



Compilation of Henry's law constants (version 5.0.0-rc.0) for water as solvent

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Abstract. Many atmospheric chemicals occur in the gas phase as well as in liquid cloud droplets and aerosol particles. Therefore, it is necessary to understand their distribution between the phases. According to Henry's law, the equilibrium ratio between the abundances in the gas phase and in the aqueous phase is constant for a dilute solution. Henry's law constants of trace gases of potential importance in environmental chemistry have been collected and converted into a uniform format. The compilation contains 46433 values of Henry's law constants for 10173 species, collected from 993 references. It will also be available on the internet at <https://www.henrys-law.org>. This article is a living review that supersedes the now obsolete publication by Sander (2015).

1 Introduction

Henry's law is named after the English chemist William Henry, who studied the topic in the early 19th century. In his publication about the quantity of gases absorbed by water (Henry, 1803), he described the results of his experiments:

“[...] water takes up, of gas condensed by one, two, or more additional atmospheres, a quantity which, ordinarily compressed, would be equal to twice, thrice, &c. the volume absorbed under the common pressure of the atmosphere.”

In other words, the amount of dissolved gas is proportional to its partial pressure in the gas phase. The proportionality factor is called Henry's law constant. In atmospheric chemistry, these constants are needed to describe the distribution of trace species between the air and liquid cloud droplets or aerosol particles. In other areas of environmental research,

the constants are needed to calculate the vaporization of contaminants from rivers and during waste water treatment (e.g. Shen, 1982; Hawthorne et al., 1985; David et al., 2000).

Section 2 provides theoretical background about Henry's law and commonly used quantities and units. In Sect. 3, the compilation of Henry's law constants is described in detail. Additional information can be found in the electronic supplement, which is described in Sect. 4.

This article is a living review describing version 5.0.0-rc.0¹. Compared to the now obsolete version 4.0 (Sander, 2015), the compilation contains 29083 additional values of Henry's law constants for 5541 additional species, collected from 304 additional references. In cases where experimental data are available for a large temperature range, the data were refitted to a 3-parameter equation, replacing the 2-parameter fits that were used previously. The symbols of the Henry's law constants have been adjusted in order to follow the new recommendations of the International Union of Pure and Applied Chemistry (IUPAC) by Sander et al. (2022). In addition to the CAS registry numbers, chemical species are now also identified by their InChIKeys (Heller et al., 2015).

2 Theoretical background

2.1 Fundamental types of Henry's law constants

There are many variants of Henry's law constants which can all be classified into two fundamental types: One possibility is to put the aqueous phase into the numerator and the gas phase into the denominator, i.e., define the constant as

¹The name of this version indicates that it is a “release candidate” used for the interactive discussion in ACPD. If necessary, corrections can still be made. It is planned to release the final version 5.0.0 together with the final paper in ACP.



Table 1. Variants of Henry's law constants H .

symbol	definition ^a	SI unit	other commonly used (non-SI) units ^b	conversion ^c from H_s^{cp}
Henry's law solubility constants H_s				
H_s^{cp}	c_a/p	$\text{mol m}^{-3} \text{Pa}^{-1}$	M/atm	
H_s^{xp}	x/p	Pa^{-1}	atm^{-1}	$H_s^{xp} = H_s^{cp} \times M_{\text{H}_2\text{O}}/\varrho_{\text{H}_2\text{O}}$
H_s^{bp}	b/p	$\text{mol kg}^{-1} \text{Pa}^{-1}$	$\text{mol kg}^{-1} \text{atm}^{-1}$	$H_s^{bp} = H_s^{cp}/\varrho_{\text{H}_2\text{O}}$
H_s^{cc}	c_a/c_g	1 (dimensionless)		$H_s^{cc} = H_s^{cp} \times RT$
Henry's law volatility constants H_v				
H_v^{pc}	p/c_a	$\text{Pa m}^3 \text{mol}^{-1}$	$\text{atm m}^3 \text{mol}^{-1}$	$H_v^{pc} = 1/H_s^{cp}$
H_v^{px}	p/x	Pa	atm	$H_v^{px} = (\varrho_{\text{H}_2\text{O}}/M_{\text{H}_2\text{O}})/H_s^{cp}$
H_v^{pw}	p/w	Pa	atm	$H_v^{pw} = (\varrho_{\text{H}_2\text{O}}/M_B)/H_s^{cp}$
H_v^{cc}	c_g/c_a	1 (dimensionless)		$H_v^{cc} = 1/(H_s^{cp} \times RT)$

^a The definitions apply only at equilibrium and in the limit of infinite dilution.

^b Here, M = mol/L and atm = 101 325 Pa.

^c Here, $M_{\text{H}_2\text{O}}$ and $\varrho_{\text{H}_2\text{O}}$ are the molar mass and density of water, respectively. M_B is the molar mass of the solute. The simplified conversion formulas are valid only for binary solutions and ideal gases. More conversion formulas can be found in Tab. 2 of Sander et al. (2022).

the quotient A/G . Here, A and G are quantities describing the equilibrium composition (at infinite dilution) of the aqueous phase and the gas phase, respectively. Alternatively, the Henry's law constant can be defined as the quotient G/A , which results in the inverse value. There is no advantage or disadvantage in using one or the other, the two types exist purely for historical reasons. Unfortunately, the name "Henry's law constant" is used for both types. Therefore, expressions like "a large Henry's law constant" are meaningless unless the type is specified. Especially the dimensionless constants are very error-prone because their type cannot be deduced from the unit. In order to have a consistent terminology, the name "Henry's law solubility constant" (or "Henry solubility" for conciseness) should be used when referring to A/G . When referring to G/A , the name "Henry's law volatility constant" (or "Henry volatility") should be used.

2.2 Variants of Henry's law constants

For both of the fundamental types described in the previous section, there are several variants. This results from the multiplicity of quantities that can be chosen to describe the composition of the two phases. Typical choices for the aqueous phase are molar concentration (c_a), molality (b), and amount fraction (x). For the gas phase, molar concentration (c_g) and partial pressure (p) are often used. Note, however, that it is not possible to use the gas-phase amount fraction (y). At a given gas-phase amount fraction, the aqueous-phase concentration c_a depends on the total pressure and thus the ratio y/c_a is not a constant.

There are numerous combinations of these quantities. The eight variants recommended by IUPAC are summarized in Table 1. Numerical values of conversion factors between them are shown in Tables 2, 3, and 4.

2.3 Symbols

In the current literature, a plethora of different symbols is used for the Henry's law constants. Several symbols are used for the same variant, and sometimes the same symbol is used for different variants. However, for this work a consistent terminology is indispensable. Here, the IUPAC recommendations by Sander et al. (2022) are used: For Henry's law solubility constants, the symbol H_s is used, and for Henry's law volatility constants the symbol H_v is used.

To specify the exact variant of the Henry's law constant, two superscripts are used. They refer to the numerator and the denominator of the definition. For example, H_s^{cp} refers to the Henry solubility defined as c/p . If H_s refers to the reference temperature $T^\ominus = 298.15 \text{ K}$, it will be denoted as H_s^\ominus . A summary of the symbols is shown in Table 5.

2.4 Temperature dependence of Henry's law constants

In spite of the name Henry's law "constant", it should be kept in mind that its value still depends on some parameters, e.g., the temperature T . The temperature dependence of equilibrium constants can be described with the van't Hoff equation, which also applies to Henry's law:

$$\frac{d \ln H_s}{d(1/T)} = \frac{-\Delta_{\text{sol}}H}{R}, \quad (1)$$

where $\Delta_{\text{sol}}H$ = enthalpy of dissolution and R = gas constant. Note that the letter H in the symbol $\Delta_{\text{sol}}H$ refers to enthalpy and is not related to the letter H for Henry's law constants. Integrating the above equation leads to

$$\ln H_s = \frac{-\Delta_{\text{sol}}H}{R} \frac{1}{T} + \text{const} \quad (2)$$



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Table 2. Conversion factors between several Henry’s law solubility constants H_s (at $T^\ominus = 298.15$ K and $\rho^\ominus = 997$ kg/m³).

	$H_s^{cp} = \dots \frac{\text{mol}}{\text{m}^3 \text{ Pa}}$	$H_s^{cp} = \dots \frac{\text{M}}{\text{atm}}$	$H_s^{cc} = \dots$	$H_s^{bp} = \dots \frac{\text{mol}}{\text{kg Pa}}$	$H_s^{bp} = \dots \frac{\text{mol}}{\text{kg atm}}$	$H_s^{xp} = \dots \frac{1}{\text{atm}}$	$\alpha = \dots$
$H_s^{cp} = 1 \frac{\text{mol}}{\text{m}^3 \text{ Pa}}$	1.00000	101.325	2478.96	1.00301×10^{-3}	101.630	1.83089	2271.10
$H_s^{cp} = 1 \frac{\text{M}}{\text{atm}}$	9.86923×10^{-3}	1.00000	24.4654	9.89893×10^{-6}	1.00301	0.0180695	22.4140
$H_s^{cc} = 1$	4.03395×10^{-4}	0.0408740	1.00000	4.04609×10^{-7}	0.0409970	7.38573×10^{-4}	0.916150
$H_s^{bp} = 1 \frac{\text{mol}}{\text{kg Pa}}$	997.000	1.01021×10^5	2.47152×10^6	1.00000	1.01325×10^5	1825.40	2.26428×10^6
$H_s^{bp} = 1 \frac{\text{mol}}{\text{kg atm}}$	9.83962×10^{-3}	0.997000	24.3920	9.86923×10^{-6}	1.00000	0.0180153	22.3467
$H_s^{xp} = 1 \frac{1}{\text{atm}}$	0.546182	55.3419	1353.96	5.47826×10^{-4}	55.5084	1.00000	1240.43
$\alpha = 1$	4.40316×10^{-4}	0.0446150	1.09152	4.41641×10^{-7}	0.0447493	8.06171×10^{-4}	1.00000

Table 3. Conversion factors between several Henry’s law volatility constants H_v (at $T^\ominus = 298.15$ K and $\rho^\ominus = 997$ kg/m³).

	$H_v^{px} = \dots \text{atm}$	$H_v^{pc} = \dots \frac{\text{m}^3 \text{ Pa}}{\text{mol}}$	$H_v^{pc} = \dots \frac{\text{m}^3 \text{ atm}}{\text{mol}}$	$H_v^{cc} = \dots$
$H_v^{px} = 1 \text{ atm}$	1.00000	1.83089	1.80695×10^{-5}	7.38573×10^{-4}
$H_v^{pc} = 1 \frac{\text{m}^3 \text{ Pa}}{\text{mol}}$	0.546182	1.00000	9.86923×10^{-6}	4.03395×10^{-4}
$H_v^{pc} = 1 \frac{\text{m}^3 \text{ atm}}{\text{mol}}$	55341.9	1.01325×10^5	1.00000	40.8740
$H_v^{cc} = 1$	1353.96	2478.96	0.0244654	1.00000

Table 4. Products of Henry’s law solubility constants H_s and Henry’s law volatility constants H_v (at $T^\ominus = 298.15$ K and $\rho^\ominus = 997$ kg/m³). For example, if $H_v^{px} = 5$ atm, then $H_s^{bp} \approx 11$ mol/(kg atm) because $5 \times 11 \approx 55.5084$.

	$\frac{H_s^{cp}}{\text{mol}/(\text{m}^3 \text{ Pa})}$	$\frac{H_s^{cp}}{\text{M}/\text{atm}}$	$\frac{H_s^{cc}}{1}$	$\frac{H_s^{bp}}{\text{mol}/(\text{kg Pa})}$	$\frac{H_s^{bp}}{\text{mol}/(\text{kg atm})}$	$\frac{H_s^{xp}}{1/\text{atm}}$	$\frac{\alpha}{1}$
$\frac{H_v^{px}}{\text{atm}}$	0.546182	55.3419	1353.96	5.47826×10^{-4}	55.5084	1.00000	1240.43
$\frac{H_v^{pc}}{\text{m}^3 \text{ Pa}/\text{mol}}$	1.00000	101.325	2478.96	1.00301×10^{-3}	101.630	1.83089	2271.10
$\frac{H_v^{pc}}{\text{m}^3 \text{ atm}/\text{mol}}$	9.86923×10^{-6}	1.00000×10^{-3}	0.0244654	9.89893×10^{-9}	1.00301×10^{-3}	1.80695×10^{-5}	0.0224140
$\frac{H_v^{cc}}{1}$	4.03395×10^{-4}	0.0408740	1.00000	4.04609×10^{-7}	0.0409970	7.38573×10^{-4}	0.916150



Table 5. List of Symbols.

symbol	quantity	SI unit*
ρ	density	kg m ⁻³
A	parameter for temperature dependence of H_s	1
b	molality	mol kg ⁻¹
B	parameter for temperature dependence of H_s	1
C	parameter for temperature dependence of H_s	1
c_a	aqueous-phase concentration	mol m ⁻³
c_g	gas-phase concentration	mol m ⁻³
D	parameter for temperature dependence of H_s	1
$\Delta_{\text{sol}}H$	molar enthalpy of dissolution	J mol ⁻¹
H_s	Henry solubility (all variants)	miscellaneous
H_s^\ominus	Henry solubility at the reference temperature T^\ominus	miscellaneous
H_s^{bp}	Henry solubility (defined as b/p)	mol kg ⁻¹ ; Pa ⁻¹
H_s^{cc}	Henry solubility (defined as c/c)	1
H_s^{cp}	Henry solubility (defined as c/p)	mol m ⁻³ Pa ⁻¹
$H_{s,\text{eff}}$	effective Henry solubility	miscellaneous
H_s^i	$H \times K_A$ (for strong acids)	miscellaneous
H_v	Henry volatility (all variants)	miscellaneous
H_v^\ominus	Henry volatility at the reference temperature T^\ominus	miscellaneous
H_v^{cc}	Henry volatility (defined as c/c)	1
H_v^{pc}	Henry volatility (defined as p/c)	Pa m ³ mol ⁻¹
H_v^{px}	Henry volatility (defined as p/x)	Pa
K_A	acid constant	mol m ⁻³
M	molar mass	kg mol ⁻¹
p	partial pressure = $c_g RT$	Pa
R	gas constant	8.314 J (mol K) ⁻¹
T	temperature	K
T^\ominus	reference temperature	298.15 K
w	mass fraction in the aqueous phase	kg kg ⁻¹ (dimensionless)
x	amount fraction (molar mixing ratio) in the aqueous phase	mol mol ⁻¹ (dimensionless)
y	amount fraction (molar mixing ratio) in the gas phase	mol mol ⁻¹ (dimensionless)

*A unit of "1" denotes a quantity of dimension 1, commonly called "dimensionless quantity".

Calling the constant of integration A , and defining the parameter $B = -\Delta_{\text{sol}}H/R$, we get:

$$\ln H_s = A + \frac{B}{T} \quad (3)$$

or

$$H_s = \exp(A) \times \exp\left(\frac{B}{T}\right) \quad (4)$$

To determine the parameters A and B experimentally, Henry's law constants are measured at several temperatures, and the method of least squares is used to fit the points to a function. Note that functions (3) and (4) produce slightly different fit parameters because the logarithmic function (3) puts less weight on errors of large Henry's law constants than the linear function (4) does. In this work, linear regression is performed using Eq. (3).

Thermodynamic data are often available at the temperature $T^\ominus = 298.15$ K. To present Henry's law constants at T^\ominus and also show their temperature dependence, an alternative form

of Eq. (4) can be used:

$$H_s = H_s^\ominus \times \exp\left(B\left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right). \quad (5)$$

where $H_s^\ominus = \exp(A) \times \exp(B/T^\ominus)$. The enthalpy of dissolution $\Delta_{\text{sol}}H$ is independent of temperature here: 20

$$\frac{-\Delta_{\text{sol}}H}{R} = \frac{d \ln H_s}{d(1/T)} = B \quad (6)$$

In this work, the values H_s^\ominus and $d \ln H_s / d(1/T)$ are tabulated.

A simple equation based on the two parameters A and B is valid only for a limited temperature range, in which the enthalpy of dissolution $\Delta_{\text{sol}}H$ can be considered constant. To accommodate a larger temperature range, a third parameter C is often added: 25

$$\ln H_s = A + \frac{B}{T} + C \times \ln T. \quad (7)$$

Here, the fit parameters A and B are different from those calculated for function (3). The enthalpy of dissolution 30



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Table 6. Temperature-dependent terms and their analytical derivatives. Here, C , C_1 and C_2 are the empirical fit parameters defining $\ln(H_s)$. See Sect. 2.4 for details.

$\ln(H_s)$	$\frac{d \ln H_s}{d(1/T)}$
C	0
C/T	C
CT	$-CT^2$
CT^2	$-2CT^3$
C/T^2	$2C/T$
C/T^3	$3C/T^2$
$C \ln(T)$	$-CT$
$C_1 \ln(C_2 T)$	$-C_1 T$ (independent of C_2)
$C \log_{10}(T)$	$-CT/\ln(10)$

$\Delta_{\text{sol}}H$ changes linearly with temperature in the 3-parameter fit:

$$\frac{-\Delta_{\text{sol}}H}{R} = \frac{d \ln H_s}{d(1/T)} = B - CT \quad (8)$$

To cover an even larger temperature range with an empirical formula, the dependence of $\ln H_s$ on T can be expressed as the sum of several terms. For example, Wilhelm et al. (1977) used the formula:

$$\ln H_s = A + B \times T^{-1} + C \times \ln T + D \times T. \quad (9)$$

The analytical derivative is simply the sum of the derivatives of the individual terms. Using the derivatives from Table 6, the temperature dependence of this expression can be calculated as:

$$\frac{d \ln H_s}{d(1/T)} = 0 + B - C \times T - D \times T^2. \quad (10)$$

When reporting Henry's law constants as such a function, it is important to present sufficient significant digits because H_s depends exponentially on the parameters.

Note that the temperature dependences for H_s^{cp} and H_s^{cc} are different since the conversion factor between them includes the temperature:

$$\begin{aligned} H_s^{cp} &= H_s^{cc}/(RT) \\ \Leftrightarrow \ln H_s^{cp} &= \ln H_s^{cc} + \ln(1/R) + \ln(1/T) \\ \Rightarrow \frac{d \ln H_s^{cp}}{d(1/T)} &= \frac{d \ln H_s^{cc}}{d(1/T)} + \frac{d \ln(1/T)}{d(1/T)} \\ &= \frac{d \ln H_s^{cc}}{d(1/T)} + T. \end{aligned} \quad (11)$$

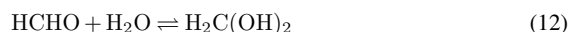
2.5 Effective Henry's law solubility constants $H_{s,\text{eff}}$

The Henry's law constants mentioned so far describe the equilibrium between a chemical species in the gas phase and exactly the same species in the aqueous phase. This type is called the "intrinsic" Henry's law constant.

Once transferred into the aqueous phase, some species are involved in fast equilibria. In these cases, an "effective" Henry's law constant $H_{s,\text{eff}}$ can be defined, using a "total concentration" c_{tot} . Depending on the chemical class, there are different ways to define such a total concentration.

2.5.1 $H_{s,\text{eff}}$ for aldehydes

Aldehydes can be hydrated, forming geminal diols. For example, methanal (HCHO) is almost completely hydrated in aqueous solution:



The total concentration of dissolved methanal is:

$$c_{\text{tot}} = c(\text{HCHO}) + c(\text{H}_2\text{C}(\text{OH})_2) \quad (13)$$

The intrinsic Henry's law solubility constant of HCHO is:

$$H_s = \frac{c(\text{HCHO})}{p(\text{HCHO})} \quad (14)$$

In contrast, the effective Henry's law constant $H_{s,\text{eff}}$ is defined as:

$$H_{s,\text{eff}} = \frac{c_{\text{tot}}}{p(\text{HCHO})} = \frac{c(\text{HCHO}) + c(\text{H}_2\text{C}(\text{OH})_2)}{p(\text{HCHO})} \quad (15)$$

2.5.2 $H_{s,\text{eff}}$ for acids and bases

Acids and bases undergo ionic dissociation upon dissolution, e.g.:



Defining the total concentration c_{tot} as

$$c_{\text{tot}} = c(\text{HCl}) + c(\text{Cl}^-), \quad (17)$$

the effective Henry's law constant is:

$$H_{s,\text{eff}} = \frac{c(\text{HCl}) + c(\text{Cl}^-)}{p(\text{HCl})} \quad (18)$$

Considering the acidity constant

$$K_a = \frac{c(\text{H}^+) c(\text{Cl}^-)}{c(\text{HCl})}, \quad (19)$$

the relation between the intrinsic and the effective Henry's law constant for HCl can be written as:

$$H_{s,\text{eff}} = H_s \times \left(1 + \frac{K_a}{c(\text{H}^+)} \right) \quad (20)$$

Since the factor on the right-hand side contains $c(\text{H}^+)$, the conversion between the intrinsic and the effective Henry's law constant is pH-dependent. Proportionality between $p(\text{HCl})$ and c_{tot} is restricted to conditions under which



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the uptake of gaseous HCl does not affect the acidity of the solution. Thus, effective Henry's law constants of acids and bases are not material constants but depend on the solution pH (Sander et al., 2022).

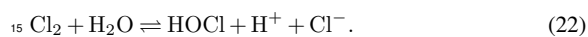
5 In order to obtain a pH-independent constant, the product of the intrinsic Henry's law constant H_s^{cp} and the acidity constant K_a is often used for HCl and other strong acids:

$$H'_s = H_s^{cp} \times K_a = \frac{c(\text{H}^+) \times c(\text{Cl}^-)}{p(\text{HCl})} \quad (21)$$

10 Although H'_s is usually also called a Henry's law constant, it should be noted that it is a different quantity and it has different units than H_s^{cp} .

2.5.3 $H_{s,\text{eff}}$ for halogens

In the aqueous phase, halogens are in equilibrium with their hypohalous acids, e.g.:



The equilibrium constant is:

$$K = \frac{c(\text{HOCl}) c(\text{H}^+) c(\text{Cl}^-)}{c(\text{Cl}_2)} \quad (23)$$

20 Since the sum of Cl_2 and HOCl is not affected by this equilibrium, a "total chlorine concentration" c_{tot} can be defined as:

$$c_{\text{tot}} = c(\text{Cl}_2) + c(\text{HOCl}), \quad (24)$$

Using c_{tot} , it is formally possible to define an effective Henry's law constant as:

$$H_{s,\text{eff}} = \frac{c_{\text{tot}}}{p(\text{Cl}_2)} = \frac{c(\text{Cl}_2) + c(\text{HOCl})}{p(\text{Cl}_2)} \quad (25)$$

25 However, this definition is problematic because it doesn't work at infinite dilution. With decreasing Cl_2 concentration, the equilibrium in Eq. (22) will shift to the right (Le Chatelier's principle), i.e., $c(\text{HOCl}) \gg c(\text{Cl}_2)$, and the effective Henry's law solubility constant goes to infinity (e.g., Fig. 2 in Jones (1911) or Fig. A1 in Lin and Pehkonen (1998)).
30 Therefore, the intrinsic Henry's law constant should be used for halogens, and the term "effective Henry's law constant" should be avoided here.

Instead of extrapolating to infinite dilution, the total chlorine solubility is sometimes reported at the fixed partial pressure of $p(\text{Cl}_2) = 101325 \text{ Pa}$. However, even in the vicinity of 101325 Pa, the total chlorine concentration c_{tot} is not proportional to $p(\text{Cl}_2)$.

40 In order to convert experimentally determined chlorine solubilities to the intrinsic constant $H_s(\text{Cl}_2)$, additional processes may have to be considered, e.g., aqueous-phase diffusion (Brian et al., 1962; Leaist, 1986) and the formation of chlorine hydrates (Adams and Edmonds, 1937; Young, 1983).

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2.6 Dependence of Henry's law constants on the composition of the solution 45

Values of Henry's law constants for aqueous solutions depend on the composition of the solution, i.e., on its ionic strength and on dissolved organics. In general, the solubility of a gas decreases with increasing salinity ("salting out").
50 However, a "salting in" effect has also been observed, e.g., for the effective Henry's law constant of glyoxal (Kampf et al., 2013; Kurtén et al., 2015). The effect can be described with the Sechenov equation (Setschenow, 1889). Note that the scientific transliteration from Cyrillic is "Sechenov" but the original article was written in German and used the German transliteration "Setschenow". There are many alternative ways to define the Sechenov equation, depending on how the aqueous-phase composition is described (based on concentration, molality, or molar fraction) and which variant of the Henry's law constant is used. Describing the solution in terms of molality is preferred because molality is invariant to temperature and to the addition of dry salt to the solution (see Sander (1999) for details). Thus, the Sechenov equation can be written as:

$$\log_{10} \left(\frac{H_{s0}^{bp}}{H_s^{bp}} \right) = K_s \times b(\text{salt}) \quad (26)$$

where H_{s0}^{bp} = Henry's law constant in pure water, H_s^{bp} = Henry's law constant in the salt solution, K_s = molality-based Sechenov constant, and $b(\text{salt})$ = molality of the salt.

Since the atmosphere contains very dilute cloud droplets as well as highly concentrated aerosols, adequate values of Henry's law constants should be used. Unfortunately, Sechenov parameters are unknown for many species.

3 Values of Henry's law constants

3.1 The data compilation 75

The compilation of Henry's law constants is presented in the appendix, and it will also be available online at <https://www.henrys-law.org>. It contains Henry's law constants for inorganic and organic species of potential importance in environmental chemistry. Most data were measured at ambient conditions (around 298 K and 1 atm). Data at high temperatures are excluded or (if possible) extrapolated to $T^\ominus = 298.15 \text{ K}$. The data refer to aqueous solutions; octanol and other solvents are not included. The constants refer to pure water as solvent unless noted otherwise (e.g., sea water).
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All Henry's law constants have been converted to a uniform format: H_s^{cp} with the unit $\text{mol}/(\text{m}^3 \text{ Pa})$. In cases where the conversion involves the temperature-dependent density of water, the parameterization by Bettin and Spieweck (1990) was used to calculate $\rho_{\text{H}_2\text{O}}$ at the temperature T .
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Inorganic substances are sorted according to the elements they contain. The order chosen is: O, H, N, F, Cl, Br, I,



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S, rare gases, others. Compounds with several of these elements are put into the last of the applicable sections. For example, nitryl chloride which contains O, N and Cl, is listed in the Cl section. Carbon-containing compounds (including CO and CO₂) are sorted somewhat arbitrarily by increasing chain length and complexity. Hetero atoms (O, N, F, Cl, Br, I, S, P, etc.) are sorted in the same order as for inorganic compounds. The table contains the following groups of species:

10	Inorganic species	11
	Oxygen (O)	11
	Hydrogen (H)	13
	Nitrogen (N)	15
	Fluorine (F)	20
15	Chlorine (Cl)	21
	Bromine (Br)	24
	Iodine (I)	26
	Sulfur (S)	28
	Rare gases (He, Ne, Ar, Kr, Xe, Rn)	31
20	Other elements (B, Se, P, As, Hg)	34
	Hydrocarbons (C, H)	36
	Alkanes	36
	Cycloalkanes	139
	Aliphatic alkenes and cycloalkenes	161
25	Aliphatic alkynes	201
	Mononuclear aromatics	212
	Terpenes and terpenoids	251
	Polynuclear aromatics	257
	Organic species with oxygen (O)	286
30	Carbon oxides	286
	Alcohols (ROH)	288
	Polyols (R(OH) _n)	371
	Peroxides (ROOH) and peroxy radicals (ROO)	388
	Aldehydes (RCHO)	417
35	Ketones (RCOR)	451
	Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH)	548
	Esters (RCOOR)	580
	Ethers (ROR)	652
40	Heterocycles with oxygen	687
	Oxidized terpenoids	696
	Miscellaneous	698
	Organic species with nitrogen (N)	727
	Amines (C, H, N)	727
45	Heterocycles with nitrogen (C, H, N)	762
	Nitriles (C, H, N)	779
	Amines, amides, amino acids (C, H, O, N)	786
	Heterocycles with oxygen and nitrogen (C, H, O, N)	815
	Nitrates (RONO ₂)	835
50	Nitriles with oxygen (C, H, O, N)	919
	Nitro compounds (RNO ₂)	921

	Organic species with fluorine (F)	952
	Organic fluorine	952
	Organic species with chlorine (Cl)	988
	Chlorocarbons (C, H, Cl)	988 55
	Polychlorinated naphthalenes (PCNs)	1055
	Polychlorinated biphenyls (PCBs)	1062
	Oxygenated chlorocarbons (C, H, O, Cl)	1116
	Polychlorinated diphenyl ethers (PCDEs)	1151
	Polychlorinated dibenzofuranes (PCDFs)	1167 60
	Polychlorinated dibenzo- <i>p</i> -dioxins (PCDDs)	1185
	Chlorocarbons with nitrogen (C, H, O, N, Cl)	1197
	Chlorofluorocarbons (C, H, O, N, F, Cl)	1236
	Organic species with bromine (Br)	1256
	Bromocarbons (C, H, O, N, Br)	1256 65
	Polybrominated diphenyl ethers (PBDEs)	1283
	Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br)	1318
	Organic species with iodine (I)	1331
	Iodocarbons (C, H, O, Cl, I)	1331 70
	Organic species with sulfur (S)	1340
	Sulfur (C, H, O, N, Cl, S)	1340
	Organic species with phosphorus (P)	1410
	Phosphorus (C, H, O, N, Cl, Br, S, P)	1410
	Organic species with other elements	1434 75
	Sodium (Na)	1434
	Aluminum (Al)	1436
	Silicon (Si)	1437
	Calcium (Ca)	1445
	Zinc (Zn)	1446 80
	Arsenic (Sn)	1447
	Selenium (Se)	1449
	Tin (Sn)	1450
	Mercury (Hg)	1451
	Lead (Pb)	1454 85

The first column of the table shows the systematic name, the chemical formula, trivial names (if any), the CAS registry number (in square brackets), and the InChIKey.

The column labeled “ H_s^{CP} ” contains Henry’s law solubility constants at the reference temperature $T^\ominus = 298.15$ K. Values are rounded to two significant digits and given in the unit mol/(m³ Pa).

The column labeled “ $d \ln H_s / d(1/T)$ ” contains the temperature dependence of the Henry solubility as defined in Eq. (5), rounded to two significant digits and given in the unit K. If the term $\Delta_{sol}H$ is temperature-dependent, the value of $d \ln H_s / d(1/T)$ is calculated at $T^\ominus = 298.15$ K.

For each table entry the column labeled “type” denotes how the Henry’s law constant was obtained in the given reference. Literature reviews are usually most reliable, followed



by original publications of experimental determinations of H_g . Other data has to be treated more carefully. The types listed here are roughly ordered by decreasing reliability:

“L” The cited paper is a *literature* review.

5 “M” Original publication of a *measured* value.

“V” *Vapor* pressure of the pure substance divided by aqueous solubility (sometimes called “VP/AS”).

10 “R” The cited paper presents a *recalculation* of previously published material (e.g. extrapolation to a different temperature or concentration range).

“T” *Thermodynamical* calculation ($\Delta_{\text{sol}}G = -RT \ln H$, see Sander (1999) for details).

“X” The original paper was not available for this study. The data listed here was found in a secondary source.

15 “C” The paper is a *citation* of a reference which I could not obtain (personal communication, Ph.D. theses, grey literature).

20 “Q” The value was calculated with a “*quantitative* structure property relationship” (QSPR) or a similar theoretical method.

“E” The value is an *estimate*. Estimates are listed only if no reliable data are available.

“?” The cited paper doesn’t clearly state how the value was obtained.

25 “W” The value is probably wrong, as explained in the note.

In some cases there might be good agreement between different authors. However, if the original work they refer to is not known one has to be careful when evaluating the reliability. It is possible that they were recalculating data from the same source. The similarity in that case would not be due to independent investigations.

30 The table entries in the pdf of this document are hyperlinked to endnotes with additional information. In order to avoid spreading of erroneous data, some of these notes identify errors in the original publications. Symbols and acronyms used here refer to those in the original publications.

The CAS numbers in the tables are hyperlinked to the NIST Chemistry WebBook.

40 3.2 Further sources of information

3.2.1 Review articles

Several reviews about Henry’s law have been published, starting with Markham and Kobe (1941), up to more recent publications such as Wilhelm et al. (1977), Mackay and

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Shiu (1981), Staudinger and Roberts (1996), Staudinger and Roberts (2001), Fogg and Sangster (2003), and Burkholder et al. (2019). Practical guidance on the use of Henry’s law has been published by Smith and Harvey (2007).

Experimental methods to obtain Henry’s law constants as well as indirect (theoretical) methods have been described and compared by several authors. Only a brief summary of some articles is given here. For details, the reader is referred to the original publications:

- Battino and Clever (1966): Miscellaneous methods, partially of historical interest 55
- Betterton (1992): Head-space method, bubble column method, thermodynamic cycles, calculation from vapor pressure and solubility, linear correlations
- Turner et al. (1996): Static methods, mechanical recirculation methods, separate measurement of solubility and pure species vapor pressure, ebulliometry, perturbation chromatography 60
- Staudinger and Roberts (1996): Batch air stripping, concurrent flow technique, Equilibrium Partitioning in Closed Systems (EPICS), calculation via Quantitative Property Property Relationships (QPPR), Quantitative Structure Property Relationships (QSPR), UNiversal quasicheical Functional group Activity Coefficients (UNIFAC) 65
- Brennan et al. (1998): Comparison of predictive methods 70
- Sander (1999): QPPR, QSPR, thermodynamic calculations
- Fogg and Sangster (2003): Miscellaneous methods
- Dupeux et al. (2022): QSPR 75

3.2.2 Internet

On the internet, several pages provide Henry’s law constants, e.g.:

- The PubChem database:
<https://pubchem.ncbi.nlm.nih.gov> 80
- The NIST Chemistry WebBook:
<https://webbook.nist.gov/chemistry>
- The ChemSpider database:
<https://www.chemspider.com>
- The Generator for Explicit Chemistry and Kinetics of Organics in the Atmosphere (GECKO-A) provides Henry’s law constants on the basis of experimental data and structure-activity relationships:
http://geckoa.lisa.u-pec.fr/generateur_form.php 85



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- The Pesticide Properties Database (PPD):
<https://www.ars.usda.gov/Services/docs.htm?docid=14199>
- HENRYWIN, a program to calculate Henry's law constants:
<https://www.epa.gov/tsca-screening-tools/epi-suitetm-estimation-program-interface>
- Vapor-liquid equilibrium data (mostly at elevated temperatures) from the "Dortmund Data Bank":
<http://www.ddbst.com/en/EED/VLE/VLEindex.php>
- EPI Suite estimates from the Arctic Monitoring and Assessment Programme (AMAP) database:
<https://chemicals.amap.no/about>

3.2.3 Vapor-liquid equilibrium data

Henry's law constants can be obtained from vapor-liquid equilibrium (VLE) data. For example, consider a binary mixture that consists of a solute dissolved in water. The total pressure P over the solution is the sum of the partial pressures of the components. The partial pressure of the solute can be defined via Henry's law, and the partial pressure of the water can be defined via Raoult's law:

$$\begin{aligned} P &= p_{\text{solute}} + p_{\text{water}} \\ &= xH_v^{px} + (1-x)p_{\text{sat}} \\ &= x(H_v^{px} - p_{\text{sat}}) + p_{\text{sat}} \end{aligned} \quad (27)$$

where p_{sat} is the saturation vapor pressure of water. If VLE data with the total pressure at several small solute fractions x are available, the derivative dP/dx (i.e., the slope of a plot P vs x) can be used to obtain the Henry's law constant:

$$\frac{dP}{dx} = H_v^{px} - p_{\text{sat}} \Rightarrow H_v^{px} = \frac{dP}{dx} + p_{\text{sat}} \quad (28)$$

4 The electronic supplement

The Supplement contains several files with additional information about the compiled Henry's law constants. It includes a README file with a detailed description. Here, only a short summary is given:

- The files `henry_*.f90` contain the Fortran 90 code that was used to convert the values from the original publications to a uniform format: H_s^{cp} with the unit $\text{mol}/(\text{m}^3 \text{Pa})$. The code and the comments in the code can be used to double-check that the conversion was done correctly.
- If the original publications contain measurements at different temperatures, the code often contains all individual data points, not just the regression line that was used to calculate the temperature dependence. In addition, the supplement contains data files

with the temperature-dependent values of H_s^{cp} in `output/Tdep_data/*.dat` and plots of the data points as well as the regression lines according to Eqs. (5) and (7) in `output/gnuplot/Tdep.pdf`.

- If the Henry's law constants are needed in electronic form, it is cumbersome to extract them from the pdf of this article. Therefore, the supplement contains the files `output/*.f90` with declarations of the Henry's law constants (H_s^{cp} , H_s^{xp} , H_s^{bp} , H_s^{cc} , H_v^{pc} , H_v^{px} , and H_v^{cc}) in Fortran 90 syntax.
- For some references, the `util/` directory contains python scripts that preprocess input and perform other calculations related to the original data.

5 Summary and outlook

An updated and extended version of a compilation of Henry's law constants has been presented. The collection, which will also be available at <https://www.henrys-law.org>, will be continuously maintained, updated and extended in the future. If necessary, errata will also be posted on the web page. In addition to providing a source of information, I hope that this work will help to identify gaps in our current knowledge and stimulate research projects. In particular, it seems that even for some well-known chemicals like HCl, Br₂, and BrCl, there is a large uncertainty in the value of the Henry's law constants. I always welcome information about new measurements of Henry's law constants to be included in the table.

Supplement. The supplement related to this article is available online at: <https://doi.org/10.5194/acp-0-1-2023-supplement>.

Competing interests. The author declares no competing interests.

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<https://doi.org/10.5194/egusphere-2023-1584>

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Appendix A: Appendix with data tables

A1 Inorganic species

A1.1 Oxygen (O)

Table A1.1: Oxygen (O)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
oxygen	1.3×10^{-5}	1500	Burkholder et al. (2019)	L	1
O ₂	1.3×10^{-5}	1500	Burkholder et al. (2015)	L	1
[7782-44-7]			Clever et al. (2014)	L	2
MYMOFIZGZYHOMD-UHFFFAOYSA-N	1.2×10^{-5}	1700	Warneck and Williams (2012)	L	
	1.3×10^{-5}	1500	Sander et al. (2011)	L	1
	1.3×10^{-5}	1500	Sander et al. (2006)	L	1
	1.3×10^{-5}	1400	Fernández-Prini et al. (2003)	L	3
	1.3×10^{-5}	1500	Battino et al. (1983)	L	
	1.3×10^{-5}	1500	Battino (1981)	L	1
	1.3×10^{-5}	1500	Wilhelm et al. (1977)	L	
	1.2×10^{-5}	1400	Himmelblau (1960)	L	1
	1.2×10^{-5}	1600	Millero et al. (2002a)	M	4, 5
	1.2×10^{-5}	1600	Millero et al. (2002b)	M	6, 7
	1.3×10^{-5}	1500	Rettich et al. (2000)	M	8
	1.3×10^{-5}	1400	Sherwood et al. (1991)	M	9
	1.3×10^{-5}	1500	Rettich et al. (1981)	M	10
	1.3×10^{-5}	1500	Cosgrove and Walkley (1981)	M	11
	1.2×10^{-5}		da Silva et al. (1980)	M	12
	1.3×10^{-5}	1400	Cramer (1980)	M	
	1.3×10^{-5}	1400	Benson et al. (1979)	M	
	1.4×10^{-4}		Razumovskii and Zaikov (1971)	M	13
	1.1×10^{-5}		Power and Stegall (1970)	M	14
	1.3×10^{-5}	1500	Murray and Riley (1969)	M	15
	1.2×10^{-5}	1200	Shoor et al. (1969)	M	16
	1.2×10^{-5}	1600	Carpenter (1966)	M	17
	1.3×10^{-5}	1500	Morrison and Billett (1952)	M	18
	1.2×10^{-5}		Orcutt and SeEVERS (1937a)	M	
	1.3×10^{-5}	1500	Fox (1909)	M	
	1.2×10^{-5}	1700	Geffcken (1904)	M	
	1.3×10^{-5}	1400	Winkler (1891b)	M	19
	1.3×10^{-5}	1400	Bohr and Bock (1891)	M	
	1.2×10^{-5}	1800	Timofejew (1890)	M	
	1.2×10^{-5}	1200	Bunsen (1855a)	M	
	1.2×10^{-5}	1600	Wauchope and Haque (1972)	V	
	1.2×10^{-5}	1600	Wauchope and Haque (1972)	V	
	1.3×10^{-5}	1500	Wauchope and Haque (1972)	V	
	1.3×10^{-5}		Pierotti (1965)	T	
	1.4×10^{-5}		Nunn (1958)	C	12
	7.9×10^{-6}		Hayer et al. (2022)	Q	20
	1.3×10^{-5}	1500	Yaws et al. (1999)	?	21
	1.1×10^{-5}		Abraham and Weathersby (1994)	?	21



Table A1.1: Oxygen (O) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-5}	1500	Dean and Lange (1999)	?	22, 23
	1.3×10^{-5}		Seinfeld (1986)	?	21
	1.3×10^{-4}		Smith and Bomberger (1980)	?	24
ozone O_3 [10028-15-6] CBENFWSGALASAD-UHFFFAOYSA-N	1.0×10^{-4}	2800	Burkholder et al. (2019)	L	
	1.0×10^{-4}	2800	Burkholder et al. (2015)	L	
			Clever et al. (2014)	L	25
	1.0×10^{-4}	2800	Sander et al. (2011)	L	
	1.0×10^{-4}	2800	Sander et al. (2006)	L	
	7.6×10^{-5}	3700	Bíř (2005)	L	
	1.1×10^{-4}	2400	Warneck (2003)	L	
			Battino (1981)	L	26
	1.3×10^{-4}	2000	Wilhelm et al. (1977)	L	
	1.1×10^{-4}		Levanov et al. (2008)	M	12
	1.1×10^{-4}	2300	Gershenson et al. (2001)	M	
	9.9×10^{-5}	2600	Rischbieter et al. (2000)	M	
	9.2×10^{-5}	2600	Andreozzi et al. (1996)	M	
	1.2×10^{-4}	1400	Sotelo et al. (1989)	M	
	1.1×10^{-4}	2300	Kosak-Channing and Helz (1983)	M	
	1.7×10^{-4}		Gurol and Singer (1982)	M	12
			Roth and Sullivan (1981)	M	27
	1.2×10^{-4}	1900	Stumm (1958)	M	
	9.9×10^{-5}	2600	Kilpatrick et al. (1956)	M	
	1.3×10^{-4}	2000	Briner and Perrottet (1939)	M	
	2.0×10^{-4}		Fischer and Tropsch (1917)	M	
	8.0×10^{-5}	2900	Luther (1905)	M	
	1.2×10^{-4}	4100	Mailfert (1894)	M	
	1.2×10^{-4}		Schöne (1873)	M	28
	1.1×10^{-4}	2600	Chameides (1984)	T	
	1.2×10^{-4}		Perry and Chilton (1973)	X	29
	1.2×10^{-4}		Hayer et al. (2022)	Q	20
			Lide and Frederikse (1995)	?	30
	9.3×10^{-5}	2500	Seinfeld (1986)	?	21
	9.3×10^{-5}	2500	Hoffmann and Jacob (1984)	?	21



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A1.2 Hydrogen (H)

Table A1.2: Hydrogen (H)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hydrogen atom	2.6×10^{-6}		Burkholder et al. (2019)	L	
H	2.6×10^{-6}		Burkholder et al. (2015)	L	
[12385-13-6]	2.6×10^{-6}		Sander et al. (2011)	L	
YZCKVEUIGOORGS-UHFFFAOYSA-N	2.6×10^{-6}		Sander et al. (2006)	L	
	3.1×10^{-6}		Armstrong et al. (2015)	T	
	3.4×10^{-6}		Parker (1992)	E	31
			Roduner and Bartels (1992)	?	32
hydrogen	7.8×10^{-6}	530	Fernández-Prini et al. (2003)	L	3
H ₂	7.7×10^{-6}	490	Young (1981a)	L	1
[1333-74-0]	7.7×10^{-6}	490	Wilhelm et al. (1977)	L	
UFHFLCQGNINRP-UHFFFAOYSA-N	7.8×10^{-6}	600	Himmelblau (1960)	L	1
	7.8×10^{-6}	620	Schmidt (1979)	M	33, 34
	7.7×10^{-6}	480	Gordon et al. (1977)	M	35
	7.7×10^{-6}	520	Crozier and Yamamoto (1974)	M	36
	7.2×10^{-6}		Longo et al. (1970)	M	14
	7.2×10^{-6}		Power and Stegall (1970)	M	14
			Shoor et al. (1969)	M	37
	7.5×10^{-6}		Ruetschi and Amlie (1966)	M	38
	7.8×10^{-6}	510	Morrison and Billett (1952)	M	39
	7.8×10^{-6}	540	Geffcken (1904)	M	
	7.7×10^{-6}	1500	Braun (1900)	M	40
	7.7×10^{-6}	500	Winkler (1891a)	M	41
	7.5×10^{-6}	550	Bohr and Bock (1891)	M	
	7.8×10^{-6}	610	Timofejew (1890)	M	
	8.5×10^{-6}	20	Bunsen (1855a)	M	42, 43
	7.8×10^{-6}	500	Wauchope and Haque (1972)	V	
	7.7×10^{-6}		Hine and Weimar (1965)	R	
	8.3×10^{-6}		Pierotti (1965)	T	
	6.4×10^{-6}		Hayer et al. (2022)	Q	20
	7.7×10^{-6}	490	Yaws et al. (1999)	?	21
	7.7×10^{-6}		Abraham and Weathersby (1994)	?	21
	7.7×10^{-6}	500	Dean and Lange (1999)	?	44, 23
deuterium			Young (1981a)	L	45
D ₂	7.9×10^{-6}	720	Muccitelli and Wen (1978)	M	46
[7782-39-0]	7.9×10^{-6}	720	Muccitelli and Wen (1978)	M	
UFHFLCQGNINRP-VVKOMZTBSA-N	8.2×10^{-6}		Hayer et al. (2022)	Q	20
hydroxyl radical	3.8×10^{-1}		Burkholder et al. (2019)	L	
OH	3.8×10^{-1}		Burkholder et al. (2015)	L	
[3352-57-6]	3.8×10^{-1}		Sander et al. (2011)	L	
TUJKJAMUKRIRHC-UHFFFAOYSA-N	3.8×10^{-1}		Sander et al. (2006)	L	
	2.9×10^{-1}	4300	Hanson et al. (1992)	T	
	3.2×10^{-1}		Mozurkewich (1986)	T	
	2.9×10^{-1}	3100	Berdnikov and Bazhin (1970)	T	47



Table A1.2: Hydrogen (H) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-1}		Lelieveld and Crutzen (1991)	C	
	2.0		Lelieveld and Crutzen (1991)	C	
	8.9×10^1		Lelieveld and Crutzen (1991)	C	
	2.5×10^{-1}	5300	Jacob (1986)	C	48
hydroperoxy radical HO ₂ [3170-83-0] MHAJPDJQMIIY-UHFFFAOYSA-M	6.8		Burkholder et al. (2019)	L	
	6.8		Burkholder et al. (2015)	L	
	6.8		Sander et al. (2011)	L	
	6.8		Sander et al. (2006)	L	
	5.7×10^1		Régimbal and Mozurkewich (1997)	R	
	3.8×10^1	5900	Hanson et al. (1992)	T	
	8.9×10^1		Weinstein-Lloyd and Schwartz (1991)	T	
	8.9×10^1		Chameides (1984)	T	
	1.2×10^1		Schwartz (1984)	T	49
	4.6×10^1	4800	Berdnikov and Bazhin (1970)	T	47
		6600	Jacob (1986)	E	50
hydrogen peroxide H ₂ O ₂ [7722-84-1] MHAJPDJQMIIY-UHFFFAOYSA-N	8.6×10^2	7300	Burkholder et al. (2019)	L	
	8.6×10^2	7300	Burkholder et al. (2015)	L	
	9.5×10^2	7200	Brockbank (2013)	L	1
	9.1×10^2	6600	Warneck and Williams (2012)	L	
	8.3×10^2	7600	Sander et al. (2011)	L	
	7.6×10^2	7300	Sander et al. (2006)	L	
	9.8×10^2	6100	Fogg and Sangster (2003)	L	51
	1.2×10^3	5900	Rivera-Rios (2018)	M	
	1.1×10^3	7000	Huang and Chen (2010)	M	
	8.2×10^2	7400	O'Sullivan et al. (1996)	M	
	9.9×10^2	6300	Lind and Kok (1994)	M	52
			Staffelbach and Kok (1993)	M	53
	8.5×10^2	6500	Zhou and Lee (1992)	M	
	6.7×10^2	7900	Hwang and Dasgupta (1985)	M	
	1.4×10^3		Yoshizumi et al. (1984)	M	12
	9.6×10^2	6600	Chameides (1984)	T	
	7.0×10^2	7000	Martin and Damschen (1981)	T	
	6.4×10^1		Hilal et al. (2008)	Q	
	7.0×10^2	7300	Seinfeld (1986)	?	21
	7.0×10^2	7300	Hoffmann and Jacob (1984)	?	21
			Pandis and Seinfeld (1989)	W	54



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A1.3 Nitrogen (N)

Table A1.3: Nitrogen (N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nitrogen	6.4×10^{-6}	1300	Burkholder et al. (2019)	L	1
N ₂	6.4×10^{-6}	1300	Burkholder et al. (2015)	L	1
[7727-37-9]	6.4×10^{-6}	1600	Warneck and Williams (2012)	L	
IJGRMHOSHxDMSA-UHFFFAOYSA-N	6.4×10^{-6}	1300	Sander et al. (2011)	L	1
	6.4×10^{-6}	1300	Sander et al. (2006)	L	1
	6.5×10^{-6}	1200	Fernández-Prini et al. (2003)	L	3
	6.5×10^{-6}	1200	Battino et al. (1984)	L	
	6.5×10^{-6}	1200	Battino (1982)	L	1
	6.4×10^{-6}	1300	Wilhelm et al. (1977)	L	
	5.4×10^{-6}		Steward et al. (1973)	L	14
	6.5×10^{-6}	1400	Allott et al. (1973)	L	
	6.3×10^{-6}	1300	Himmelblau (1960)	L	1
	6.4×10^{-6}	1300	Rettich et al. (1984)	M	55
	6.6×10^{-6}	1300	Cosgrove and Walkley (1981)	M	11
	5.5×10^{-6}		Power and Stegall (1970)	M	14
	6.4×10^{-6}	1300	Murray et al. (1969)	M	56
	6.5×10^{-6}	1400	Morrison and Billett (1952)	M	57
	6.6×10^{-6}		Orcutt and SeEVERS (1937a)	M	
	6.5×10^{-6}	1100	Van Slyke et al. (1934)	M	
	5.6×10^{-6}		Grollman (1929)	M	58
	6.4×10^{-6}	1200	Fox (1909)	M	
	6.3×10^{-6}	2200	Braun (1900)	M	59
	6.3×10^{-6}	1300	Winkler (1891b)	M	60
	6.7×10^{-6}	1400	Bohr and Bock (1891)	M	
	5.8×10^{-6}	1200	Bunsen (1855a)	M	43
	6.4×10^{-6}	1300	Wauchope and Haque (1972)	V	
	6.5×10^{-6}	1300	Wauchope and Haque (1972)	V	
	6.5×10^{-6}		Pierotti (1965)	T	
	7.2×10^{-6}		Nunn (1958)	C	12
	5.6×10^{-6}		Hayer et al. (2022)	Q	20
	6.4×10^{-6}	1600	Battino et al. (2018)	?	
	6.3×10^{-6}	1200	Yaws et al. (1999)	?	21
	5.7×10^{-6}		Abraham and Weathersby (1994)	?	21
	6.3×10^{-6}	1300	Dean and Lange (1999)	?	61, 23
ammonia	5.9×10^{-1}	4200	Burkholder et al. (2019)	L	
NH ₃	5.9×10^{-1}	4200	Burkholder et al. (2015)	L	
[7664-41-7]	5.9×10^{-1}	4200	Sander et al. (2011)	L	
QGZKDVFNNGYKY-UHFFFAOYSA-N	5.9×10^{-1}	4200	Sander et al. (2006)	L	
	5.8×10^{-1}	4400	Yoo et al. (1986)	L	1
	6.0×10^{-1}	4200	Edwards et al. (1978)	L	1
	1.0×10^{-1}	1500	Wilhelm et al. (1977)	L	
	2.8×10^{-1}	3200	Shi et al. (1999)	M	
	9.9	6600	Tsuji et al. (1990)	M	62
	6.0×10^{-1}	4200	Clegg and Brimblecombe (1989)	M	



Table A1.3: Nitrogen (N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.5×10^{-1}	4100	Dasgupta and Dong (1986)	M	
	7.7×10^{-1}		Holzwarth et al. (1984)	M	
	7.4×10^{-1}	3700	Hales and Drewes (1979)	M	
	5.6×10^{-1}	4200	Dasgupta and Dong (1986)	T	
	5.7×10^{-1}	4100	Chameides (1984)	T	
	5.9×10^{-1}	4100	Edwards et al. (1975)	T	1
	6.1×10^{-1}		Van Krevelen et al. (1949)	X	63
	2.9×10^{-1}		Hayer et al. (2022)	Q	20
	2.7×10^{-1}	2400	Dean and Lange (1999)	?	64, 23
	5.7×10^{-1}		Abraham et al. (1990)	?	
	6.1×10^{-1}	4100	Seinfeld (1986)	?	21
	5.8×10^{-1}	4100	Hoffmann and Jacob (1984)	?	21
	5.2×10^{-1}		Bone et al. (1983)	?	65
hydrazoic acid HN_3 [7782-79-8] JUINSXZKUKVTMD-UHFFFAOYSA-N	1.2×10^{-1}	3800	Sander et al. (2011)	L	66
	9.8×10^{-2}	3100	Wilhelm et al. (1977)	L	
	1.2×10^{-1}	3700	Betterton and Robinson (1997)	M	
	9.9×10^{-2}		Templeton and King (1971)	M	38
	7.6×10^{-1}		Modarresi et al. (2007)	Q	67
			Burkholder et al. (2019)	W	68
			Burkholder et al. (2015)	W	69
hydrazine H_4N_2 [302-01-2] OAKJQQAXSVQMHS-UHFFFAOYSA-N	1.6×10^1		HSDB (2015)	V	
dinitrogen monoxide N_2O (nitrous oxide; laughing gas) [10024-97-2] GQPLMRYTRLFLPF-UHFFFAOYSA-N	2.4×10^{-4}	2600	Burkholder et al. (2019)	L	1
	2.1×10^{-4}	2600	Burkholder et al. (2019)	L	70
	2.4×10^{-4}	2600	Burkholder et al. (2015)	L	1
	2.1×10^{-4}	2600	Burkholder et al. (2015)	L	70
	2.4×10^{-4}	2700	Warneck and Williams (2012)	L	
	2.4×10^{-4}	2600	Sander et al. (2011)	L	1
	2.4×10^{-4}	2600	Sander et al. (2006)	L	1
	2.4×10^{-4}	2500	Young (1981b)	L	1
	2.4×10^{-4}	2600	Wilhelm et al. (1977)	L	
	1.8×10^{-4}		Steward et al. (1973)	L	14
	2.5×10^{-4}	2500	Allott et al. (1973)	L	
	2.4×10^{-4}	2500	Weiss and Price (1980)	M	71
	2.5×10^{-4}	2300	Gabel and Schultz (1973)	M	
	2.4×10^{-4}		Joosten and Danckwerts (1972)	M	
	1.9×10^{-4}		Bachofen and Farhi (1971)	M	14
	2.4×10^{-4}	2400	Saidman et al. (1966)	M	
	1.4×10^{-4}		Sy and Hasbrouck (1964)	M	14
	2.2×10^{-4}		Nunn (1958)	M	72
	2.4×10^{-4}		Orcutt and SeEVERS (1937a)	M	
	2.4×10^{-4}	2500	Kunerth (1922)	M	
	2.4×10^{-4}	2400	Siebeck (1909)	M	
	2.4×10^{-4}	2700	Geffcken (1904)	M	



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Table A1.3: Nitrogen (N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^{-4}	2900	Roth (1897)	M	73
	2.5×10^{-4}	2600	Carius (1855)	M	
	2.6×10^{-4}	2500	Gordon (1895)	X	74
	1.7×10^{-4}		Harris (1951)	X	14, 75
	3.0×10^{-4}		Macintosh et al. (1958)	X	12, 75
	1.7×10^{-4}		Orcutt and SeEVERS (1937b)	X	58, 75
	2.8×10^{-4}		Nunn (1958)	C	12
	2.2×10^{-4}		Hayer et al. (2022)	Q	20
		3600	Kühne et al. (2005)	Q	
		2700	Kühne et al. (2005)	?	
	2.4×10^{-4}	2500	Yaws et al. (1999)	?	21
	1.8×10^{-4}		Abraham and Weathersby (1994)	?	21
	2.4×10^{-4}	2800	Dean and Lange (1999)	?	23
	2.5×10^{-4}		Seinfeld (1986)	?	21
	2.5×10^{-4}		Liss and Slater (1974)	?	
nitrogen monoxide NO (nitric oxide) [10102-43-9] MWUXSHHQAYIFBG-UHFFFAOYSA-N	1.9×10^{-5}	1600	Warneck and Williams (2012)	L	
	1.9×10^{-5}	1600	Sander et al. (2011)	L	76, 1
	1.9×10^{-5}	1600	Sander et al. (2006)	L	77, 1
	1.9×10^{-5}	1500	Schwartz and White (1981)	L	
	1.9×10^{-5}	1400	Young (1981b)	L	78, 1
	1.3×10^{-5}		Zafriou and McFarland (1980)	M	79
	2.3×10^{-5}		Komiyama and Inoue (1980)	M	80
	1.9×10^{-5}	1500	Komiyama and Inoue (1978)	M	
	1.9×10^{-5}	1400	Winkler (1901)	M	81
	3.4×10^{-5}		Pierotti (1965)	T	
	1.9×10^{-5}	1300	Loomis (1928)	C	82
	1.5×10^{-5}		Hayer et al. (2022)	Q	20
		1500	Kühne et al. (2005)	Q	
		1600	Kühne et al. (2005)	?	
	1.9×10^{-5}	1400	Yaws et al. (1999)	?	21
	1.9×10^{-5}	1500	Dean and Lange (1999)	?	83, 23
	1.9×10^{-5}		Seinfeld (1986)	?	21
	1.9×10^{-5}		Andrew and Hanson (1961)	?	
			Burkholder et al. (2019)	W	84
			Burkholder et al. (2015)	W	85
			Wilhelm et al. (1977)	W	86
nitrogen dioxide NO ₂ [10102-44-0] JCXJVPUVTGWSNB-UHFFFAOYSA-N	1.2×10^{-4}	2400	Burkholder et al. (2019)	L	
	1.2×10^{-4}	2400	Burkholder et al. (2015)	L	
	9.9×10^{-5}		Warneck and Williams (2012)	L	
	1.2×10^{-4}	2400	Sander et al. (2011)	L	
	1.4×10^{-4}		Sander et al. (2006)	L	
	1.2×10^{-4}		Schwartz and White (1981)	L	
	1.4×10^{-4}		Cheung et al. (2000)	M	
	6.9×10^{-5}		Lee and Schwartz (1981)	M	87
	2.3×10^{-4}		Komiyama and Inoue (1980)	M	80
	1.2×10^{-4}	2500	Chameides (1984)	T	



Table A1.3: Nitrogen (N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.4×10^{-4}	1800	Berdnikov and Bazhin (1970)	T	47
	9.9×10^{-5}		Pandis and Seinfeld (1989)	?	88
	9.9×10^{-5}		Seinfeld (1986)	?	21
	4.0×10^{-4}		Andrew and Hanson (1961)	?	
nitrogen trioxide NO_3 (nitrate radical) [12033-49-7] YPJKMVATUPSWOH-UHFFFAOYSA-N	3.8×10^{-4}		Burkholder et al. (2019)	L	
	3.8×10^{-4}		Burkholder et al. (2015)	L	
	3.8×10^{-4}		Sander et al. (2011)	L	
	3.8×10^{-4}		Sander et al. (2006)	L	
	1.8×10^{-2}		Thomas et al. (1998)	M	
	5.9×10^{-3}		Rudich et al. (1996)	M	89
	1.2×10^{-1}	1900	Chameides (1986)	T	
	3.4×10^{-4}	2000	Berdnikov and Bazhin (1970)	T	47
			Jacob (1986)	E	90
			Seinfeld and Pandis (1998)	?	91
dinitrogen trioxide N_2O_3 [10544-73-7] LZDSILRDTDCIQT-UHFFFAOYSA-N	5.9×10^{-3}		Schwartz and White (1981)	L	
	2.5×10^{-1}		Komiyama and Inoue (1978)	M	
dinitrogen tetroxide N_2O_4 [10544-72-6] WFPZPJUSADLPSON-UHFFFAOYSA-N	1.4×10^{-2}		Schwartz and White (1981)	L	
	2.0×10^{-2}		Komiyama and Inoue (1980)	M	80
	1.6×10^{-2}	3500	Komiyama and Inoue (1978)	M	
	3.1×10^{-2}		Andrew and Hanson (1961)	M	
	1.3×10^{-2}	1100	Kramers et al. (1961)	M	
dinitrogen pentoxide N_2O_5 (nitric anhydride) [10102-03-1] ZWWCURLKEXEFQT-UHFFFAOYSA-N	3.0×10^{-2}		Cruzeiro et al. (2022)	T	92
	3.9×10^{-3}		Galib and Limmer (2021)	T	93
	4.9×10^{-3}		Hirshberg et al. (2018)	T	94
	8.7×10^{-4}	3600	Fried et al. (1994)	T	95
	3.9×10^{-2}	4300	Robinson et al. (1997)	Q	96
	4.9×10^{-2}		Mentel et al. (1999)	E	97
	∞		Sander and Crutzen (1996)	E	98
	∞		Jacob (1986)	E	98
hydroxylamine H_3NO [7803-49-8] AVXURJPOCDRRFD-UHFFFAOYSA-N	1.4×10^3		HSDB (2015)	Q	99
nitrous acid HNO_2 [7782-77-6] IOVCWXUNBOPUCH-UHFFFAOYSA-N	4.8×10^{-1}	4800	Schwartz and White (1981)	L	
	4.7×10^{-1}	4900	Becker et al. (1998)	M	
	4.7×10^{-1}	4900	Becker et al. (1996)	M	
	4.8×10^{-1}	4900	Park and Lee (1988)	M	
	3.7×10^{-1}	9000	Komiyama and Inoue (1978)	M	
	4.7×10^{-1}	4700	Martin (1984)	T	
	4.8×10^{-1}	4800	Chameides (1984)	T	
	4.8×10^{-1}		Seinfeld (1986)	?	21



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Table A1.3: Nitrogen (N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nitric acid HNO_3 [7697-37-2] GRYLNZFGIOXLOG-UHFFFAOYSA-N	8.8×10^2	8700	Durham et al. (1981)	V	
	2.1×10^3		Lelieveld and Crutzen (1991)	R	100
	2.6×10^4	8700	Clegg and Brimblecombe (1990)	T	101, 1
			Brimblecombe and Clegg (1989)	T	102
			Chameides (1984)	T	
			Schwartz and White (1981)	T	
			Pandis and Seinfeld (1989)	?	103
2.1×10^3	8800	Seinfeld (1986)	?	21	
2.1×10^3		Hoffmann and Jacob (1984)	?	21	
3.4×10^3		Brimblecombe and Clegg (1988)	W	104	
pernitric acid HNO_4 [26404-66-0] UZZZMWZGAZGXSF-UHFFFAOYSA-N	3.9×10^{-1}	8400	Leu and Zhang (1999)	L	
	3.9×10^1	6900	Amels et al. (1996)	M	
	1.2×10^2		Régimbal and Mozurkewich (1997)	T	
	1.4×10^2	0	Warneck (1999)	C	
	2.0×10^2		Jacob et al. (1989)	C	
			Möller and Mauersberger (1992)	E	105



A1.4 Fluorine (F)

Table A1.4: Fluorine (F)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fluorine atom F [14762-94-8] YCKRFDGAMUMZLT-UHFFFAOYSA-N	2.0×10^{-4}	400	Berdnikov and Bazhin (1970)	T	47
hydrogen fluoride HF [7664-39-3] KRHYFGTRYWZRS-UHFFFAOYSA-N	1.3×10^2		Fredenhagen and Wellmann (1932a)	M	
	6.8×10^{-4}		Brimblecombe and Clegg (1989)	T	106
			Hayer et al. (2022)	Q	20
			Brimblecombe and Clegg (1988)	W	104
difluorine monoxide F ₂ O [7783-41-7] UJMWVICAENGCRF-UHFFFAOYSA-N	2.9×10^{-5}		Schäfer and Lax (1962)	C	
nitrogen trifluoride NF ₃ [7783-54-2] GVGCUCJTUSOZKP-UHFFFAOYSA-N	7.9×10^{-6}	1900	Burkholder et al. (2019)	L	1
	7.9×10^{-6}	1900	Burkholder et al. (2015)	L	1
	7.9×10^{-6}	1900	Sander et al. (2011)	L	1
	7.9×10^{-6}	1900	Wilhelm et al. (1977)	L	
	7.7×10^{-6}	1700	Dean et al. (1973)	M	107
	7.8×10^{-6}	1900	Ashton et al. (1968)	M	108
dinitrogen tetrafluoride N ₂ F ₄ (tetrafluorohydrazine) [10036-47-2] GFADZIUESKAXAK-UHFFFAOYSA-N	8.4×10^{-6}	2500	Burkholder et al. (2019)	L	1
	8.4×10^{-6}	2500	Burkholder et al. (2015)	L	1
	8.4×10^{-6}	2500	Sander et al. (2011)	L	1
	8.4×10^{-6}	2500	Wilhelm et al. (1977)	L	
	8.4×10^{-6}	2400	Dean et al. (1973)	M	109



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A1.5 Chlorine (Cl)

Table A1.5: Chlorine (Cl)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note		
chlorine (molecular) Cl ₂ [7782-50-5] KZBUYRJDOAKODT-UHFFFAOYSA-N			Burkholder et al. (2019)	L	110		
			Burkholder et al. (2015)	L	110		
			Sander et al. (2011)	L	110		
			Sander et al. (2006)	L	110		
			Young (1983)	L	111		
			6.1×10^{-4}	3200	Aieta and Roberts (1986)	M	
			6.2×10^{-4}	3500	Whitney and Vivian (1941a)	M	112
			6.0×10^{-4}	3000	Jones (1911)	M	110
					Winkler (1907)	M	110
					Yakovkin (1900)	M	113
					Bakhuis Roozeboom (1884)	M	110
					Goodwin (1883)	M	110
					Schoenfeld (1855)	M	110
					7.4×10^{-4}	2600	Lin and Pehkonen (1998)
			5.9×10^{-4}	3200	Leaist (1986)	R	114
					Brian et al. (1962)	R	
			6.1×10^{-4}	2800	Adams and Edmonds (1937)	R	115
Arkadiev (1918)	R	116					
Wagman et al. (1982)	T						
8.7×10^{-4}		Hayer et al. (2022)	Q	20			
		Bartlett and Margerum (1999)	?	110, 21, 117			
		Yaws et al. (1999)	?	110			
		Dean and Lange (1999)	?	110			
		Wilhelm et al. (1977)	?	118, 110			
chlorine atom Cl [22537-15-1] ZAMOUCENKQFHK-UHFFFAOYSA-N			Burkholder et al. (2019)	L			
			Burkholder et al. (2015)	L			
			Sander et al. (2011)	L			
			Sander et al. (2006)	L			
			2.0×10^{-3}		Mozurkewich (1986)	T	119
1.5×10^{-4}	1500	Berdnikov and Bazhin (1970)	T	47			
hydrogen chloride HCl [7647-01-0] VEXZGXHMUGYJMC-UHFFFAOYSA-N			Clegg and Brimblecombe (1986)	L	120		
			Chen et al. (1979)	R			
			Carslaw et al. (1995)	T	121, 1		
			1.1×10^{-2}	2300	Brimblecombe and Clegg (1989)	T	122
					Marsh and McElroy (1985)	T	
					Wagman et al. (1982)	T	123
			2.0×10^{-1}		Graedel and Goldberg (1983)	C	
			2.4×10^{-1}		Hayer et al. (2022)	Q	20
					Seinfeld and Pandis (1998)	?	91
			1.9×10^{-1}	620	Dean and Lange (1999)	?	124, 23
			2.5×10^1		Seinfeld (1986)	?	21
7.2	2000	Pandis and Seinfeld (1989)	W	125			
		Brimblecombe and Clegg (1988)	W	104			



Table A1.5: Chlorine (Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hypochlorous acid HOCl [7790-92-3] QWPPOHNGKGFQJK-UHFFFAOYSA-N	6.5 6.5 6.5 6.5 6.5 9.1 4.7 9.0 6.0 1.2×10^1 6.4 2.6 5.4	5900 5900 5900 5900 5900 1600 4900 5200 8900 5100	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Huthwelker et al. (1995) Blatchley et al. (1992) Hanson and Ravishankara (1991) McCoy et al. (1990) Holzwarth et al. (1984) Imagawa (1950) Ourisson and Kastner (1939) Wagman et al. (1982) Hilal et al. (2008)	L L L L L M M M M M M T Q	12 126 12 127 11
perchloric acid HClO ₄ [7601-90-3] VLTRZXGMWDSKGL-UHFFFAOYSA-N	9.9×10^3		Jaeglé et al. (1996)	E	128
monochlorine monoxide ClO [14989-30-1] MLWGAEVSWJXQJ-UHFFFAOYSA-N	7.0×10^{-3} 7.0×10^{-3} 7.0×10^{-3} 7.0×10^{-3}		Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006)	L L L L	
dichlorine monoxide Cl ₂ O [7791-21-1] RCJVRBWBZCANNQT-UHFFFAOYSA-N	3.4×10^{-2} 7.6×10^{-2} 7.0×10^{-2}	5900 5600	Secoy and Cady (1941) Ourisson and Kastner (1939) this work this work Roth (1942) Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Young (1983) Wilhelm et al. (1977)	M M R R R ? ? ? ? ? ?	129 130 131, 132, 133 132, 134 135 136 136 136 136 137 138
chlorine dioxide ClO ₂ [10049-04-4] OSVXSBDYLRYLIG-UHFFFAOYSA-N	1.0×10^{-2} 1.0×10^{-2} 1.0×10^{-2} 1.0×10^{-2} 1.0×10^{-2} 1.0×10^{-2} 1.0×10^{-2} 1.1×10^{-2} 1.0×10^{-2} 6.6×10^{-3} 9.7×10^{-3}	3500 3500 3500 3500 3300 3300 3200 3100 3200 1200 3600	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Young (1983) Wilhelm et al. (1977) Kepinski and Trzeszczynski (1964) Ishi (1958) Taube and Dodgen (1949) Bigorgne (1947) Holst (1944) Haller and Northgraves (1955)	L L L L L L M M M M M C	1



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Table A1.5: Chlorine (Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-2}	3100	Mavu (2011)	?	
	9.7×10^{-3}		Morrow et al. (2006)	?	
	1.0×10^{-2}	3300	Yaws et al. (1999)	?	21
perchloryl fluoride ClO ₃ F [7616-94-6] XHFXMNZYIKFCPN-UHFFFAOYSA-N	4.4×10^{-5}		Hayer et al. (2022)	Q	20
nitrosyl chloride NOCl [2696-92-6] VPCDQGACGWYTMU-UHFFFAOYSA-N	$>4.9 \times 10^{-4}$		Burkholder et al. (2019)	L	
	$>4.9 \times 10^{-4}$		Burkholder et al. (2015)	L	
	$>4.9 \times 10^{-4}$		Scheer et al. (1997)	M	
nitryl chloride ClNO ₂ [13444-90-1] HSSFHZJIMRUXDM-UHFFFAOYSA-M	4.5×10^{-4}		Frenzel et al. (1998)	E	
	2.4×10^{-4}		Behnke et al. (1997)	E	140
	3.9×10^{-4}		Roberts et al. (2008)	?	
chlorine nitrate ClNO ₃ [14545-72-3] XYLGPCWDPLOBGP-UHFFFAOYSA-N	7.0×10^{-2}	4500	Robinson et al. (1997)	Q	141
	∞		Sander and Crutzen (1996)	E	98
chloramine NH ₂ Cl (chloramide) [10599-90-3] QDHHQCZDFGDHMP-UHFFFAOYSA-N	8.6×10^{-1}	6000	Burkholder et al. (2019)	L	
	8.6×10^{-1}	6000	Burkholder et al. (2015)	L	
	8.6×10^{-1}	6000	Sander et al. (2011)	L	
	8.6×10^{-1}	6000	Sander et al. (2006)	L	
	9.2×10^{-1}	4800	Holzwarth et al. (1984)	M	
	4.6×10^{-5}		Hayer et al. (2022)	Q	20
dichloramine NHCl ₂ (chlorimide) [3400-09-7] JSYGRUBHOCKMGQ-UHFFFAOYSA-N	2.9×10^{-1}	4200	Burkholder et al. (2019)	L	
	2.9×10^{-1}	4200	Burkholder et al. (2015)	L	
	2.9×10^{-1}	4200	Sander et al. (2011)	L	
	2.9×10^{-1}	4200	Sander et al. (2006)	L	
	2.8×10^{-1}	4200	Holzwarth et al. (1984)	M	
nitrogen trichloride NCl ₃ [10025-85-1] QEHKBHWEUPXBCW-UHFFFAOYSA-N	9.9×10^{-4}	4100	Burkholder et al. (2019)	L	
	9.9×10^{-4}	4100	Burkholder et al. (2015)	L	
	9.9×10^{-4}	4100	Sander et al. (2011)	L	
	9.9×10^{-4}	4100	Sander et al. (2006)	L	
	9.9×10^{-4}	4100	Holzwarth et al. (1984)	M	



A1.6 Bromine (Br)

Table A1.6: Bromine (Br)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
bromine (molecular) Br ₂ [7726-95-6] GDTBXPJZTBHREO-UHFFFAOYSA-N	7.2×10^{-3}	4400	Burkholder et al. (2019)	L		
	7.2×10^{-3}	4400	Burkholder et al. (2015)	L		
	7.2×10^{-3}	4400	Sander et al. (2011)	L		
	7.2×10^{-3}	4400	Sander et al. (2006)	L		
	1.8×10^{-2}	3600	Dubik et al. (1987)	M	142	
	6.8×10^{-3}		Hill et al. (1968)	M		
	9.6×10^{-3}		Jenkins and King (1965)	M	12	
	7.0×10^{-3}	4100	Kelley and Tartar (1956)	M		
	1.4×10^{-2}		Jones (1911)	M	80	
	7.8×10^{-3}	3800	Winkler (1906)	M		
	7.9×10^{-3}	3600	Winkler (1899)	M		
	8.3×10^{-3}	4100	Fogg and Sangster (2003)	V		
	bromine atom Br [10097-32-2] WKBOTKDWSSQWDR-UHFFFAOYSA-N	7.9×10^{-3}	3900	Jenkins and King (1965)	R	
7.2×10^{-3}		4000	Wagman et al. (1982)	T		
9.2×10^{-3}			Giona et al. (1969)	X	143, 12	
7.6×10^{-3}			Bartlett and Margerum (1999)	?	21, 117	
7.5×10^{-3}		3900	Dean and Lange (1999)	?	144, 23	
1.2×10^{-2}			Mozurkewich (1986)	T	119	
3.4×10^{-4}		1800	Berdnikov and Bazhin (1970)	T	47	
hydrogen bromide HBr [10035-10-6] CPELXLSAUQHCOX-UHFFFAOYSA-N				Carslaw et al. (1995)	T	145, 1
				Brimblecombe and Clegg (1989)	T	146
				Wagman et al. (1982)	T	147
	6.8×10^{-2}		Hayer et al. (2022)	Q	20	
			Chameides and Stelson (1992)	?	148	
	2.4×10^{-1}	250	Dean and Lange (1999)	?	149, 23	
hypobromous acid HOBr [13517-11-8] CUILPNURFADTPE-UHFFFAOYSA-N			Brimblecombe and Clegg (1988)	W	104	
	$>1.3 \times 10^1$		Burkholder et al. (2019)	L		
	$>1.3 \times 10^1$		Burkholder et al. (2015)	L		
	$>1.9 \times 10^1$		Blatchley et al. (1992)	M	12	
	1.9×10^1		McCoy et al. (1990)	M	12	
	1.8×10^{-2}	4000	Mozurkewich (1995)	T	150	
	6.0×10^1		Frenzel et al. (1998)	E		
	9.1×10^{-1}		Vogt et al. (1996)	E		
			Sander et al. (2011)	W	151	
			Sander et al. (2006)	W	151	
		Fickert (1998)	W	152		
nitryl bromide BrNO ₂ [13536-70-4] SEYAFXCXQVHRPY-UHFFFAOYSA-M						
	3.0×10^{-3}		Frenzel et al. (1998)	E		



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Table A1.6: Bromine (Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bromine nitrate BrNO ₃ [40423-14-1] RRTWEEAEXPZMPY-UHFFFAOYSA-N	∞		Sander and Crutzen (1996)	E	98
bromine chloride BrCl [13863-41-7] CODNYICXDISAEA-UHFFFAOYSA-N	9.7×10^{-3} 9.7×10^{-3} 9.7×10^{-3} 9.7×10^{-3} $< 6.2 \times 10^{-2}$ 1.5×10^{-2} 9.3×10^{-3} 4.2×10^{-2} 1.1×10^{-2} 6.9×10^{-4} 5.8×10^{-3}	5600 5600 5600 5600	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Katrib et al. (2001) Disselkamp et al. (1999) Bartlett and Margerum (1999) Dubik et al. (1987) this work Ordóñez et al. (2012) Frenzel et al. (1998)	L L L L M M M M T E E	153 154 142 155



A1.7 Iodine (I)

Table A1.7: Iodine (I)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
iodine (molecular) I ₂ [7553-56-2] PNDPGZBMCMPRI-UHFFFAOYSA-N	2.8×10^{-2}	4300	Eguchi et al. (1973)	M	
	2.8×10^{-2}	3900	Fogg and Sangster (2003)	V	
	3.0×10^{-2}	4400	Palmer et al. (1985)	R	1
	3.1×10^{-2}	4600	Berdnikov and Bazhin (1970)	R	
	3.2×10^{-2}	4800	Wagman et al. (1982)	T	
	1.1×10^{-2}		Thompson and Zafiriou (1983)	C	156
iodine atom I [14362-44-8] ZCYVEMRRCGMTRW-UHFFFAOYSA-N	7.9×10^{-4}		Mozurkewich (1986)	T	157
	6.2×10^{-5}	2300	Berdnikov and Bazhin (1970)	T	47
hydrogen iodide HI [10034-85-2] XMBWDFGMSWQBKA-UHFFFAOYSA-N			Brimblecombe and Clegg (1989)	T	158
			Wagman et al. (1982)	T	159
	2.5×10^{-1}	9800	Ordóñez et al. (2012)	E	
	∞		Vogt et al. (1999)	E	98
			Brimblecombe and Clegg (1988)	W	104
iodine monoxide IO [14696-98-1] AFSVSXMRDKPOEW-UHFFFAOYSA-N	4.4		Saiz-Lopez et al. (2014)	?	160
iodine dioxide OIO [13494-92-3] WXDJHDMIIZKXSK-UHFFFAOYSA-N	9.9×10^1		Saiz-Lopez et al. (2014)	?	160
diiodine dioxide I ₂ O ₂ [215239-62-6] IELAHHPASVAYOC-UHFFFAOYSA-N	∞		Badia et al. (2019)	E	161, 162
	∞		Vogt et al. (1999)	E	161, 98
	9.9×10^1		Saiz-Lopez et al. (2014)	?	161, 160
diiodine trioxide I ₂ O ₃ [11085-17-9] NMNCVPLBOKQA-UHFFFAOYSA-N	∞		Badia et al. (2019)	E	161, 162
	9.9×10^1		Saiz-Lopez et al. (2014)	?	161, 160
diiodine tetroxide I ₂ O ₄ [1024652-24-1] XHTWXUOEQMOFEJ-UHFFFAOYSA-N	∞		Badia et al. (2019)	E	161, 162
	9.9×10^1		Saiz-Lopez et al. (2014)	?	161, 160
hypoiodous acid HOI [14332-21-9] GEOVEUCEIQCBKH-UHFFFAOYSA-N	>4.1		Palmer et al. (1985)	C	
			Thompson and Zafiriou (1983)	E	163



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Table A1.7: Iodine (I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
iodine nitrite INO ₂ [15465-40-4] PSZTWRLUACEPOW-UHFFFAOYSA-N	3.0×10^{-3} ∞		Badia et al. (2019) Vogt et al. (1999)	E E	164 98
iodine nitrate INO ₃ [14696-81-2] CCJHDZZUWZIVJF-UHFFFAOYSA-N	∞		Vogt et al. (1999)	E	98
iodine chloride ICl [7790-99-0] QZRGKCOWNLSUDK-UHFFFAOYSA-N	1.1		Wagman et al. (1982)	T	
iodine bromide IBr [7789-33-5] CBEQRNSPHCCXSH-UHFFFAOYSA-N	2.4×10^{-1}		Wagman et al. (1982)	T	



A1.8 Sulfur (S)

Table A1.8: Sulfur (S)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
sulfur S [7704-34-9] NINIDFKCEFEMDL-UHFFFAOYSA-N	2.0×10^1		Maniere et al. (2011)	?	12, 165
hydrogen sulfide H_2S [7783-06-4] RWSOTUBLDIXVET-UHFFFAOYSA-N	1.0×10^{-3}	2100	Burkholder et al. (2019)	L	1
	1.0×10^{-3}	2100	Burkholder et al. (2015)	L	1
	1.0×10^{-3}	2100	Sander et al. (2011)	L	1
	1.0×10^{-3}	2100	Sander et al. (2006)	L	1
	1.0×10^{-3}	2000	Fernández-Prini et al. (2003)	L	3
	1.0×10^{-3}	2200	Carroll and Mather (1989)	L	
	1.0×10^{-3}	2000	Fogg and Young (1988)	L	1, 166
	1.0×10^{-3}	2000	Yoo et al. (1986)	L	1
	1.0×10^{-3}	2100	Edwards et al. (1978)	L	1
	1.0×10^{-3}	2100	Wilhelm et al. (1977)	L	
	9.1×10^{-4}	1700	Rinker and Sandall (2000)	M	
	9.2×10^{-4}	1600	Munder et al. (2000)	M	
	8.6×10^{-4}	2100	De Bruyn et al. (1995b)	M	
	1.1×10^{-3}	2300	Suleimenov and Krupp (1994)	M	1
	1.2×10^{-3}	1700	Tsuji et al. (1990)	M	62
	9.4×10^{-4}	2300	Barrett et al. (1988)	M	
	1.0×10^{-3}	2100	Clarke and Glew (1971)	M	167
	1.0×10^{-3}	2300	Winkler (1907)	M	
	1.0×10^{-3}	2100	Winkler (1906)	M	
	1.1×10^{-3}	2000	Schoenfeld (1855)	M	168
	9.6×10^{-4}	2000	Iliuta and Larachi (2007)	R	1
	1.0×10^{-3}		Hine and Weimar (1965)	R	
	1.0×10^{-3}	2300	Edwards et al. (1975)	T	1
	7.0×10^{-4}		Hayer et al. (2022)	Q	20
	1.0×10^{-3}	2000	Yaws et al. (1999)	?	21
	1.0×10^{-3}	2100	Dean and Lange (1999)	?	169, 23
			Chapoy et al. (2005)	W	170, 1
deuterium sulfide D_2S [13536-94-2] RWSOTUBLDIXVET-ZSJDYOACSA-N	9.9×10^{-4}	2100	Clarke and Glew (1971)	M	171, 172
sulfur dioxide SO_2 [7446-09-5] RAHZWNYVWXNFOC-UHFFFAOYSA-N	1.3×10^{-2}	2900	Burkholder et al. (2019)	L	1
	1.3×10^{-2}	2900	Burkholder et al. (2015)	L	1
	1.3×10^{-2}	2900	Sander et al. (2011)	L	1
	1.3×10^{-2}	2900	Sander et al. (2006)	L	1
	1.2×10^{-2}	3100	Yoo et al. (1986)	L	1
	1.3×10^{-2}	2900	Young (1983)	L	1
	1.2×10^{-2}	3200	Maahs (1982)	L	
	1.2×10^{-2}	3000	Edwards et al. (1978)	L	1



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Table A1.8: Sulfur (S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-2}	2800	Wilhelm et al. (1977)	L	
	4.0×10^{-1}		St-Pierre et al. (2014)	M	173
	1.2×10^{-2}	3100	Johnstone and Leppla (1934)	M	
	1.4×10^{-2}	3400	Schoenfeld (1855)	M	174
	1.1×10^{-2}	1200	Terraglio and Manganelli (1967)	V	
	1.2×10^{-2}	3100	Chameides (1984)	T	
	1.2×10^{-2}	3100	Edwards et al. (1975)	T	1
	1.2×10^{-2}		Rodríguez-Sevilla et al. (2001)	X	175
	1.2×10^{-2}	3100	Pandis and Seinfeld (1989)	C	
	1.2×10^{-2}	3300	Beilke and Gravenhorst (1978)	C	
	2.9×10^{-2}		Hayer et al. (2022)	Q	20
	1.3×10^{-2}	2900	Yaws et al. (1999)	?	21
	1.5×10^{-2}	3100	Dean and Lange (1999)	?	176, 23
	1.2×10^{-2}	3100	Seinfeld (1986)	?	21
	1.2×10^{-2}	3100	Hoffmann and Jacob (1984)	?	21
sulfur trioxide SO ₃ [7446-11-9] AKEJUJNQAGONA-UHFFFAOYSA-N	5.1×10^{-8} ∞		Hayer et al. (2022) Sander and Crutzen (1996)	Q E	20 98
sulfuric acid H ₂ SO ₄ [7664-93-9] QAOWNCQDCNURD-UHFFFAOYSA-N			Marti et al. (1997) Ayers et al. (1980) Gmitro and Vermeulen (1964) Clegg et al. (1998) Hoffmann and Calvert (1985) Ayers (1983)	M M M V T T	177 178 179 180
	1.3×10^{13} 2.9×10^7	20000 10000			
sulfur hexafluoride SF ₆ [2551-62-4] SFZCNBIFKDRMGX-UHFFFAOYSA-N	2.4×10^{-6} 2.5×10^{-6} 2.4×10^{-6} 2.3×10^{-6} 1.4×10^{-6} 2.4×10^{-6} 2.5×10^{-6} 1.7×10^{-6} 1.7×10^{-6} 2.4×10^{-6} 2.2×10^{-6} 2.2×10^{-6} 2.6×10^{-6} 2.2×10^{-5} 2.6×10^{-5} 2.2×10^{-6} 2.4×10^{-6} 1.9×10^{-6}	3100 2100 2400 2700 260 2400 3500 3200 2800 2400	Warneck and Williams (2012) Fernández-Prini et al. (2003) Wilhelm et al. (1977) Bullister et al. (2002) Guitart et al. (1989) Park et al. (1982) Cosgrove and Walkley (1981) Longo et al. (1970) Power and Stegall (1970) Shoor et al. (1969) Ashton et al. (1968) Friedman (1954) Giardino et al. (1988) Hayer et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005) Yaws et al. (1999) Abraham and Weathersby (1994)	L L L M M M M M M M M M V Q Q Q Q ? ? ? ?	3 181 14 42, 11 14 14 182 183 185, 21 21 21



Table A1.8: Sulfur (S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
sulfuryl fluoride	8.9×10^{-5}	3100	Cady and Misra (1974)	M	
SO ₂ F ₂ [2699-79-8]	7.3×10^{-5} 3.2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
OBTWBSRJZRCYQV-UHFFFAOYSA-N	6.3×10^{-6}		Maniere et al. (2011)	?	12, 165



Rolf Sander: Compilation of Henry’s law constants

A1.9 Rare gases (He, Ne, Ar, Kr, Xe, Rn)

Table A1.9: Rare gases (He, Ne, Ar, Kr, Xe, Rn)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
helium	3.9×10^{-6}	15	Fernández-Prini et al. (2003)	L	3
He	3.8×10^{-6}	83	Abraham and Matteoli (1988)	L	
[7440-59-7]	3.8×10^{-6}	83	Clever (1979a)	L	1
SWQJXJQGLNCZEY-UHFFFAOYSA-N	3.8×10^{-6}	92	Wilhelm et al. (1977)	L	
	3.7×10^{-6}	320	Himmelblau (1960)	L	1
	3.9×10^{-6}	69	Krause and Benson (1989)	M	
			Shoor et al. (1969)	M	187
	3.7×10^{-6}	120	Morrison and Johnstone (1954)	M	188
	3.8×10^{-6}		Friedman (1954)	M	
	3.8×10^{-6}	210	Lannung (1930)	M	189
	3.7×10^{-6}	380	Cady et al. (1922)	M	
	6.3×10^{-6}	-700	von Antropoff (1910)	M	42
	3.7×10^{-6}	220	Wauchope and Haque (1972)	V	
	5.3×10^{-6}		Pierotti (1965)	T	
	4.5×10^{-6}		Hayer et al. (2022)	Q	20
	3.3×10^{-6}	4	Linnemann et al. (2020)	Q	42
	3.3×10^{-6}	71	Linnemann et al. (2020)	Q	42, 190
	3.9×10^{-6}		Warr et al. (2015)	Q	12
	3.8×10^{-6}	83	Yaws et al. (1999)	?	21
	3.9×10^{-6}		Abraham and Weathersby (1994)	?	21
	3.7×10^{-6}	200	Dean and Lange (1999)	?	191, 23
	3.8×10^{-6}		Abraham et al. (1990)	?	
neon	4.5×10^{-6}	430	Fernández-Prini et al. (2003)	L	3
Ne	4.4×10^{-6}	470	Abraham and Matteoli (1988)	L	
[7440-01-9]	4.5×10^{-6}	470	Clever (1979a)	L	1
GKAOGPPIIYCISHV-UHFFFAOYSA-N	4.4×10^{-6}	450	Wilhelm et al. (1977)	L	
	4.5×10^{-6}	440	Krause and Benson (1989)	M	
	4.4×10^{-6}	510	Crovetto et al. (1982)	M	
	4.3×10^{-6}		Power and Stegall (1970)	M	14
	4.5×10^{-6}	460	Morrison and Johnstone (1954)	M	192
	4.6×10^{-6}	37	Lannung (1930)	M	193
	6.6×10^{-6}	-990	von Antropoff (1910)	M	
	4.5×10^{-6}	510	Wauchope and Haque (1972)	V	
	8.8×10^{-6}		Pierotti (1965)	T	
	4.5×10^{-6}		Hayer et al. (2022)	Q	20
	3.4×10^{-6}	250	Linnemann et al. (2020)	Q	33
	4.7×10^{-6}	470	Linnemann et al. (2020)	Q	33, 190
	3.6×10^{-6}		Warr et al. (2015)	Q	12
	4.5×10^{-6}	470	Yaws et al. (1999)	?	21
	4.4×10^{-6}		Abraham and Weathersby (1994)	?	21
	4.5×10^{-6}	550	Dean and Lange (1999)	?	194, 23
	4.4×10^{-6}		Abraham et al. (1990)	?	



Table A1.9: Rare gases (He, Ne, Ar, Kr, Xe, Rn) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
argon	1.4×10^{-5}	1700	Warneck and Williams (2012)	L	
Ar	1.4×10^{-5}	1400	Fernández-Prini et al. (2003)	L	3
[7440-37-1]	1.4×10^{-5}	1500	Abraham and Matteoli (1988)	L	
XKRFYHLGVUSROY-UHFFFAOYSA-N	1.4×10^{-5}	1500	Clever (1980)	L	1
	1.4×10^{-5}	1500	Wilhelm et al. (1977)	L	
	1.4×10^{-5}	1400	Rettich et al. (1992)	M	195
	1.4×10^{-5}	1400	Krause and Benson (1989)	M	
	1.4×10^{-5}		Park et al. (1982)	M	
	1.4×10^{-5}	1500	Crovetto et al. (1982)	M	
	1.4×10^{-5}	1200	Cosgrove and Walkley (1981)	M	11
	1.4×10^{-5}	1300	Potter II and Clyne (1978)	M	
	1.4×10^{-5}	1500	Murray and Riley (1970)	M	196
	1.4×10^{-5}	1600	Shoor et al. (1969)	M	197
	1.4×10^{-5}	1500	Ashton et al. (1968)	M	198
	1.3×10^{-5}	1500	Morrison and Johnstone (1954)	M	199
	1.4×10^{-5}	1800	Friedman (1954)	M	
	1.4×10^{-5}	1400	Lannung (1930)	M	200
	1.6×10^{-5}	1300	von Antropoff (1910)	M	
	1.5×10^{-5}	1400	Winkler (1906)	M	
	1.4×10^{-5}	1400	Wauchope and Haque (1972)	V	
	1.4×10^{-5}	1400	Wauchope and Haque (1972)	V	
	1.8×10^{-5}		Pierotti (1965)	T	
	9.5×10^{-6}		Hayer et al. (2022)	Q	20
	7.8×10^{-6}	1200	Linnemann et al. (2020)	Q	190
	1.1×10^{-5}	1100	Linnemann et al. (2020)	Q	201
	1.2×10^{-5}		Warr et al. (2015)	Q	12
	1.4×10^{-5}	1500	Yaws et al. (1999)	?	21
	1.2×10^{-5}		Abraham and Weathersby (1994)	?	21
	1.4×10^{-5}	1500	Dean and Lange (1999)	?	202, 23
	1.4×10^{-5}		Abraham et al. (1990)	?	
krypton	2.5×10^{-5}	1700	Fernández-Prini et al. (2003)	L	3
Kr	2.5×10^{-5}	1900	Abraham and Matteoli (1988)	L	
[7439-90-9]	2.5×10^{-5}	1900	Clever (1979b)	L	1
DNNSWSSYDEUBZ-UHFFFAOYSA-N	2.5×10^{-5}	1900	Wilhelm et al. (1977)	L	
	2.0×10^{-5}		Steward et al. (1973)	L	14
	2.5×10^{-5}	2000	Allott et al. (1973)	L	
	2.5×10^{-5}	1800	Krause and Benson (1989)	M	
	2.5×10^{-5}	1900	Crovetto et al. (1982)	M	
	2.6×10^{-5}	1800	Cosgrove and Walkley (1981)	M	11
	2.4×10^{-5}	1700	Morrison and Johnstone (1954)	M	203
	3.4×10^{-5}	1400	von Antropoff (1910)	M	204
	2.8×10^{-5}	1900	von Antropoff (1910)	M	204
	2.4×10^{-5}	1800	Wauchope and Haque (1972)	V	
	4.4×10^{-5}		Pierotti (1965)	T	
	2.6×10^{-5}		Hayer et al. (2022)	Q	20
	1.5×10^{-5}	1600	Linnemann et al. (2020)	Q	190
	1.6×10^{-5}	1400	Linnemann et al. (2020)	Q	201



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Table A1.9: Rare gases (He, Ne, Ar, Kr, Xe, Rn) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-5}		Warr et al. (2015)	Q	12
	2.5×10^{-5}	1900	Yaws et al. (1999)	?	21
	2.0×10^{-5}		Abraham and Weathersby (1994)	?	21
	2.5×10^{-5}	1800	Dean and Lange (1999)	?	205, 23
	2.5×10^{-5}		Abraham et al. (1990)	?	
xenon	4.4×10^{-5}	2200	Fernández-Prini et al. (2003)	L	3
Xe	4.3×10^{-5}	2300	Abraham and Matteoli (1988)	L	
[7440-63-3]	4.3×10^{-5}	2300	Clever (1979b)	L	1
FHNFHKCVQCLJFQ-UHFFFAOYSA-N	4.2×10^{-5}	2200	Wilhelm et al. (1977)	L	
	3.3×10^{-5}		Steward et al. (1973)	L	14
	4.5×10^{-5}	2400	Allott et al. (1973)	L	
	4.0×10^{-5}	2400	Himmelblau (1960)	L	1, 206
	4.3×10^{-5}	2300	Krause and Benson (1989)	M	
	4.2×10^{-5}	2400	Crovetto et al. (1982)	M	
	4.2×10^{-5}	2200	Morrison and Johnstone (1954)	M	207
	4.4×10^{-5}	2500	von Antropoff (1910)	M	
	4.2×10^{-5}	2200	Wauchope and Haque (1972)	V	
	5.5×10^{-5}		Pierotti (1965)	T	
	2.5×10^{-5}		Hayer et al. (2022)	Q	20
	7.0×10^{-5}	2300	Linnemann et al. (2020)	Q	190
	2.9×10^{-5}	1800	Linnemann et al. (2020)	Q	201
	8.2×10^{-5}		Warr et al. (2015)	Q	12
	4.3×10^{-5}	2300	Yaws et al. (1999)	?	21
	3.4×10^{-5}		Abraham and Weathersby (1994)	?	21
	4.9×10^{-5}	2200	Dean and Lange (1999)	?	208, 23
	4.3×10^{-5}		Abraham et al. (1990)	?	
xenon-133 ^{133}Xe [14932-42-4] FHNFHKCVQCLJFQ-NJFSPNSNSA-N	3.2×10^{-5}		Ercan (1979)	M	14
radon	9.1×10^{-5}	2900	Abraham and Matteoli (1988)	L	
Rn	9.1×10^{-5}	2600	Clever (1979b)	L	1
[10043-92-2]	9.2×10^{-5}	2600	Wilhelm et al. (1977)	L	
SYUHGPVQRZVTB-UHFFFAOYSA-N	9.4×10^{-5}	2600	Lewis et al. (1987)	M	209
	1.0×10^{-4}	2700	Ramstedt (1911)	M	
	1.2×10^{-4}		Pierotti (1965)	T	
	1.0×10^{-4}		Hayer et al. (2022)	Q	20
	7.4×10^{-5}	2400	Linnemann et al. (2020)	Q	210
	9.1×10^{-5}	2600	Yaws et al. (1999)	?	21
	8.3×10^{-5}	2800	Dean and Lange (1999)	?	211, 23
	9.1×10^{-5}		Abraham et al. (1990)	?	



A1.10 Other elements (B, Se, P, As, Hg)

Table A1.10: Other elements (B, Se, P, As, Hg)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
boric acid H_3BO_3 [10043-35-3] KGBXLFKZBHKPEV-UHFFFAOYSA-N	3.8×10^6		HSDB (2015)	V	
selenium hydride H_2Se [7783-07-5] BUGBHKTXTAQXES-UHFFFAOYSA-N	8.1×10^{-4} 8.3×10^{-4} 8.3×10^{-4}	1700 1900 1900	Fogg and Young (1988) Wilhelm et al. (1977) Sisi et al. (1971)	L L M	1 212
phosphorus trihydride PH_3 (phosphine) [7803-51-2] XYFCBTPGUUZFI-UHFFFAOYSA-N	8.1×10^{-5} 5.9×10^{-5} 8.1×10^{-5}	2000 3000 2000	Wilhelm et al. (1977) Fu et al. (2013) Yaws et al. (1999)	L M ?	 213 21
arsenic hydride AsH_3 (arsine) [7784-42-1] RQNWIZPPADIBDY-UHFFFAOYSA-N	8.8×10^{-5}	2100	Wilhelm et al. (1977)	L	
mercury Hg [7439-97-6] QSHDDOUJBYECFT-UHFFFAOYSA-N	1.3×10^{-3} 1.3×10^{-3} 1.2×10^{-3} 1.1×10^{-3} 1.3×10^{-3} 1.3×10^{-3} 8.7×10^{-4} 1.1×10^{-3} 1.2×10^{-3} 1.4×10^{-3}	2600 2600 5400 4800 2600 2500 5700 2300	Burkholder et al. (2019) Burkholder et al. (2015) Clever (1987) Clever et al. (1985) Andersson et al. (2008) Sanemasa (1975) Mackay and Leinonen (1975) Glew and Hames (1971) Shon et al. (2005) WHO (1990) Abraham et al. (2008)	L L L L M M V V C C Q	 1 1 12 214
mercury(II) oxide HgO [21908-53-2] UKWHYYKOEPR TIC-UHFFFAOYSA-N	3.2×10^4 2.7×10^{10} 1.4×10^4		Shon et al. (2005) Schroeder and Munthe (1998) Petersen et al. (1998)	? ? ?	216 21 215
mercury dihydroxide $\text{Hg}(\text{OH})_2$ [12135-13-6] VLKXDXVWIBHHS-UHFFFAOYSA-L	1.3×10^2 1.3×10^2	4200 4200	WHO (1990) Lindqvist and Rodhe (1985)	C C	



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Table A1.10: Other elements (B, Se, P, As, Hg) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
mercury dichloride HgCl_2 [7487-94-7] LWJROJJCJINYWOX-UHFFFAOYSA-L	1.0×10^3		Severit (1997)	M	217
	1.6×10^4		Abraham et al. (2008)	V	
	4.2×10^4		Abraham et al. (2008)	V	
	1.3×10^4	7400	Kanefke (2008)	R	
	2.4×10^5		Shon et al. (2005)	C	
	1.4×10^4	5300	WHO (1990)	C	
	1.4×10^4	5300	Lindqvist and Rodhe (1985)	C	
	4.2×10^4	7400	Abraham et al. (2008)	Q	218
	2.7×10^4		Schroeder and Munthe (1998)	?	12, 21
1.4×10^4	9500	Braun and Dransfeld (1989)	?	11	
6.3×10^2		Iverfeldt and Persson (1985)	?	219	
mercury dibromide HgBr_2 [7789-47-1] NGYIMTKLQULBOO-UHFFFAOYSA-L	1.2×10^3		Abraham et al. (2008)	V	
	9.6×10^2	7400	Kanefke (2008)	C	
	4.4×10^3	7100	Abraham et al. (2008)	Q	218
	2.7×10^4		Hedgecock et al. (2005)	?	220
	5.2×10^1		Iverfeldt and Persson (1985)	?	219
mercury diiodide HgI_2 [7774-29-0] YFDLHELOZYVNJE-UHFFFAOYSA-L	5.7×10^1		Abraham et al. (2008)	V	
	2.0×10^2	6700	Abraham et al. (2008)	Q	218
	1.9		Iverfeldt and Persson (1985)	?	219



A2 Hydrocarbons (C, H)

A2.1 Alkanes

Table A2.1: Alkanes

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methane	1.4×10^{-5}	1600	Burkholder et al. (2019)	L	1
CH ₄	1.2×10^{-5}	1100	Burkholder et al. (2019)	L	70
[74-82-8]	1.4×10^{-5}	1600	Burkholder et al. (2015)	L	1
VNWK TOKETHGBQD-UHFFFAOYSA-N	1.2×10^{-5}	1100	Burkholder et al. (2015)	L	70
	1.4×10^{-5}	1900	Warneck and Williams (2012)	L	
	1.4×10^{-5}	1600	Sander et al. (2011)	L	1
	1.4×10^{-5}	1600	Sander et al. (2006)	L	1
	1.4×10^{-5}	1500	Fernández-Prini et al. (2003)	L	3
	1.4×10^{-5}	1600	Plyasunov and Shock (2000)	L	
	1.4×10^{-5}	1600	Abraham and Matteoli (1988)	L	
			Clever and Young (1987)	L	221
	1.5×10^{-5}		Mackay and Shiu (1981)	L	
	1.4×10^{-5}	1700	Wilhelm et al. (1977)	L	
	1.3×10^{-5}	1500	Himmelblau (1960)	L	1
	1.6×10^{-5}		Liu et al. (2021)	M	
	1.4×10^{-5}	1800	Lutsyk et al. (2005)	M	
	1.2×10^{-5}	2400	Lekvam and Bishnoi (1997)	M	
	1.3×10^{-5}	1400	Reichl (1995)	M	222
	1.4×10^{-5}	1600	Scharlin and Battino (1995)	M	223
	1.2×10^{-5}		Guitart et al. (1989)	M	14
	1.4×10^{-5}	1800	Ben-Naim and Battino (1985)	M	
	1.4×10^{-5}	1600	Crovetto et al. (1982)	M	
	1.4×10^{-5}	1600	Rettich et al. (1981)	M	
	1.4×10^{-5}	1600	Cosgrove and Walkley (1981)	M	11
	1.3×10^{-5}	1700	Shoor et al. (1969)	M	224
	1.5×10^{-5}		McAuliffe (1966)	M	225
	1.4×10^{-5}	1600	Wetlaufer et al. (1964)	M	
	1.5×10^{-5}		McAuliffe (1963)	M	226
	1.3×10^{-5}	1600	Morrison and Billett (1952)	M	227
	1.3×10^{-5}	1700	Winkler (1901)	M	228
	1.5×10^{-5}		Duchowicz et al. (2020)	V	186
	1.5×10^{-5}		HSDB (2015)	V	
	1.5×10^{-5}		Meylan and Howard (1991)	V	
	1.5×10^{-5}		Hine and Mookerjee (1975)	V	
	1.3×10^{-5}	1600	Wauchope and Haque (1972)	V	
	9.2×10^{-5}		Butler and Ramchandani (1935)	V	
	1.4×10^{-5}		Hine and Weimar (1965)	R	
	1.4×10^{-5}		Pierotti (1965)	T	
	9.6×10^{-6}		Liss and Slater (1974)	C	
	1.3×10^{-5}		Deno and Berkheimer (1960)	C	
	1.1×10^{-5}		Hayer et al. (2022)	Q	20
	3.4×10^{-3}		Duchowicz et al. (2020)	Q	
	7.0×10^{-7}		Gharagheizi et al. (2012)	Q	



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-5}	2300	Hilal et al. (2008)	Q	
	3.0×10^{-5}		Kühne et al. (2005)	Q	
	3.0×10^{-5}		Yao et al. (2002)	Q	229
	8.6×10^{-6}		English and Carroll (2001)	Q	230, 231
	1.6×10^{-5}		Katritzky et al. (1998)	Q	
	2.1×10^{-5}		Nirmalakhandan et al. (1997)	Q	
	2.4×10^{-5}		Suzuki et al. (1992)	Q	232
		1700	Meylan and Howard (1991)	Q	
	1.6×10^{-5}		Kühne et al. (2005)	?	
	1.4×10^{-5}		Yaws (1999)	?	21
	1.2×10^{-5}	1600	Yaws et al. (1999)	?	21
	1.3×10^{-5}		Abraham and Weathersby (1994)	?	21
	1.5×10^{-5}	1700	Dean and Lange (1999)	?	233, 23
	1.4×10^{-5}		Yaws and Yang (1992)	?	21
			Abraham et al. (1990)	?	
ethane	1.9×10^{-5}	2400	Burkholder et al. (2019)	L	1
C ₂ H ₆	1.9×10^{-5}	2400	Burkholder et al. (2015)	L	1
[74-84-0]	1.9×10^{-5}	2400	Sander et al. (2011)	L	1
OTMSDBZUPAUJEDD-UHFFFAOYSA-N	1.9×10^{-5}	2400	Sander et al. (2006)	L	1
	1.9×10^{-5}	2400	Fernández-Prini et al. (2003)	L	3
	1.9×10^{-5}	2300	Plyasunov and Shock (2000)	L	
	1.9×10^{-5}	2300	Abraham and Matteoli (1988)	L	
	1.9×10^{-5}	2300	Hayduk (1982)	L	1
	2.0×10^{-5}		Mackay and Shiu (1981)	L	
	1.8×10^{-5}	2400	Wilhelm et al. (1977)	L	
	2.0×10^{-5}	2300	Reichl (1995)	M	234
	1.3×10^{-5}		Guitart et al. (1989)	M	14
	1.8×10^{-5}	2700	Ben-Naim and Battino (1985)	M	
	1.9×10^{-5}	2300	Rettich et al. (1981)	M	
	1.8×10^{-5}	2700	Cosgrove and Walkley (1981)	M	11
	2.0×10^{-5}		McAuliffe (1966)	M	225
	2.0×10^{-5}	2400	Wetlaufer et al. (1964)	M	
	2.0×10^{-5}		McAuliffe (1963)	M	226
	1.7×10^{-5}	2100	Morrison and Billett (1952)	M	235
	1.8×10^{-5}	2400	Winkler (1901)	M	236
	2.0×10^{-5}		Duchowicz et al. (2020)	V	186
	2.0×10^{-5}		HSDB (2015)	V	
	2.0×10^{-5}		Hine and Mookerjee (1975)	V	
	1.7×10^{-5}	2000	Wauchope and Haque (1972)	V	
	1.0×10^{-4}		Butler and Ramchandani (1935)	V	
	4.0×10^{-5}		Pierotti (1965)	T	
	2.0×10^{-5}		Yaws (2003)	X	237
	1.8×10^{-5}		Deno and Berkheimer (1960)	C	
	1.8×10^{-5}		Hayer et al. (2022)	Q	20
	1.3×10^{-3}		Duchowicz et al. (2020)	Q	
	1.1×10^{-4}		Wang et al. (2017)	Q	80, 238
	1.1×10^{-5}		Wang et al. (2017)	Q	80, 239



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-5}		Wang et al. (2017)	Q	80, 240
	2.0×10^{-5}		Li et al. (2014)	Q	241
	3.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	4.1×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.0×10^{-5}		Hilal et al. (2008)	Q	
	7.8×10^{-6}		Modarresi et al. (2007)	Q	67
		2600	Kühne et al. (2005)	Q	
	4.6×10^{-6}		Modarresi et al. (2005)	Q	247
	2.1×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	2.1×10^{-5}		Yao et al. (2002)	Q	229
	1.8×10^{-5}		English and Carroll (2001)	Q	230, 231
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	2.4×10^{-5}		Suzuki et al. (1992)	Q	232
	2.2×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-5}		Irmann (1965)	Q	
		2500	Kühne et al. (2005)	?	
	2.0×10^{-5}		Yaws (1999)	?	21
	1.9×10^{-5}	2300	Yaws et al. (1999)	?	21
	1.5×10^{-5}		Abraham and Weathersby (1994)	?	21
	1.8×10^{-5}	2400	Dean and Lange (1999)	?	250, 23
	2.0×10^{-5}		Yaws and Yang (1992)	?	21
	1.9×10^{-5}		Abraham et al. (1990)	?	
propane	1.5×10^{-5}	2700	Burkholder et al. (2019)	L	1
C_3H_8	1.5×10^{-5}	2700	Burkholder et al. (2015)	L	1
[74-98-6]	1.5×10^{-5}	2700	Sander et al. (2011)	L	1
ATUOYWHBWRKTHZ-UHFFFAOYSA-N	1.5×10^{-5}	2700	Sander et al. (2006)	L	1
	1.5×10^{-5}	2800	Plyasunov and Shock (2000)	L	
	1.5×10^{-5}	2800	Abraham and Matteoli (1988)	L	
	1.5×10^{-5}	2700	Hayduk (1986)	L	1
	1.4×10^{-5}		Mackay and Shiu (1981)	L	
	1.5×10^{-5}	2700	Wilhelm et al. (1977)	L	
	1.6×10^{-5}	2700	Chapoy et al. (2004)	M	1
	1.5×10^{-5}	2700	Reichl (1995)	M	251
	9.7×10^{-6}		Guitart et al. (1989)	M	14
	1.4×10^{-5}	3000	Ben-Naim and Battino (1985)	M	
	1.4×10^{-5}		McAuliffe (1966)	M	225
	1.6×10^{-5}	2700	Wetlaufer et al. (1964)	M	
	1.4×10^{-5}		McAuliffe (1963)	M	226
	1.5×10^{-5}	2600	Morrison and Billett (1952)	M	252
	1.4×10^{-5}		Duchowicz et al. (2020)	V	186
	1.4×10^{-5}		HSDB (2015)	V	
	1.4×10^{-5}		Hine and Mookerjee (1975)	V	
	1.5×10^{-5}	2600	Wauchope and Haque (1972)	V	
	1.5×10^{-5}	2700	Wauchope and Haque (1972)	V	



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-5}		Irmann (1965)	V	
	1.4×10^{-5}		Yaws (2003)	X	237
	1.4×10^{-5}		Deno and Berkheimer (1960)	C	
	1.7×10^{-5}		Hayer et al. (2022)	Q	20
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	8.7×10^{-5}		Wang et al. (2017)	Q	80, 238
	9.3×10^{-6}		Wang et al. (2017)	Q	80, 239
	1.9×10^{-5}		Wang et al. (2017)	Q	80, 240
	4.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.4×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-5}		Hilal et al. (2008)	Q	
	7.2×10^{-6}		Modarresi et al. (2007)	Q	67
		2900	Kühne et al. (2005)	Q	
	3.7×10^{-6}		Modarresi et al. (2005)	Q	247
	1.4×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	2.0×10^{-5}		Yao et al. (2002)	Q	229
	1.4×10^{-5}		English and Carroll (2001)	Q	230, 231
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	1.7×10^{-5}		Suzuki et al. (1992)	Q	232
	1.6×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.3×10^{-5}		Irmann (1965)	Q	
		2800	Kühne et al. (2005)	?	
	1.4×10^{-5}		Yaws (1999)	?	21
	1.5×10^{-5}	4500	Yaws et al. (1999)	?	21
	1.4×10^{-5}		Yaws and Yang (1992)	?	21
	1.5×10^{-5}		Abraham et al. (1990)	?	
butane	1.2×10^{-5}	3100	Burkholder et al. (2019)	L	253, 1
C_4H_{10}	1.2×10^{-5}	3100	Burkholder et al. (2015)	L	254, 1
[106-97-8]	1.2×10^{-5}	3100	Sander et al. (2011)	L	255, 1
IJDNQMDRQITEOD-UHFFFAOYSA-N	1.2×10^{-5}	3100	Sander et al. (2006)	L	256, 1
	1.2×10^{-5}	3100	Plyasunov and Shock (2000)	L	
	1.3×10^{-5}	3100	Abraham and Matteoli (1988)	L	
	1.2×10^{-5}	3000	Hayduk (1986)	L	1
	1.0×10^{-5}		Mackay and Shiu (1981)	L	
	1.2×10^{-5}	3100	Wilhelm et al. (1977)	L	
	1.3×10^{-5}	2300	Carroll et al. (1997)	M	1
	8.0×10^{-6}		Guitart et al. (1989)	M	14
	1.2×10^{-5}	3200	Ben-Naim and Battino (1985)	M	
	1.1×10^{-5}		McAuliffe (1966)	M	225
	1.3×10^{-5}	3200	Wetlaufer et al. (1964)	M	
	1.1×10^{-5}		McAuliffe (1963)	M	226
	1.1×10^{-5}	2900	Morrison and Billett (1952)	M	257
	1.0×10^{-5}		Duchowicz et al. (2020)	V	186
	1.0×10^{-5}		HSDB (2015)	V	



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.0×10^{-5}		Mackay et al. (2006a)	V	
	1.0×10^{-5}		Mackay et al. (1993)	V	
	9.6×10^{-6}		Hwang et al. (1992)	V	
	1.1×10^{-5}		Hine and Mookerjee (1975)	V	
	1.1×10^{-5}	2900	Wauchope and Haque (1972)	V	
	1.2×10^{-5}	3100	Wauchope and Haque (1972)	V	
	1.2×10^{-5}		Irmann (1965)	V	
	4.8×10^{-5}		Butler and Ramchandani (1935)	V	
	1.1×10^{-5}		Yaws (2003)	X	258
	1.1×10^{-5}		Yaws (2003)	X	237
	1.1×10^{-5}		Deno and Berkheimer (1960)	C	
	1.6×10^{-5}		Dupeux et al. (2022)	Q	259
	1.6×10^{-5}		Hayer et al. (2022)	Q	20
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	7.8×10^{-5}		Wang et al. (2017)	Q	80, 238
	1.1×10^{-5}		Wang et al. (2017)	Q	80, 239
	1.8×10^{-5}		Wang et al. (2017)	Q	80, 240
	1.1×10^{-5}		Li et al. (2014)	Q	241
	4.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-5}		Hilal et al. (2008)	Q	
		3300	Kühne et al. (2005)	Q	
	3.5×10^{-6}		Modarresi et al. (2005)	Q	247
	1.1×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	1.6×10^{-5}		Yao et al. (2002)	Q	229
	1.0×10^{-5}		English and Carroll (2001)	Q	230, 260
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	1.3×10^{-5}		Suzuki et al. (1992)	Q	232
	1.2×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.2×10^{-5}		Irmann (1965)	Q	
		3300	Kühne et al. (2005)	?	
	1.1×10^{-5}		Yaws (1999)	?	21
	1.2×10^{-5}	3000	Yaws et al. (1999)	?	21
	1.1×10^{-5}		Yaws and Yang (1992)	?	21
	1.2×10^{-5}		Abraham et al. (1990)	?	
2-methylpropane	9.1×10^{-6}	2700	Burkholder et al. (2019)	L	261, 1
HC(CH ₃) ₃	9.1×10^{-6}	2700	Burkholder et al. (2015)	L	262, 1
(isobutane)	9.1×10^{-6}	2700	Sander et al. (2011)	L	263, 1
[75-28-5]	9.1×10^{-6}	2700	Sander et al. (2006)	L	264, 1
NNPMTNAJDCUHE-UHFFFAOYSA-N			Fogg and Sangster (2003)	L	265
	9.2×10^{-6}	2900	Plyasunov and Shock (2000)	L	
	9.1×10^{-6}	2700	Hayduk (1986)	L	266, 1
	8.3×10^{-6}		Mackay and Shiu (1981)	L	
	8.0×10^{-6}	2700	Wilhelm et al. (1977)	L	



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-4}	5100	Mohebbi et al. (2012)	M	
	8.5×10^{-6}		McAuliffe (1966)	M	225
	9.9×10^{-6}	2700	Wetlaufer et al. (1964)	M	
	8.5×10^{-6}		McAuliffe (1963)	M	226
	8.3×10^{-6}		Duchowicz et al. (2020)	V	186
	8.3×10^{-6}		HSDB (2015)	V	
	8.3×10^{-6}		Mackay et al. (2006a)	V	
	8.3×10^{-6}		Mackay et al. (1993)	V	
	8.4×10^{-6}		Hine and Mookerjee (1975)	V	
	9.7×10^{-6}		Irmann (1965)	V	
	8.5×10^{-6}		Yaws (2003)	X	237
	1.3×10^{-5}		Hayer et al. (2022)	Q	20
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	8.3×10^{-5}		Wang et al. (2017)	Q	80, 238
	5.3×10^{-6}		Wang et al. (2017)	Q	80, 239
	2.0×10^{-5}		Wang et al. (2017)	Q	80, 240
	3.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	5.6×10^{-6}		Hilal et al. (2008)	Q	
	5.8×10^{-6}		Modarresi et al. (2007)	Q	67
		3300	Kühne et al. (2005)	Q	
	3.7×10^{-6}		Modarresi et al. (2005)	Q	247
	8.4×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	8.4×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	9.8×10^{-6}		Yao et al. (2002)	Q	229, 267
	1.0×10^{-5}		English and Carroll (2001)	Q	230, 231
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	1.1×10^{-5}		Suzuki et al. (1992)	Q	232
	1.0×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-5}		Irmann (1965)	Q	
		2900	Kühne et al. (2005)	?	
	8.6×10^{-6}		Yaws (1999)	?	21
	9.1×10^{-6}	2700	Yaws et al. (1999)	?	21
	8.5×10^{-6}		Yaws and Yang (1992)	?	21
	8.0×10^{-6}		Abraham et al. (1990)	?	
	7.9×10^{-6}		Abraham (1979)	?	
pentane	7.2×10^{-6}	3900	Brockbank (2013)	L	1, 268
C_5H_{12}	8.7×10^{-6}	3500	Plyasunov and Shock (2000)	L	
[109-66-0]	8.0×10^{-6}	3400	Abraham and Matteoli (1988)	L	
OFBQJSOFQDEBGM-UHFFFAOYSA-N	8.0×10^{-6}		Mackay and Shiu (1981)	L	
	8.7×10^{-6}	3400	Jou and Mather (2000)	M	269, 270
	8.2×10^{-6}	3600	Jönsson et al. (1982)	M	
	7.8×10^{-6}		Rytting et al. (1978)	M	
	7.8×10^{-6}		Mackay et al. (2006a)	V	



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.8×10^{-6}		Mackay et al. (1993)	V	
	8.3×10^{-6}		Eastcott et al. (1988)	V	
	7.8×10^{-6}		Amoore and Buttery (1978)	V	
	7.9×10^{-6}		Hine and Mookerjee (1975)	V	
	8.3×10^{-6}		McAuliffe (1966)	V	225
	8.3×10^{-6}		McAuliffe (1963)	V	226
		3000	Gill et al. (1976)	T	
	7.8×10^{-6}		Yaws (2003)	X	258
	7.8×10^{-6}		Yaws (2003)	X	237
	1.3×10^{-5}		Dupeux et al. (2022)	Q	259
	4.9×10^{-5}		Keshavarz et al. (2022)	Q	
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	184
	6.5×10^{-5}		Wang et al. (2017)	Q	80, 238
	9.3×10^{-6}		Wang et al. (2017)	Q	80, 239
	1.7×10^{-5}		Wang et al. (2017)	Q	80, 240
	4.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	8.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	9.9×10^{-6}		Hilal et al. (2008)	Q	
	6.6×10^{-6}		Modarresi et al. (2007)	Q	67
		3600	Kühne et al. (2005)	Q	
	3.1×10^{-6}		Modarresi et al. (2005)	Q	247
	8.4×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	1.5×10^{-5}		Yao et al. (2002)	Q	229
	8.0×10^{-6}		English and Carroll (2001)	Q	230, 231
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	1.0×10^{-5}		Suzuki et al. (1992)	Q	232
	9.9×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
	7.9×10^{-6}		Duchowicz et al. (2020)	?	185, 21
		4200	Kühne et al. (2005)	?	
	7.8×10^{-6}		Yaws (1999)	?	21
	5.1×10^{-6}		Abraham and Weathersby (1994)	?	21
	7.8×10^{-6}		Yaws and Yang (1992)	?	21
	8.0×10^{-6}		Abraham et al. (1990)	?	
2-methylbutane C_5H_{12} (isopentane) [78-78-4] QWTDNUCVQCZILF-UHFFFAOYSA-N	7.7×10^{-6}	3000	Plyasunov and Shock (2000)	L	
	7.2×10^{-6}		Mackay and Shiu (1981)	L	
	7.0×10^{-6}		Duchowicz et al. (2020)	V	186
	7.0×10^{-6}		HSDB (2015)	V	
	7.2×10^{-6}		Mackay et al. (2006a)	V	
	2.1×10^{-6}		Mackay et al. (1993)	V	
	7.2×10^{-6}		Eastcott et al. (1988)	V	
	7.2×10^{-6}		Cabani et al. (1981)	V	
	7.6×10^{-6}		McAuliffe (1966)	V	225
	7.6×10^{-6}		McAuliffe (1963)	V	226
	7.2×10^{-6}		Yaws (2003)	X	237



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	7.3×10^{-5}		Wang et al. (2017)	Q	80, 238
	6.0×10^{-6}		Wang et al. (2017)	Q	80, 239
	2.0×10^{-5}		Wang et al. (2017)	Q	80, 240
	3.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	271, 243
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	8.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	6.4×10^{-6}		Hilal et al. (2008)	Q	
	7.2×10^{-6}		Modarresi et al. (2007)	Q	67
	3.8×10^{-6}		Modarresi et al. (2005)	Q	247
	5.8×10^{-6}		Yaffe et al. (2003)	Q	248, 272
	8.4×10^{-6}		Yao et al. (2002)	Q	229
	7.9×10^{-6}		English and Carroll (2001)	Q	230, 231
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	8.4×10^{-6}		Nirmalakhandan et al. (1997)	Q	
	7.2×10^{-6}		Yaws (1999)	?	21
	7.2×10^{-6}		Yaws and Yang (1992)	?	21
dimethylpropane $C(CH_3)_4$ (neopentane) [463-82-1] CRSQQBOWXPBRES-UHFFFAOYSA-N	6.0×10^{-6}	3000	Plyasunov and Shock (2000)	L	
	2.7×10^{-6}		Mackay and Shiu (1981)	L	
	5.9×10^{-6}	3300	Wilhelm et al. (1977)	L	
	5.5×10^{-6}	2800	Shoor et al. (1969)	M	273
	4.7×10^{-6}		McAuliffe (1966)	M	
	6.3×10^{-6}	3200	Wetlaufer et al. (1964)	M	
	2.7×10^{-6}		Duchowicz et al. (2020)	V	186
	2.7×10^{-6}		HSDB (2015)	V	
	4.5×10^{-6}		Mackay et al. (2006a)	V	
	4.5×10^{-6}		Mackay et al. (1993)	V	
	4.5×10^{-6}		Hine and Mookerjee (1975)	V	
	4.7×10^{-6}		Yaws (2003)	X	237
	7.5×10^{-5}		Duchowicz et al. (2020)	Q	
	4.5×10^{-5}		Wang et al. (2017)	Q	80, 238
	2.1×10^{-6}		Wang et al. (2017)	Q	80, 239
	2.5×10^{-5}		Wang et al. (2017)	Q	80, 240
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	8.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.5×10^{-6}		Hilal et al. (2008)	Q	
	5.3×10^{-6}		Modarresi et al. (2007)	Q	67
		3600	Kühne et al. (2005)	Q	
	3.6×10^{-6}		Modarresi et al. (2005)	Q	247
	4.6×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	3.8×10^{-6}		Yao et al. (2002)	Q	229, 267
	8.0×10^{-6}		English and Carroll (2001)	Q	230, 274



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-5}		Katritzky et al. (1998)	Q	
	7.3×10^{-6}		Suzuki et al. (1992)	Q	232
	6.2×10^{-6}	3100	Nirmalakhandan and Speece (1988)	Q	
			Kühne et al. (2005)	?	
	4.7×10^{-6}		Yaws (1999)	?	21
	4.7×10^{-6}		Yaws and Yang (1992)	?	21
	5.8×10^{-6}		Abraham et al. (1990)	?	
	5.9×10^{-6}		Abraham (1979)	?	
hexane C_6H_{14} [110-54-3] VLKZOEYAKHREP-UHFFFAOYSA-N	5.7×10^{-6}	4400	Brockbank (2013)	L	1, 275
	6.9×10^{-6}	3800	Plyasunov and Shock (2000)	L	
	6.1×10^{-6}	3800	Abraham and Matteoli (1988)	L	
	5.9×10^{-6}		Mackay and Shiu (1981)	L	
	6.1×10^{-6}		Ryu and Park (1999)	M	
	7.4×10^{-6}		Park et al. (1997)	M	276
	2.4×10^{-4}	8700	Kolb et al. (1992)	M	277
	6.7×10^{-6}		Guitart et al. (1989)	M	14
	9.9×10^{-6}	7500	Ashworth et al. (1988)	M	278
	6.7×10^{-6}	4200	Tsonopoulos and Wilson (1983)	M	1
	5.9×10^{-6}	4000	Jönsson et al. (1982)	M	
	5.4×10^{-6}		Rytting et al. (1978)	M	
	5.5×10^{-6}		Duchowicz et al. (2020)	V	186
	5.5×10^{-6}		HSDB (2015)	V	
	5.5×10^{-6}		Mackay et al. (2006a)	V	
	5.5×10^{-6}		Mackay et al. (1993)	V	
	5.5×10^{-6}		Hwang et al. (1992)	V	
	7.1×10^{-6}		Eastcott et al. (1988)	V	
	6.1×10^{-6}		Cabani et al. (1981)	V	
	5.4×10^{-6}		Hine and Mookerjee (1975)	V	
	5.9×10^{-6}		McAuliffe (1966)	V	225
	5.9×10^{-6}		McAuliffe (1963)	V	226
	6.7×10^{-6}	3800	Plyasunov et al. (2001)	T	
		3800	Gill et al. (1976)	T	
	7.6×10^{-6}		Yaws (2003)	X	258
	7.6×10^{-6}		Yaws (2003)	X	237
	1.0×10^{-5}		Dupeux et al. (2022)	Q	259
	5.7×10^{-6}		Hayer et al. (2022)	Q	20
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	5.0×10^{-5}		Wang et al. (2017)	Q	80, 238
	6.9×10^{-6}		Wang et al. (2017)	Q	80, 239
	1.6×10^{-5}		Wang et al. (2017)	Q	80, 240
	2.3×10^{-5}		Li et al. (2014)	Q	241
	4.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	5.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	7.7×10^{-6}		Hilal et al. (2008)	Q	



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.2×10^{-6}	4000	Modarresi et al. (2007)	Q	67
	2.9×10^{-6}		Kühne et al. (2005)	Q	
	5.8×10^{-6}		Modarresi et al. (2005)	Q	247
	6.0×10^{-6}		Yaffe et al. (2003)	Q	248, 272
	6.2×10^{-6}		Yao et al. (2002)	Q	229
	1.4×10^{-5}		English and Carroll (2001)	Q	230, 231
	1.4×10^{-5}		Katritzky et al. (1998)	Q	
	7.9×10^{-6}		Russell et al. (1992)	Q	279
	7.9×10^{-6}		Suzuki et al. (1992)	Q	232
	7.9×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
	7.6×10^{-6}	4100	Kühne et al. (2005)	?	
	3.4×10^{-6}		Yaws (1999)	?	21
	7.6×10^{-6}		Abraham and Weathersby (1994)	?	21
	6.1×10^{-6}		Yaws and Yang (1992)	?	21
	6.1×10^{-6}		Abraham et al. (1990)	?	
2-methylpentane C_6H_{14} (isohexane) [107-83-5] AFABGHUZZDYHJO-UHFFFAOYSA-N	6.4×10^{-6}	4500	Brockbank (2013)	L	1
	5.7×10^{-6}	3900	Plyasunov and Shock (2000)	L	
	5.9×10^{-6}	960	Mackay and Shiu (1981)	L	
	1.3×10^{-5}		Ashworth et al. (1988)	M	42, 278
	5.8×10^{-6}		Duchowicz et al. (2020)	V	186
	5.8×10^{-6}		HSDB (2015)	V	
	5.7×10^{-6}		Mackay et al. (2006a)	V	
	5.7×10^{-6}		Mackay et al. (1993)	V	
	5.7×10^{-6}		Eastcott et al. (1988)	V	
	5.7×10^{-6}		Hine and Mookerjee (1975)	V	
	6.0×10^{-6}		McAuliffe (1966)	V	225
	6.0×10^{-6}		McAuliffe (1963)	V	226
	6.0×10^{-6}		Staudinger and Roberts (1996)	R	280
	5.7×10^{-6}		Yaws (2003)	X	237
	6.2×10^{-6}		Hilal et al. (2008)	C	
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	6.0×10^{-5}		Wang et al. (2017)	Q	80, 238
	4.5×10^{-6}		Wang et al. (2017)	Q	80, 239
	1.9×10^{-5}		Wang et al. (2017)	Q	80, 240
	3.5×10^{-6}	Gharagheizi et al. (2012)	Q		
	6.2×10^{-6}	Raventos-Duran et al. (2010)	Q	242, 243	
	6.2×10^{-6}	Raventos-Duran et al. (2010)	Q	244	
	6.2×10^{-6}	Raventos-Duran et al. (2010)	Q	245	
	5.1×10^{-6}	Gharagheizi et al. (2010)	Q	246	
	4.8×10^{-6}	Hilal et al. (2008)	Q		
	5.9×10^{-6}	4000	Modarresi et al. (2007)	Q	67
	3.9×10^{-6}		Kühne et al. (2005)	Q	
	5.8×10^{-6}		Modarresi et al. (2005)	Q	247
	8.0×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	6.1×10^{-6}		Yao et al. (2002)	Q	229
	1.4×10^{-5}		English and Carroll (2001)	Q	230, 231
	1.4×10^{-5}		Katritzky et al. (1998)	Q	



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.0×10^{-6}		Suzuki et al. (1992)	Q	232
	6.7×10^{-6}	4000	Nirmalakhandan and Speece (1988)	Q	
			Kühne et al. (2005)	?	
	5.7×10^{-6}		Yaws (1999)	?	21
	3.6×10^{-6}		Abraham and Weathersby (1994)	?	21
	5.7×10^{-6}		Yaws and Yang (1992)	?	21
3-methylpentane C_6H_{14} [96-14-0] PFEOZHBOMNWTJB-UHFFFAOYSA-N	5.9×10^{-6}		Brockbank (2013)	L	
	5.9×10^{-6}		Plyasunov and Shock (2000)	L	
	5.8×10^{-6}		Mackay and Shiu (1981)	L	
	5.9×10^{-6}		Duchowicz et al. (2020)	V	186
	5.8×10^{-6}		HSDB (2015)	V	
	5.9×10^{-6}		Mackay et al. (2006a)	V	
	5.9×10^{-6}		Mackay et al. (1993)	V	
	5.9×10^{-6}		Eastcott et al. (1988)	V	
	5.8×10^{-6}		Hine and Mookerjee (1975)	V	
	6.0×10^{-6}		McAuliffe (1966)	V	
	8.2×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	6.0×10^{-5}		Wang et al. (2017)	Q	80, 238
	5.8×10^{-6}		Wang et al. (2017)	Q	80, 239
	1.9×10^{-5}		Wang et al. (2017)	Q	80, 240
	4.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	271, 243
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	5.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	6.2×10^{-6}		Hilal et al. (2008)	Q	
	7.0×10^{-6}		Modarresi et al. (2007)	Q	67
		4000	Kühne et al. (2005)	Q	
	3.1×10^{-6}		Modarresi et al. (2005)	Q	247
	5.8×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	6.7×10^{-6}		Yao et al. (2002)	Q	229
	6.1×10^{-6}		English and Carroll (2001)	Q	230, 260
	1.4×10^{-5}		Katritzky et al. (1998)	Q	
	7.2×10^{-6}		Suzuki et al. (1992)	Q	232
	7.0×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
		4700	Kühne et al. (2005)	?	
	8.2×10^{-6}		Yaws (1999)	?	21
	3.7×10^{-6}		Abraham and Weathersby (1994)	?	21
	8.8×10^{-6}		Yaws and Yang (1992)	?	21



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethylbutane C_6H_{14} [75-83-2] HNRMPXKDFBEGFZ-UHFFFAOYSA-N	5.7×10^{-6}	3500	Brockbank (2013)	L	
	5.6×10^{-6}		Plyasunov and Shock (2000)	L	
	5.8×10^{-6}		Mackay and Shiu (1981)	L	
	6.5×10^{-6}		Duchowicz et al. (2020)	V	186
	5.8×10^{-6}		HSDB (2015)	V	
	5.0×10^{-6}		Mackay et al. (2006a)	V	
	5.0×10^{-6}		Mackay et al. (1993)	V	
	5.8×10^{-6}		Eastcott et al. (1988)	V	
	5.1×10^{-6}		Hine and Mookerjee (1975)	V	
	5.5×10^{-6}		McAuliffe (1966)	V	225
	5.5×10^{-6}		McAuliffe (1963)	V	226
	6.5×10^{-6}		Yaws (2003)	X	237
	7.5×10^{-5}		Duchowicz et al. (2020)	Q	
	4.0×10^{-5}		Wang et al. (2017)	Q	80, 238
	2.8×10^{-6}		Wang et al. (2017)	Q	80, 239
	2.5×10^{-5}		Wang et al. (2017)	Q	80, 240
	2.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	271, 243
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	245
4.9×10^{-6}	Gharagheizi et al. (2010)	Q	246		
3.4×10^{-6}	Hilal et al. (2008)	Q			
7.2×10^{-6}	Modarresi et al. (2007)	Q	67		
3.9×10^{-6}	Modarresi et al. (2005)	Q	247		
5.3×10^{-6}	Yaffe et al. (2003)	Q	248, 272		
3.4×10^{-6}	Yao et al. (2002)	Q	229		
6.2×10^{-6}	English and Carroll (2001)	Q	230, 231		
1.3×10^{-5}	Katritzky et al. (1998)	Q			
6.0×10^{-6}	Suzuki et al. (1992)	Q	232		
5.3×10^{-6}	Nirmalakhandan and Speece (1988)	Q			
6.5×10^{-6}	Yaws (1999)	?	21		
3.4×10^{-6}	Abraham and Weathersby (1994)	?	21		
6.5×10^{-6}	Yaws and Yang (1992)	?	21		
2,3-dimethylbutane C_6H_{14} [79-29-8] ZFFMLCVRJBJUDZ-UHFFFAOYSA-N	8.0×10^{-6}	4400	Brockbank (2013)	L	1
	7.6×10^{-6}		Plyasunov and Shock (2000)	L	
	7.7×10^{-6}		Mackay and Shiu (1981)	L	
	8.4×10^{-6}		Duchowicz et al. (2020)	V	186
	8.2×10^{-6}		HSDB (2015)	V	
	6.9×10^{-6}		Mackay et al. (2006a)	V	
	6.9×10^{-6}		Mackay et al. (1993)	V	
	7.1×10^{-6}		Eastcott et al. (1988)	V	
	7.6×10^{-6}		Yaws (2003)	X	237
	6.7×10^{-5}		Duchowicz et al. (2020)	Q	
	6.8×10^{-5}		Wang et al. (2017)	Q	80, 238
	4.9×10^{-6}		Wang et al. (2017)	Q	80, 239
	2.2×10^{-5}		Wang et al. (2017)	Q	80, 240
	3.5×10^{-6}		Gharagheizi et al. (2012)	Q	



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	5.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	5.3×10^{-6}		Hilal et al. (2008)	Q	
	7.6×10^{-6}		Modarresi et al. (2007)	Q	67
		4000	Kühne et al. (2005)	Q	
	5.2×10^{-6}		Modarresi et al. (2005)	Q	247
	7.7×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	4.2×10^{-6}		Yao et al. (2002)	Q	229
	6.1×10^{-6}		English and Carroll (2001)	Q	230, 274
	1.3×10^{-5}		Katritzky et al. (1998)	Q	
	5.8×10^{-6}		Nirmalakhandan et al. (1997)	Q	
		4200	Kühne et al. (2005)	?	
	7.6×10^{-6}		Yaws (1999)	?	21
	7.6×10^{-6}		Yaws and Yang (1992)	?	21
heptane	4.4×10^{-6}	4500	Brockbank (2013)	L	1
C_7H_{16}	4.9×10^{-6}	4200	Plyasunov and Shock (2000)	L	
[142-82-5]	4.4×10^{-6}	4100	Abraham and Matteoli (1988)	L	
IMNFDUFMRHMDMM-UHFFFAOYSA-N	4.3×10^{-6}		Mackay and Shiu (1981)	L	
	4.5×10^{-6}		Ryu and Park (1999)	M	
	5.5×10^{-6}		Park et al. (1997)	M	276
	1.2×10^{-5}	3700	Hansen et al. (1993)	M	281
	6.0×10^{-6}		Guitart et al. (1989)	M	14
	4.2×10^{-6}	4700	Jönsson et al. (1982)	M	
	4.8×10^{-6}		Rytting et al. (1978)	M	
	4.9×10^{-6}		Duchowicz et al. (2020)	V	186
	5.5×10^{-6}		HSDB (2015)	V	
	4.8×10^{-6}		Mackay et al. (2006a)	V	
	4.8×10^{-6}		Mackay et al. (1993)	V	
	5.0×10^{-6}		Eastcott et al. (1988)	V	
	4.8×10^{-6}		Hine and Mookerjee (1975)	V	
	5.2×10^{-6}		McAuliffe (1966)	V	225
	5.2×10^{-6}		McAuliffe (1963)	V	226
	3.7×10^{-6}		Yaws (2003)	X	258
	3.7×10^{-6}		Yaws (2003)	X	237
	8.2×10^{-6}		Dupeux et al. (2022)	Q	259
	1.1×10^{-5}		Hayer et al. (2022)	Q	20
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	4.7×10^{-5}		Wang et al. (2017)	Q	80, 238
	4.9×10^{-6}		Wang et al. (2017)	Q	80, 239
	8.0×10^{-6}		Wang et al. (2017)	Q	80, 240
	4.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	271, 243
	7.8×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.4×10^{-6}		Gharagheizi et al. (2010)	Q	246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.4×10^{-6}		Hilal et al. (2008)	Q	
	5.3×10^{-6}	4300	Modarresi et al. (2007)	Q	67
			Kühne et al. (2005)	Q	
	2.4×10^{-6}		Modarresi et al. (2005)	Q	247
	4.1×10^{-6}		Yaffe et al. (2003)	Q	248, 272
	5.1×10^{-6}		Yao et al. (2002)	Q	229
	1.3×10^{-5}		Katritzky et al. (1998)	Q	
	6.5×10^{-6}		Russell et al. (1992)	Q	279
	6.0×10^{-6}		Suzuki et al. (1992)	Q	232
	6.2×10^{-6}	4900	Nirmalakhandan and Speece (1988)	Q	
			Kühne et al. (2005)	?	
	3.7×10^{-6}		Yaws (1999)	?	21
	2.8×10^{-6}		Abraham and Weathersby (1994)	?	21
	3.6×10^{-6}		Yaws and Yang (1992)	?	21
	4.4×10^{-6}		Abraham et al. (1990)	?	
2-methylhexane C_7H_{16} (isoheptane) [591-76-4] GXDHCNNESPLIKD-UHFFFAOYSA-N	2.9×10^{-6}		Brockbank (2013)	L	
	2.9×10^{-6}		Plyasunov and Shock (2000)	L	
	2.9×10^{-6}		Mackay and Shiu (1981)	L	
	1.9×10^{-5}	-3600	Hansen et al. (1993)	M	281, 282
	2.9×10^{-6}		Duchowicz et al. (2020)	V	186
	2.9×10^{-6}		Mackay et al. (2006a)	V	
	2.9×10^{-6}		Mackay et al. (1993)	V	
	2.9×10^{-6}		Eastcott et al. (1988)	V	
	2.9×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	4.7×10^{-5}		Wang et al. (2017)	Q	80, 238
	3.2×10^{-6}		Wang et al. (2017)	Q	80, 239
	1.7×10^{-5}		Wang et al. (2017)	Q	80, 240
	3.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.7×10^{-6}		Hilal et al. (2008)	Q	
	5.2×10^{-6}		Modarresi et al. (2007)	Q	67
	2.8×10^{-6}		Modarresi et al. (2005)	Q	247
	2.9×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	3.4×10^{-6}		Yao et al. (2002)	Q	229
	1.3×10^{-5}		Katritzky et al. (1998)	Q	
	5.2×10^{-6}		Nirmalakhandan et al. (1997)	Q	
	2.9×10^{-6}		Yaws (1999)	?	21
	2.9×10^{-6}		Yaws and Yang (1992)	?	21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methylhexane C_7H_{16} [589-34-4] VLJXXKOSFGPHI-UHFFFAOYSA-N	3.2×10^{-6}		Brockbank (2013)	L	
	4.5×10^{-6}		Plyasunov and Shock (2000)	L	
	4.2×10^{-6}		Mackay and Shiu (1981)	L	
	6.0×10^{-6}		Duchowicz et al. (2020)	V	186
	4.0×10^{-6}		Mackay et al. (2006a)	V	
	4.0×10^{-6}		Mackay et al. (1993)	V	
	3.2×10^{-6}		Eastcott et al. (1988)	V	
	3.2×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	4.7×10^{-5}		Wang et al. (2017)	Q	80, 238
	3.8×10^{-6}		Wang et al. (2017)	Q	80, 239
	1.8×10^{-5}		Wang et al. (2017)	Q	80, 240
	3.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	4.5×10^{-6}		Hilal et al. (2008)	Q	
	6.1×10^{-6}		Modarresi et al. (2007)	Q	67
	2.7×10^{-6}		Modarresi et al. (2005)	Q	247
4.1×10^{-6}		Yaffe et al. (2003)	Q	248, 249	
3.4×10^{-6}		Yao et al. (2002)	Q	229	
4.6×10^{-6}		English and Carroll (2001)	Q	230, 231	
1.3×10^{-5}		Katritzky et al. (1998)	Q		
5.3×10^{-6}		Nirmalakhandan et al. (1997)	Q		
3.2×10^{-6}		Yaws (1999)	?	21	
2.5×10^{-6}		Abraham and Weathersby (1994)	?	21	
3.2×10^{-6}		Yaws and Yang (1992)	?	21	
2,2-dimethylpentane C_7H_{16} [590-35-2] CXOWYJMDMMMJO-UHFFFAOYSA-N	3.1×10^{-6}		Plyasunov and Shock (2000)	L	
	3.1×10^{-6}		Mackay and Shiu (1981)	L	
	3.1×10^{-6}		Duchowicz et al. (2020)	V	186
	3.1×10^{-6}		Mackay et al. (2006a)	V	
	3.1×10^{-6}		Mackay et al. (1993)	V	
	3.1×10^{-6}		Eastcott et al. (1988)	V	
	3.1×10^{-6}		Yaws (2003)	X	237
	7.5×10^{-5}		Duchowicz et al. (2020)	Q	
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.5×10^{-6}		Hilal et al. (2008)	Q	
	5.2×10^{-6}		Modarresi et al. (2007)	Q	67
	3.1×10^{-6}		Modarresi et al. (2005)	Q	247
	3.1×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	3.7×10^{-6}		Yao et al. (2002)	Q	229
	3.6×10^{-6}		English and Carroll (2001)	Q	230, 231
1.2×10^{-5}		Katritzky et al. (1998)	Q		
4.1×10^{-6}		Nirmalakhandan et al. (1997)	Q		
3.1×10^{-6}		Yaws (1999)	?	21	



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1×10^{-6}		Yaws and Yang (1992)	?	21
2,3-dimethylpentane C_7H_{16} [565-59-3] WGECXQBGLLYSFP-UHFFFAOYSA-N	5.7×10^{-6}		Plyasunov and Shock (2000)	L	
	5.7×10^{-6}		Mackay and Shiu (1981)	L	
	5.7×10^{-6}		Duchowicz et al. (2020)	V	186
	5.7×10^{-6}		Mackay et al. (1993)	V	
	5.7×10^{-6}		Eastcott et al. (1988)	V	
	5.7×10^{-6}		Yaws (2003)	X	237
	6.7×10^{-5}		Duchowicz et al. (2020)	Q	
	3.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	4.8×10^{-6}		Hilal et al. (2008)	Q	
	7.1×10^{-6}		Modarresi et al. (2007)	Q	67
	5.8×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	4.7×10^{-6}		English and Carroll (2001)	Q	230, 231
	1.2×10^{-5}		Katritzky et al. (1998)	Q	
	4.7×10^{-6}		Nirmalakhandan et al. (1997)	Q	
	5.7×10^{-6}		Yaws (1999)	?	21
	5.7×10^{-6}		Yaws and Yang (1992)	?	21
2,4-dimethylpentane C_7H_{16} [108-08-7] BZHMBWZPUJHVEE-UHFFFAOYSA-N	2.9×10^{-6}		Brockbank (2013)	L	
	3.3×10^{-6}		Plyasunov and Shock (2000)	L	
	3.3×10^{-6}		Mackay and Shiu (1981)	L	
	5.2×10^{-6}		Duchowicz et al. (2020)	V	186
	3.1×10^{-6}		Mackay et al. (2006a)	V	
	3.1×10^{-6}		Mackay et al. (1993)	V	
	3.4×10^{-6}		Eastcott et al. (1988)	V	
	3.1×10^{-6}		Hine and Mookerjee (1975)	V	
	3.1×10^{-6}		McAuliffe (1966)	V	
	3.3×10^{-6}		Yaws (2003)	X	237
	6.7×10^{-5}		Duchowicz et al. (2020)	Q	
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	3.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	5.2×10^{-6}		Modarresi et al. (2007)	Q	67
	3.0×10^{-6}		Modarresi et al. (2005)	Q	247
	5.3×10^{-6}		Yaffe et al. (2003)	Q	248, 272
	4.0×10^{-6}		Yao et al. (2002)	Q	229
	4.7×10^{-6}		English and Carroll (2001)	Q	230, 274
	1.2×10^{-5}		Katritzky et al. (1998)	Q	
	4.7×10^{-6}		Suzuki et al. (1992)	Q	232
	4.5×10^{-6}		Nirmalakhandan and Speece (1988)	Q	



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.4×10^{-6}		Yaws (1999)	?	21
	3.3×10^{-6}		Yaws and Yang (1992)	?	21
3,3-dimethylpentane C_7H_{16} [562-49-2] AEXMKKGTQYZCS-UHFFFAOYSA-N	5.6×10^{-6}	3000	Brockbank (2013)	L	1, 283
	5.3×10^{-6}		Plyasunov and Shock (2000)	L	
	5.4×10^{-6}		Mackay and Shiu (1981)	L	
	5.4×10^{-6}		Duchowicz et al. (2020)	V	186
	5.4×10^{-6}		Mackay et al. (2006a)	V	
	5.4×10^{-6}		Mackay et al. (1993)	V	
	5.4×10^{-6}		Eastcott et al. (1988)	V	
	5.4×10^{-6}		Yaws (2003)	X	237
	7.5×10^{-5}		Duchowicz et al. (2020)	Q	
	3.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	4.0×10^{-6}		Hilal et al. (2008)	Q	
	7.5×10^{-6}		Modarresi et al. (2007)	Q	67
		4300	Kühne et al. (2005)	Q	
	3.5×10^{-6}		Modarresi et al. (2005)	Q	247
	5.3×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	2.8×10^{-6}		Yao et al. (2002)	Q	229
	3.6×10^{-6}		English and Carroll (2001)	Q	230, 231
	1.2×10^{-5}		Katritzky et al. (1998)	Q	
	4.4×10^{-6}		Nirmalakhandan et al. (1997)	Q	
		3000	Kühne et al. (2005)	?	
	5.4×10^{-6}		Yaws (1999)	?	21
	5.3×10^{-6}		Yaws and Yang (1992)	?	21
3-ethylpentane C_7H_{16} [617-78-7] AORMDLNPRGXHHL-UHFFFAOYSA-N	3.8×10^{-6}		Yaws (2003)	X	237
	3.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	5.3×10^{-6}		Hilal et al. (2008)	Q	
	2.5×10^{-6}		Modarresi et al. (2005)	Q	247
	4.8×10^{-6}		Yao et al. (2002)	Q	229, 267
	3.8×10^{-6}		Yaws (1999)	?	21
	3.9×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3-trimethylbutane C_7H_{16} [464-06-2] ZISSAWUMDACLOM-UHFFFAOYSA-N	3.2×10^{-6}		Mackay et al. (2006a)	V	
	3.2×10^{-6}		Mackay et al. (1993)	V	
	4.2×10^{-6}		Yaws (2003)	X	237
	2.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.3×10^{-6}		Hilal et al. (2008)	Q	
	7.2×10^{-6}		Modarresi et al. (2007)	Q	67
	3.1×10^{-6}		Modarresi et al. (2005)	Q	247
	3.1×10^{-6}		Yaffe et al. (2003)	Q	248, 272
	1.8×10^{-6}		Yao et al. (2002)	Q	229
	4.2×10^{-6}		Yaws (1999)	?	21
	4.1×10^{-6}		Yaws and Yang (1992)	?	21



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
octane	3.4×10^{-6}	5300	Brockbank (2013)	L	1
C_8H_{18}	4.0×10^{-6}	4600	Plyasunov and Shock (2000)	L	
[111-65-9]	3.1×10^{-6}	4300	Abraham and Matteoli (1988)	L	
TVMXDGGIABBOFY-UHFFFAOYSA-N	3.3×10^{-6}		Mackay and Shiu (1981)	L	
	3.4×10^{-6}		Ryu and Park (1999)	M	
	3.3×10^{-6}		Park et al. (1997)	M	276
	3.0×10^{-5}	8000	Hansen et al. (1993)	M	281
	3.1×10^{-6}	4100	Heidman et al. (1985)	M	1
	2.9×10^{-6}	5400	Jönsson et al. (1982)	M	
	3.1×10^{-6}		Rytting et al. (1978)	M	
	3.1×10^{-6}		Duchowicz et al. (2020)	V	186
	3.1×10^{-6}		HSDB (2015)	V	
	8.6×10^{-7}		Abraham and Acree (2007)	V	
	3.2×10^{-6}		Mackay et al. (2006a)	V	
	3.8×10^{-6}	4800	Sarraute et al. (2004)	V	
	3.2×10^{-6}		Mackay et al. (1993)	V	
	3.0×10^{-6}		Hwang et al. (1992)	V	
	3.1×10^{-6}		Meylan and Howard (1991)	V	
	3.2×10^{-6}		Eastcott et al. (1988)	V	
	3.1×10^{-6}		Hine and Mookerjee (1975)	V	
	3.1×10^{-6}		Mackay and Leinonen (1975)	V	
	3.9×10^{-6}		McAuliffe (1966)	V	225
	3.9×10^{-6}		McAuliffe (1963)	V	226
	2.0×10^{-6}		Yaws (2003)	X	258
	2.0×10^{-6}		Yaws (2003)	X	237
	6.8×10^{-6}		Dupeux et al. (2022)	Q	259
	2.8×10^{-5}		Hayer et al. (2022)	Q	20
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	3.6×10^{-5}		Wang et al. (2017)	Q	80, 238
	3.4×10^{-6}		Wang et al. (2017)	Q	80, 239
	4.2×10^{-6}		Wang et al. (2017)	Q	80, 240
	3.1×10^{-6}		Li et al. (2014)	Q	241
	3.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	2.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.9×10^{-6}		Hilal et al. (2008)	Q	
	4.6×10^{-6}		Modarresi et al. (2007)	Q	67
		4700	Kühne et al. (2005)	Q	
	2.9×10^{-6}		Yaffe et al. (2003)	Q	248, 272
	3.7×10^{-6}		English and Carroll (2001)	Q	230, 231
	1.2×10^{-5}		Katritzky et al. (1998)	Q	
	2.6×10^{-6}		Russell et al. (1992)	Q	279
	4.6×10^{-6}		Suzuki et al. (1992)	Q	232
	3.3×10^{-6}		Meylan and Howard (1991)	Q	
	5.0×10^{-6}		Nirmalakhandan and Speece (1988)	Q	



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		5400	Kühne et al. (2005)	?	
	2.0×10^{-6}		Yaws (1999)	?	21
	2.0×10^{-6}		Abraham and Weathersby (1994)	?	21
	2.0×10^{-6}		Yaws and Yang (1992)	?	21
	3.1×10^{-6}		Abraham et al. (1990)	?	
2-methylheptane C_8H_{18} [592-27-8] JVSWJIKNEAIKJW-UHFFFAOYSA-N	2.9×10^{-6}		Mackay et al. (2006a)	V	
	2.9×10^{-6}		Mackay et al. (1993)	V	
	2.4×10^{-6}		Yaws (2003)	X	237
	2.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.7×10^{-6}		Hilal et al. (2008)	Q	
	2.1×10^{-6}		Modarresi et al. (2005)	Q	247
	3.1×10^{-6}		Yao et al. (2002)	Q	229, 267
	2.4×10^{-6}		Yaws (1999)	?	21
	2.7×10^{-6}		Hoff et al. (1993)	?	21
	2.7×10^{-6}		Yaws and Yang (1992)	?	21
3-methylheptane C_8H_{18} [589-81-1] LAIUFBWHERIJH-UHFFFAOYSA-N	2.6×10^{-6}		Brockbank (2013)	L	
	2.7×10^{-6}		Plyasunov and Shock (2000)	L	
	2.7×10^{-6}		Mackay and Shiu (1981)	L	
	2.7×10^{-6}		Duchowicz et al. (2020)	V	186
	2.7×10^{-6}		Eastcott et al. (1988)	V	
	2.6×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	3.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.3×10^{-6}		Hilal et al. (2008)	Q	
	5.5×10^{-6}		Modarresi et al. (2007)	Q	67
	2.0×10^{-6}		Modarresi et al. (2005)	Q	247
	2.9×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	3.0×10^{-6}		Yao et al. (2002)	Q	229
	3.6×10^{-6}		English and Carroll (2001)	Q	230, 260
	4.2×10^{-6}		Nirmalakhandan et al. (1997)	Q	
	2.7×10^{-6}		Yaws (1999)	?	21
	2.7×10^{-6}		Yaws and Yang (1992)	?	21
4-methylheptane C_8H_{18} [589-53-7] CHBAWFGIXDBEBT-UHFFFAOYSA-N	2.7×10^{-6}		Brockbank (2013)	L	
	2.4×10^{-6}		Yaws (2003)	X	237
	2.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.0×10^{-6}		Hilal et al. (2008)	Q	
	2.2×10^{-6}		Modarresi et al. (2005)	Q	247
	2.7×10^{-6}		Yao et al. (2002)	Q	229
	2.4×10^{-6}		Yaws (1999)	?	21
	2.7×10^{-6}		Yaws and Yang (1992)	?	21



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethylhexane C_8H_{18} [590-73-8] FLTJDUOFAQWHDF-UHFFFAOYSA-N	2.4×10^{-6}	4600	Brockbank (2013)	L	1
	2.4×10^{-6}	4600	Dohányosová et al. (2004)	M	284
	2.7×10^{-7}		Duchowicz et al. (2020)	V	186
	2.7×10^{-6}		Yaws (2003)	X	237
	7.5×10^{-5}		Duchowicz et al. (2020)	Q	
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-6}		Hilal et al. (2008)	Q	
		4700	Kühne et al. (2005)	Q	
		4.3×10^{-6}	Modarresi et al. (2005)	Q	247
	1.8×10^{-6}	Yao et al. (2002)	Q	229	
		5100	Kühne et al. (2005)	?	
	2.7×10^{-6}		Yaws (1999)	?	21
	2.9×10^{-6}		Yaws and Yang (1992)	?	21
2,3-dimethylhexane C_8H_{18} [584-94-1] JXPOLSKBTUYKJB-UHFFFAOYSA-N	2.4×10^{-6}		Yaws (2003)	X	237
	2.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-6}		Hilal et al. (2008)	Q	
	2.4×10^{-6}		Yaws (1999)	?	21
	2.6×10^{-6}		Yaws and Yang (1992)	?	21
2,4-dimethylhexane C_8H_{18} [589-43-5] HDGQICNBXPAKLR-UHFFFAOYSA-N	2.6×10^{-6}		Yaws (2003)	X	237
	2.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	2.6×10^{-6}		Yaws (1999)	?	21
	2.8×10^{-6}		Yaws and Yang (1992)	?	21
2,5-dimethylhexane C_8H_{18} [592-13-2] UWNADWZGEHDQAB-UHFFFAOYSA-N	3.1×10^{-6}	4000	Brockbank (2013)	L	1, 285
	2.4×10^{-6}	4000	Dohányosová et al. (2004)	M	286
	2.6×10^{-6}		Yaws (2003)	X	237
	2.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-6}		Hilal et al. (2008)	Q	
		4700	Kühne et al. (2005)	Q	
	2.4×10^{-6}		Modarresi et al. (2005)	Q	247
	2.3×10^{-6}		Yao et al. (2002)	Q	229
		4700	Kühne et al. (2005)	?	
	2.7×10^{-6}		Yaws (1999)	?	21
	2.9×10^{-6}		Yaws and Yang (1992)	?	21
3,3-dimethylhexane C_8H_{18} [563-16-6] KUMXLFIBWFCMOJ-UHFFFAOYSA-N	2.4×10^{-6}		Yaws (2003)	X	237
	2.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.9×10^{-6}		Hilal et al. (2008)	Q	
	1.9×10^{-6}		Modarresi et al. (2005)	Q	247
	1.5×10^{-6}		Yao et al. (2002)	Q	229
	2.4×10^{-6}		Yaws (1999)	?	21



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-6}	4000	Yao et al. (2002)	Q	229
	3.7×10^{-6}		English and Carroll (2001)	Q	230, 274
	3.1×10^{-6}		Suzuki et al. (1992)	Q	232
	2.9×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
	2.9×10^{-6}		Kühne et al. (2005)	?	
	2.9×10^{-6}		Yaws (1999)	?	21
2,3,3-trimethylpentane C_8H_{18} [560-21-4] OKVWYBALHQVFP-UHFFFAOYSA-N	2.1×10^{-6}		Yaws (2003)	X	237
	3.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.6×10^{-6}		Hilal et al. (2008)	Q	
	2.0×10^{-6}		Modarresi et al. (2005)	Q	247
	1.6×10^{-6}		Yao et al. (2002)	Q	229
2,3,4-trimethylpentane C_8H_{18} [565-75-3] RLPGDEORIPBNF-UHFFFAOYSA-N	2.2×10^{-6}	4700	Yaws (1999)	?	21
	2.4×10^{-6}		Yaws and Yang (1992)	?	21
	3.3×10^{-6}		Brockbank (2013)	L	
	4.3×10^{-6}		Plyasunov and Shock (2000)	L	
	5.3×10^{-6}		Mackay and Shiu (1981)	L	
	4.9×10^{-6}		Mackay et al. (2006a)	V	292
	5.6×10^{-6}		Mackay et al. (1993)	V	
	5.6×10^{-6}		Eastcott et al. (1988)	V	
	5.6×10^{-6}		Yaws (2003)	X	237
	2.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	2.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
3-ethyl-2-methylpentane C_8H_{18} [609-26-7] DUPUVYJQZSLJSB-UHFFFAOYSA-N	3.1×10^{-6}	4900	Hilal et al. (2008)	Q	
	7.0×10^{-6}		Modarresi et al. (2007)	Q	67
	2.0×10^{-6}		Kühne et al. (2005)	Q	
	5.3×10^{-6}		Modarresi et al. (2005)	Q	247
	2.1×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	3.7×10^{-6}		Yao et al. (2002)	Q	229
	2.1×10^{-6}		English and Carroll (2001)	Q	230, 231
	1.1×10^{-5}		Katritzky et al. (1998)	Q	
	3.2×10^{-6}		Nirmalakhandan et al. (1997)	Q	
	5.6×10^{-6}		Kühne et al. (2005)	?	
	5.6×10^{-6}	Yaws (1999)	?	21	
	5.6×10^{-6}	Yaws and Yang (1992)	?	21	
	2.3×10^{-6}	Yaws (2003)	X	237	
	3.1×10^{-6}	Gharagheizi et al. (2012)	Q		
	2.2×10^{-6}	Gharagheizi et al. (2010)	Q	246	
	3.6×10^{-6}	Hilal et al. (2008)	Q		
	2.2×10^{-6}	Modarresi et al. (2005)	Q	247	
	2.5×10^{-6}	Yao et al. (2002)	Q	229	
	2.3×10^{-6}	Yaws (1999)	?	21	



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
2-methyloctane C_9H_{20} [3221-61-2] ZUBZATZOEPUUQF-UHFFFAOYSA-N	1.6×10^{-6}		Yaws (2003)	X	237
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	2.1×10^{-6}		Modarresi et al. (2005)	Q	247
	3.3×10^{-6}		Yao et al. (2002)	Q	229
	1.6×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
3-methyloctane C_9H_{20} [2216-33-3] SEEOMASXHIJCDV-UHFFFAOYSA-N	1.5×10^{-6}		Yaws (2003)	X	237
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.4×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	2.8×10^{-6}		Yao et al. (2002)	Q	229
	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
4-methyloctane C_9H_{20} [2216-34-4] DOGIHOCMZJUJNR-UHFFFAOYSA-N	9.7×10^{-7}		Plyasunov and Shock (2000)	L	
	1.0×10^{-6}		Mackay and Shiu (1981)	L	
	9.9×10^{-7}		Duchowicz et al. (2020)	V	186
	9.9×10^{-7}		Eastcott et al. (1988)	V	
	9.8×10^{-7}		Yaws (2003)	X	237
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.3×10^{-6}		Hilal et al. (2008)	Q	
	4.9×10^{-6}		Modarresi et al. (2007)	Q	67
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	2.9×10^{-6}		Yao et al. (2002)	Q	229
	9.8×10^{-7}		Yaws (1999)	?	21
	9.9×10^{-7}		Yaws and Yang (1992)	?	21
2,3-dimethylheptane C_9H_{20} [3074-71-3] WBRFDUJXCLCKPX-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	237
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.4×10^{-6}		Hilal et al. (2008)	Q	
	2.4×10^{-6}		Modarresi et al. (2005)	Q	247
	2.0×10^{-6}		Yao et al. (2002)	Q	229, 267
	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethylheptane C_9H_{20} [1071-26-7] PSABUFWDVWCFDP-UHFFFAOYSA-N	1.7×10^{-6}		Yaws (2003)	X	237
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	2.0×10^{-6}		Yao et al. (2002)	Q	229
	1.7×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
2,4-dimethylheptane C_9H_{20} [2213-23-2] AUKVIBNBLXQNZ-UHFFFAOYSA-N	1.7×10^{-6}		Yaws (2003)	X	237
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	1.8×10^{-6}		Yao et al. (2002)	Q	229
	1.7×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
2,5-dimethylheptane C_9H_{20} [2216-30-0] HQZHQNKZOYIKQC-UHFFFAOYSA-N	1.6×10^{-6}		Yaws (2003)	X	237
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	2.0×10^{-6}		Yao et al. (2002)	Q	229
	1.6×10^{-6}		Yaws (1999)	?	21
	2.0×10^{-6}		Yaws and Yang (1992)	?	21
2,6-dimethylheptane C_9H_{20} [1072-05-5] KBPCCVWUMVGXGF-UHFFFAOYSA-N	1.7×10^{-6}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	2.2×10^{-6}		Yao et al. (2002)	Q	229
	1.7×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
3,3-dimethylheptane C_9H_{20} [4032-86-4] BVAKDOXCVSMKHE-UHFFFAOYSA-N	2.3×10^{-6}		Hilal et al. (2008)	Q	
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
3,4-dimethylheptane C_9H_{20} [922-28-1] MAKRYGRRIKSDES-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	237
	2.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.6×10^{-6}		Hilal et al. (2008)	Q	
	1.7×10^{-6}		Modarresi et al. (2005)	Q	247
	1.6×10^{-6}		Yao et al. (2002)	Q	229
	1.4×10^{-6}		Yaws (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dimethylheptane C_9H_{20} [926-82-9] DZJZTGHZAWTWGA-UHFFFAOYSA-N	1.6×10^{-6}		Yaws (2003)	X	237
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.7×10^{-6}		Modarresi et al. (2005)	Q	247
	1.6×10^{-6}		Yao et al. (2002)	Q	229
	1.6×10^{-6}		Yaws (1999)	?	21
	2.0×10^{-6}		Yaws and Yang (1992)	?	21
4,4-dimethylheptane C_9H_{20} [1068-19-5] WSOKFYJGNBQDPW-UHFFFAOYSA-N	1.5×10^{-6}		Yaws (2003)	X	237
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.1×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	247
	1.5×10^{-6}		Yao et al. (2002)	Q	229
	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
3-ethylheptane C_9H_{20} [15869-80-4] PSVQKOKKLWHNRP-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	237
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.6×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	2.4×10^{-6}		Yao et al. (2002)	Q	229
	1.4×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
4-ethylheptane C_9H_{20} [2216-32-2] XMROPFQWHHUFFS-UHFFFAOYSA-N	1.5×10^{-6}		Yaws (2003)	X	237
	2.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.5×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	247
	2.8×10^{-6}		Yao et al. (2002)	Q	229
	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3-trimethylhexane C_9H_{20} [16747-25-4] CBVFSZDQEHBJEQ-UHFFFAOYSA-N	1.5×10^{-6}		Yaws (2003)	X	237
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	9.0×10^{-7}		Yao et al. (2002)	Q	229
	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4-trimethylhexane C_9H_{20} [16747-26-5] AFTPEBDQXRMNQ-UHFFFAOYSA-N	1.7×10^{-6}		Yaws (2003)	X	237
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	1.0×10^{-6}		Yao et al. (2002)	Q	229
	1.7×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
2,2,5-trimethylhexane C_9H_{20} [3522-94-9] HHOSMYBYIHNXNO-UHFFFAOYSA-N	1.9×10^{-6}	6200	Brockbank (2013)	L	1
	2.8×10^{-6}		Plyasunov and Shock (2000)	L	
	2.9×10^{-6}		Mackay and Shiu (1981)	L	
	4.1×10^{-6}		Mackay et al. (2006a)	V	
	4.1×10^{-6}		Mackay et al. (1993)	V	
	4.1×10^{-6}		Cabani et al. (1981)	V	
	3.9×10^{-6}		McAuliffe (1966)	V	
	1.8×10^{-6}		Yaws (2003)	X	237
	1.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	9.0×10^{-7}		Hilal et al. (2008)	Q	
	1.7×10^{-6}		Modarresi et al. (2005)	Q	247
	2.9×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	1.5×10^{-6}		Yao et al. (2002)	Q	229
2.2×10^{-6}		Nirmalakhandan et al. (1997)	Q		
1.8×10^{-6}		Yaws (1999)	?	21	
1.9×10^{-6}		Yaws and Yang (1992)	?	21	
2,3,3-trimethylhexane C_9H_{20} [16747-28-7] DJYSEQMMCZAKGT-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	237
	2.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.4×10^{-6}		Hilal et al. (2008)	Q	
	2.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.0×10^{-6}		Yao et al. (2002)	Q	229
	1.4×10^{-6}		Yaws (1999)	?	21
1.7×10^{-6}		Yaws and Yang (1992)	?	21	
2,3,4-trimethylhexane C_9H_{20} [921-47-1] RUTNOQHQISEBGT-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	237
	2.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.6×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	1.1×10^{-6}		Yao et al. (2002)	Q	229
	1.4×10^{-6}		Yaws (1999)	?	21
1.8×10^{-6}		Yaws and Yang (1992)	?	21	



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,5-trimethylhexane C_9H_{20} [1069-53-0] ODGLTLJZCVNPBU-UHFFFAOYSA-N	1.7×10^{-6}		Yaws (2003)	X	237
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	2.1×10^{-6}		Modarresi et al. (2005)	Q	247
	1.1×10^{-6}		Yao et al. (2002)	Q	229, 267
	2.8×10^{-6}		English and Carroll (2001)	Q	230, 231
	1.7×10^{-6}		Yaws (1999)	?	21
	2.0×10^{-6}		Yaws and Yang (1992)	?	21
2,4,4-trimethylhexane C_9H_{20} [16747-30-1] SVEMKBCPZYWEPH-UHFFFAOYSA-N	1.5×10^{-6}		Yaws (2003)	X	237
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	247
	1.1×10^{-6}		Yao et al. (2002)	Q	229
	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
3,3,4-trimethylhexane C_9H_{20} [16747-31-2] ARWOOWBJJKVYOV-UHFFFAOYSA-N	1.3×10^{-6}		Yaws (2003)	X	237
	2.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.9×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	1.1×10^{-6}		Yao et al. (2002)	Q	229
	1.3×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2-methylhexane C_9H_{20} [16789-46-1] MVLWDGRGPHBNF-UHFFFAOYSA-N	1.5×10^{-6}		Yaws (2003)	X	237
	2.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.3×10^{-6}		Hilal et al. (2008)	Q	
	2.2×10^{-6}		Modarresi et al. (2005)	Q	247
	1.2×10^{-6}		Yao et al. (2002)	Q	229
	1.5×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-2-methylhexane C_9H_{20} [3074-75-7] KYCZJIBOPKRSOV-UHFFFAOYSA-N	1.6×10^{-6}		Yaws (2003)	X	237
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	1.5×10^{-6}		Yao et al. (2002)	Q	229, 267
	1.7×10^{-6}		Yaws (1999)	?	21
	2.0×10^{-6}		Yaws and Yang (1992)	?	21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-3-methylhexane C_9H_{20} [3074-76-8] CYWROHZCELEGSE-UHFFFAOYSA-N	1.3×10^{-6}		Yaws (2003)	X	237
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.2×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	247
	1.2×10^{-6}		Yao et al. (2002)	Q	229
	1.3×10^{-6}		Yaws (1999)	?	21
3-ethyl-4-methylhexane C_9H_{20} [3074-77-9] OKCRKWVABWILDR-UHFFFAOYSA-N	1.7×10^{-6}		Yaws and Yang (1992)	?	21
	1.4×10^{-6}		Yaws (2003)	X	237
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.1×10^{-6}		Hilal et al. (2008)	Q	
	1.9×10^{-6}		Modarresi et al. (2005)	Q	247
	1.2×10^{-6}		Yao et al. (2002)	Q	229
2,2,3,3-tetramethylpentane C_9H_{20} [7154-79-2] QUKOJKFJIHSBKV-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21
	1.2×10^{-6}		Yaws (2003)	X	237
	2.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.6×10^{-6}		Hilal et al. (2008)	Q	
	2.1×10^{-6}		Modarresi et al. (2005)	Q	247
2,2,3,4-tetramethylpentane C_9H_{20} [1186-53-4] VZFMYOCAEQDWDY-UHFFFAOYSA-N	1.0×10^{-6}		Yao et al. (2002)	Q	229, 267
	1.2×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
	1.4×10^{-6}		Yaws (2003)	X	237
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-6}		Hilal et al. (2008)	Q	
2,2,4,4-tetramethylpentane C_9H_{20} [1070-87-7] GUMULFRCHLJNDY-UHFFFAOYSA-N	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	2.8×10^{-6}		Yao et al. (2002)	Q	229
	1.4×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
	1.7×10^{-6}		Yaws (2003)	X	237
	1.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
2,2,4,4-tetramethylpentane C_9H_{20} [1070-87-7] GUMULFRCHLJNDY-UHFFFAOYSA-N	9.0×10^{-7}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	1.4×10^{-6}		Yao et al. (2002)	Q	229
	1.7×10^{-6}		Yaws (1999)	?	21
	1.9×10^{-6}		Yaws and Yang (1992)	?	21



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3,4-tetramethylpentane C_9H_{20} [16747-38-9] JLCYYQOQSAMWTA-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	237
	3.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.7×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	1.2×10^{-6}		Yao et al. (2002)	Q	229
3-ethyl-2,2-dimethylpentane C_9H_{20} [16747-32-3] CLZCPQKGOAXOJT-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
	1.5×10^{-6}		Yaws (2003)	X	237
	2.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-6}		Hilal et al. (2008)	Q	
3-ethyl-2,3-dimethylpentane C_9H_{20} [16747-33-4] MMASVVOQIKCFJZ-UHFFFAOYSA-N	1.6×10^{-6}		Modarresi et al. (2005)	Q	247
	1.6×10^{-6}		Yao et al. (2002)	Q	229
	1.5×10^{-6}		Yaws (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21
	1.2×10^{-6}		Yaws (2003)	X	237
	3.2×10^{-6}		Gharagheizi et al. (2012)	Q	
3-ethyl-2,4-dimethylpentane C_9H_{20} [1068-87-7] VLHAGZNBWKUMRW-UHFFFAOYSA-N	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	2.0×10^{-6}		Modarresi et al. (2005)	Q	247
	1.8×10^{-6}		Yao et al. (2002)	Q	229
	1.4×10^{-6}		Yaws (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21
3,3-diethylpentane C_9H_{20} [1067-20-5] BGXXYLRPIRDHJ-UHFFFAOYSA-N	4900		Abraham and Nasehzadeh (1981)	R	
	1.1×10^{-6}		Yaws (2003)	X	237
	3.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-6}		Gharagheizi et al. (2010)	Q	246
	4.1×10^{-6}		Hilal et al. (2008)	Q	
	2.0×10^{-6}		Modarresi et al. (2005)	Q	247
	1.7×10^{-6}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
9.5×10^{-6}		Abraham et al. (1990)	?		
9.4×10^{-6}		Abraham (1979)	?		



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
decane	1.3×10^{-6}		Brockbank (2013)	L	
$C_{10}H_{22}$	1.1×10^{-6}		Plyasunov and Shock (2000)	L	
[124-18-5]	1.4×10^{-6}		Mackay and Shiu (1981)	L	
DIOQZVSQGTUSAI-UHFFFAOYSA-N	1.9×10^{-6}		Duchowicz et al. (2020)	V	186
	1.9×10^{-6}		HSDB (2015)	V	
	2.1×10^{-6}		Mackay et al. (2006a)	V	
	2.1×10^{-6}		Mackay et al. (1993)	V	
	2.0×10^{-6}		Hwang et al. (1992)	V	
	2.3×10^{-6}		Eastcott et al. (1988)	V	
	1.9×10^{-6}		Abraham (1984)	V	
	1.9×10^{-6}		Yaws (2003)	X	258
	1.9×10^{-6}		Yaws (2003)	X	237
	4.4×10^{-6}		Dupeux et al. (2022)	Q	259
	4.4×10^{-4}		Duchowicz et al. (2020)	Q	
	2.3×10^{-5}		Wang et al. (2017)	Q	80, 238
	1.7×10^{-6}		Wang et al. (2017)	Q	80, 239
	6.5×10^{-6}		Wang et al. (2017)	Q	80, 240
	3.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-6}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	1.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	3.8×10^{-6}		Modarresi et al. (2007)	Q	67
	2.0×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	2.2×10^{-6}		English and Carroll (2001)	Q	230, 231
	1.0×10^{-5}		Katritzky et al. (1998)	Q	
	2.9×10^{-6}		Nirmalakhandan et al. (1997)	Q	
	1.9×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}		Yaws and Yang (1992)	?	21
2-methylnonane	1.2×10^{-6}		Yaws (2003)	X	237
$C_{10}H_{22}$	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
[871-83-0]	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
SGVYKUFIHHTIFL-UHFFFAOYSA-N	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	3.1×10^{-6}		Yao et al. (2002)	Q	229, 267
	1.2×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
3-methylnonane	1.1×10^{-6}		Yaws (2003)	X	237
$C_{10}H_{22}$	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
[5911-04-6]	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
PLZDDPSCZHRBOY-UHFFFAOYSA-N	1.7×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	2.8×10^{-6}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methylnonane $C_{10}H_{22}$ [17301-94-9] IALRSQMWHFKJJA-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	237
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	2.7×10^{-6}		Yao et al. (2002)	Q	229
	1.0×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
5-methylnonane $C_{10}H_{22}$ [15869-85-9] TYSIILFJZXHVPU-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	4.2×10^{-6}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
2,2-dimethyloctane $C_{10}H_{22}$ [15869-87-1] GPBUTTSWJNPYJL-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.1×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
2,3-dimethyloctane $C_{10}H_{22}$ [7146-60-3] YPMNDMUOGQJCLW-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	1.6×10^{-6}		Yao et al. (2002)	Q	229
	1.0×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
2,4-dimethyloctane $C_{10}H_{22}$ [4032-94-4] IXAVTTRPEXVFSX-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	237
	1.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.7×10^{-6}		Yao et al. (2002)	Q	229
	1.2×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-dimethyloctane $C_{10}H_{22}$ [15869-89-3] HOAAQUNESXYFDT-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	2.0×10^{-6}		Yao et al. (2002)	Q	229, 267
	1.1×10^{-6}		Yaws (1999)	?	21
2,6-dimethyloctane $C_{10}H_{22}$ [2051-30-1] ZALHPSXXQIPKTQ-UHFFFAOYSA-N	1.6×10^{-6}		Yaws and Yang (1992)	?	21
	1.0×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.8×10^{-6}		Yao et al. (2002)	Q	229
2,7-dimethyloctane $C_{10}H_{22}$ [1072-16-8] KEVMYFLMMDUPJE-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
	1.2×10^{-6}		Yaws (2003)	X	237
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.0×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
3,3-dimethyloctane $C_{10}H_{22}$ [4110-44-5] DBULLUBYDONGLT-UHFFFAOYSA-N	1.9×10^{-6}		Yao et al. (2002)	Q	229
	1.2×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
	1.0×10^{-6}		Yaws (2003)	X	237
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-6}		Hilal et al. (2008)	Q	
3,4-dimethyloctane $C_{10}H_{22}$ [15869-92-8] QQCWGAMGBCCGAQJ-UHFFFAOYSA-N	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.4×10^{-6}		Yao et al. (2002)	Q	229
	1.0×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
	1.0×10^{-6}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
3,4-dimethyloctane $C_{10}H_{22}$ [15869-92-8] QQCWGAMGBCCGAQJ-UHFFFAOYSA-N	2.0×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	1.6×10^{-6}		Yao et al. (2002)	Q	229
	1.0×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dimethyloctane $C_{10}H_{22}$ [15869-93-9] VRHRGVJOUHJULC-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	1.6×10^{-6}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
3,6-dimethyloctane $C_{10}H_{22}$ [15869-94-0] JEEQUUSFXRPRK-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	1.6×10^{-6}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
4,4-dimethyloctane $C_{10}H_{22}$ [15869-95-1] ZMEDGZAGMLTROM-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	237
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.4×10^{-6}		Yao et al. (2002)	Q	229, 267
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
4,5-dimethyloctane $C_{10}H_{22}$ [15869-96-2] DOYJTLUPPPUSMD-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.1×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.4×10^{-6}		Yao et al. (2002)	Q	229
	1.0×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyloctane $C_{10}H_{22}$ [5881-17-4] OEYGTUAKNZFCDJ-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyloctane $C_{10}H_{22}$ [15869-86-0] NRJUFUBKIFIKFI-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.4×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	2.8×10^{-6}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3-trimethylheptane $C_{10}H_{22}$ [52896-92-1] ACYHSTUWOQNWCX-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	9.4×10^{-7}		Yao et al. (2002)	Q	229
	1.0×10^{-6}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
2,2,4-trimethylheptane $C_{10}H_{22}$ [14720-74-2] IYGOARYARWJBO-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	237
	1.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.0×10^{-6}		Yao et al. (2002)	Q	229
	1.2×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
2,2,5-trimethylheptane $C_{10}H_{22}$ [20291-95-6] GZJFAWOTMWATOS-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	237
	1.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-6}		Modarresi et al. (2005)	Q	247
	1.1×10^{-6}		Yao et al. (2002)	Q	229, 267
	1.2×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
2,2,6-trimethylheptane $C_{10}H_{22}$ [1190-83-6] FHJCGIUZJXWNET-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	237
	1.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	1.3×10^{-6}		Yao et al. (2002)	Q	229
	1.3×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
2,3,3-trimethylheptane $C_{10}H_{22}$ [52896-93-2] QACXEXNKLFWKLIK-UHFFFAOYSA-N	9.5×10^{-7}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	9.7×10^{-7}		Yao et al. (2002)	Q	229
	9.5×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
2,3,4-trimethylheptane $C_{10}H_{22}$ [52896-95-4] UVVYAKOLFKEZEE-UHFFFAOYSA-N	9.9×10^{-7}		Yaws (2003)	X	237
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	9.0×10^{-7}		Yao et al. (2002)	Q	229
	9.9×10^{-7}		Yaws (1999)	?	21



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
2,3,5-trimethylheptane $C_{10}H_{22}$ [20278-85-7] YKPNYFKOKKKGNM-UHFFFAOYSA-N	9.5×10^{-7} 1.8×10^{-6} 1.2×10^{-6} 1.1×10^{-6} 1.4×10^{-6} 1.1×10^{-6} 9.5×10^{-7} 1.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	X Q Q Q Q Q ? ?	237 246 247 229 21 21
2,3,6-trimethylheptane $C_{10}H_{22}$ [4032-93-3] IHPXJGBVRWFEJB-UHFFFAOYSA-N	1.1×10^{-6} 1.5×10^{-6} 1.2×10^{-6} 1.1×10^{-6} 1.4×10^{-6} 1.2×10^{-6} 1.1×10^{-6} 1.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	X Q Q Q Q Q ? ?	237 246 247 229 21 21
2,4,4-trimethylheptane $C_{10}H_{22}$ [4032-92-2] QALGVLROELGEEM-UHFFFAOYSA-N	1.1×10^{-6} 1.3×10^{-6} 1.1×10^{-6} 1.1×10^{-6} 1.3×10^{-6} 8.6×10^{-7} 1.1×10^{-6} 1.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	X Q Q Q Q Q ? ?	237 246 247 229 21 21
2,4,5-trimethylheptane $C_{10}H_{22}$ [20278-84-6] YMBNRMDLJNPNF-UHFFFAOYSA-N	1.1×10^{-6} 1.6×10^{-6} 1.2×10^{-6} 1.1×10^{-6} 1.3×10^{-6} 9.0×10^{-7} 1.1×10^{-6} 1.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	X Q Q Q Q Q ? ?	237 246 247 229, 267 21 21
2,4,6-trimethylheptane $C_{10}H_{22}$ [2613-61-8] YNLBBDHDNIXQL-UHFFFAOYSA-N	1.3×10^{-6} 1.2×10^{-6} 1.2×10^{-6} 7.5×10^{-7} 1.3×10^{-6} 1.0×10^{-6} 1.3×10^{-6} 1.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	X Q Q Q Q Q ? ?	237 246 247 229 21 21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5,5-trimethylheptane $C_{10}H_{22}$ [1189-99-7] SOYLPZSOEXZMLE-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.2×10^{-6}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
3,3,4-trimethylheptane $C_{10}H_{22}$ [20278-87-9] WRBHKVWLEIYLDZ-UHFFFAOYSA-N	9.0×10^{-7}		Yaws (2003)	X	237
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	7.6×10^{-7}		Yao et al. (2002)	Q	229
	9.0×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3,3,5-trimethylheptane $C_{10}H_{22}$ [7154-80-5] VRVRZZWPKABUOE-UHFFFAOYSA-N	9.9×10^{-7}		Yaws (2003)	X	237
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	8.3×10^{-7}		Yao et al. (2002)	Q	229
	1.0×10^{-6}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
3,4,4-trimethylheptane $C_{10}H_{22}$ [20278-88-0] BLNBSBLKPFJJKQ-UHFFFAOYSA-N	9.0×10^{-7}		Yaws (2003)	X	237
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	7.7×10^{-7}		Yao et al. (2002)	Q	229
	9.0×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3,4,5-trimethylheptane $C_{10}H_{22}$ [20278-89-1] LJIIBBYARMPMSMT-UHFFFAOYSA-N	9.4×10^{-7}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.3×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	8.9×10^{-7}		Yao et al. (2002)	Q	229
	9.4×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-2-methylheptane $C_{10}H_{22}$ [14676-29-0] NKMJCVVUYDKHAV-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	237
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.0×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.4×10^{-6}		Yao et al. (2002)	Q	229
	1.0×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-2-methylheptane $C_{10}H_{22}$ [52896-88-5] OJDKRASKNKPYPDH-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.5×10^{-6}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
5-ethyl-2-methylheptane $C_{10}H_{22}$ [13475-78-0] DGEMPTLPTFNEHJ-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	1.5×10^{-6}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-3-methylheptane $C_{10}H_{22}$ [17302-01-1] HSOMNBKXPGCNBH-UHFFFAOYSA-N	9.1×10^{-7}		Yaws (2003)	X	237
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.3×10^{-6}		Yao et al. (2002)	Q	229, 267
	9.2×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-3-methylheptane $C_{10}H_{22}$ [52896-89-6] BTGGSWBKRYMHQK-UHFFFAOYSA-N	9.8×10^{-7}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	1.2×10^{-6}		Yao et al. (2002)	Q	229
	9.8×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-5-methylheptane $C_{10}H_{22}$ [52896-90-9] VXARVYMIZCGZGG-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.6×10^{-6}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
3-ethyl-4-methylheptane $C_{10}H_{22}$ [52896-91-0] JZBKRUIGSVOOIC-UHFFFAOYSA-N	1.6×10^{-6}		Yaws and Yang (1992)	?	21
	9.7×10^{-7}		Yaws (2003)	X	237
	2.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.1×10^{-6}		Yao et al. (2002)	Q	229
4-ethyl-4-methylheptane $C_{10}H_{22}$ [17302-04-4] MPYQJQDSICRCJJ-UHFFFAOYSA-N	9.8×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
	9.5×10^{-7}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.4×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
4-propylheptane $C_{10}H_{22}$ [3178-29-8] ABYGSZMCWVXFQC-UHFFFAOYSA-N	1.0×10^{-6}		Yao et al. (2002)	Q	229
	9.5×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
	1.2×10^{-6}		Yaws (2003)	X	237
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.6×10^{-6}		Hilal et al. (2008)	Q	
4-(1-methylethyl)-heptane $C_{10}H_{22}$ (4-isopropylheptane) [52896-87-4] AZLAWGCU DHUQDB-UHFFFAOYSA-N	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	2.6×10^{-6}		Yao et al. (2002)	Q	229
	1.2×10^{-6}		Yaws (1999)	?	21
	1.7×10^{-6}		Yaws and Yang (1992)	?	21
	1.0×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
4-(1-methylethyl)-heptane $C_{10}H_{22}$ (4-isopropylheptane) [52896-87-4] AZLAWGCU DHUQDB-UHFFFAOYSA-N	2.1×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	2.0×10^{-6}		Yao et al. (2002)	Q	229
	1.0×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,3-tetramethylhexane $C_{10}H_{22}$ [13475-81-5] RMQHJMMCLSJULX-UHFFFAOYSA-N	8.4×10^{-7}		Yaws (2003)	X	237
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-7}		Gharagheizi et al. (2010)	Q	246
	1.8×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	247
	4.9×10^{-7}		Yao et al. (2002)	Q	229
	8.4×10^{-7}		Yaws (1999)	?	21
	1.2×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3,4-tetramethylhexane $C_{10}H_{22}$ [52897-08-2] MHPSPNGWFAGBNH-UHFFFAOYSA-N	8.7×10^{-7}		Yaws (2003)	X	237
	1.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	5.9×10^{-7}		Yao et al. (2002)	Q	229
	8.7×10^{-7}		Yaws (1999)	?	21
	1.2×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3,5-tetramethylhexane $C_{10}H_{22}$ [52897-09-3] GCFKTDRTZYDRBI-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	8.4×10^{-7}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	6.6×10^{-7}		Yao et al. (2002)	Q	229, 267
	1.1×10^{-6}		Yaws (1999)	?	21
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
2,2,4,4-tetramethylhexane $C_{10}H_{22}$ [51750-65-3] PXHNHTBJHHSVPT-UHFFFAOYSA-N	8.3×10^{-7}		Yaws (2003)	X	237
	1.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-7}		Gharagheizi et al. (2010)	Q	246
	8.8×10^{-7}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	6.5×10^{-7}		Yao et al. (2002)	Q	229
	8.3×10^{-7}		Yaws (1999)	?	21
	1.1×10^{-6}		Yaws and Yang (1992)	?	21
2,2,4,5-tetramethylhexane $C_{10}H_{22}$ [16747-42-5] KDRZICOOQNIJDN-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	8.0×10^{-7}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	7.3×10^{-7}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,5,5-tetramethylhexane $C_{10}H_{22}$ [1071-81-4] HXQDUXXBVMMIKL-UHFFFAOYSA-N	1.4×10^{-6}		Yaws (2003)	X	237
	8.9×10^{-7}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-7}		Gharagheizi et al. (2010)	Q	246
	4.6×10^{-7}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	247
	1.1×10^{-6}		Yao et al. (2002)	Q	229
	1.4×10^{-6}		Yaws (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21
2,3,3,4-tetramethylhexane $C_{10}H_{22}$ [52897-10-6] HIHSOGFAVTVMICY-UHFFFAOYSA-N	7.9×10^{-7}		Yaws (2003)	X	237
	2.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	6.0×10^{-7}		Yao et al. (2002)	Q	229
	7.9×10^{-7}		Yaws (1999)	?	21
	1.2×10^{-6}		Yaws and Yang (1992)	?	21
2,3,3,5-tetramethylhexane $C_{10}H_{22}$ [52897-11-7] GCGFXFIPOBRMQT-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	237
	1.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	9.2×10^{-7}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	5.9×10^{-7}		Yao et al. (2002)	Q	229
	1.0×10^{-6}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
2,3,4,4-tetramethylhexane $C_{10}H_{22}$ [52897-12-8] XDRDDPSGUQMOBO-UHFFFAOYSA-N	8.2×10^{-7}		Yaws (2003)	X	237
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	247
	6.3×10^{-7}		Yao et al. (2002)	Q	229
	8.3×10^{-7}		Yaws (1999)	?	21
	1.2×10^{-6}		Yaws and Yang (1992)	?	21
2,3,4,5-tetramethylhexane $C_{10}H_{22}$ [52897-15-1] BHGNYYIOYFVKC-UHFFFAOYSA-N	1.0×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	6.6×10^{-7}		Yao et al. (2002)	Q	229, 267
	1.0×10^{-6}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3,4,4-tetramethylhexane $C_{10}H_{22}$ [5171-84-6] MCEYLFHKATVXLN-UHFFFAOYSA-N	6.6×10^{-7}		Yaws (2003)	X	237
	2.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-7}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.5×10^{-6}		Modarresi et al. (2005)	Q	247
	6.2×10^{-7}		Yao et al. (2002)	Q	229
	6.7×10^{-7}		Yaws (1999)	?	21
	1.0×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,2-dimethylhexane $C_{10}H_{22}$ [20291-91-2] XYDYDCWVCBIOQ-UHFFFAOYSA-N	9.8×10^{-7}		Yaws (2003)	X	237
	1.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.8×10^{-6}		Hilal et al. (2008)	Q	
	1.8×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	7.1×10^{-7}		Yao et al. (2002)	Q	229
	9.8×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-2,2-dimethylhexane $C_{10}H_{22}$ [52896-99-8] QHLDLDFIDFTHQI-UHFFFAOYSA-N	1.2×10^{-6}		Yaws (2003)	X	237
	1.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	9.9×10^{-7}		Yao et al. (2002)	Q	229
		1.2×10^{-6}		Yaws (1999)	?
	1.6×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,3-dimethylhexane $C_{10}H_{22}$ [52897-00-4] PJIFKODHGMUPFH-UHFFFAOYSA-N	8.5×10^{-7}		Yaws (2003)	X	237
	2.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.0×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	6.6×10^{-7}		Yao et al. (2002)	Q	229
		8.6×10^{-7}		Yaws (1999)	?
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-2,3-dimethylhexane $C_{10}H_{22}$ [52897-01-5] RHMRCBCYFAZIK-UHFFFAOYSA-N	9.4×10^{-7}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	7.2×10^{-7}		Yao et al. (2002)	Q	229
		9.5×10^{-7}		Yaws (1999)	?
	1.4×10^{-6}		Yaws and Yang (1992)	?	21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-2,4-dimethylhexane $C_{10}H_{22}$ [7220-26-0] OSKIMJMPFNLVOU-UHFFFAOYSA-N	9.5×10^{-7}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.6×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	7.1×10^{-7}		Yao et al. (2002)	Q	229, 267
	9.5×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-2,4-dimethylhexane $C_{10}H_{22}$ [52897-03-7] SIKFMUYSQCEQOO-UHFFFAOYSA-N	9.1×10^{-7}		Yaws (2003)	X	237
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	7.2×10^{-7}		Yao et al. (2002)	Q	229
	9.1×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,5-dimethylhexane $C_{10}H_{22}$ [52897-04-8] UJEUVDLASLOZIV-UHFFFAOYSA-N	1.1×10^{-6}		Yaws (2003)	X	237
	1.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.1×10^{-6}		Yao et al. (2002)	Q	229
	1.1×10^{-6}		Yaws (1999)	?	21
	1.5×10^{-6}		Yaws and Yang (1992)	?	21
4-ethyl-3,3-dimethylhexane $C_{10}H_{22}$ [52897-05-9] ZRTXVJYJVBTXHE-UHFFFAOYSA-N	8.5×10^{-7}		Yaws (2003)	X	237
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	7.3×10^{-7}		Yao et al. (2002)	Q	229
	8.6×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-3,4-dimethylhexane $C_{10}H_{22}$ [52897-06-0] ZGJCTUKRTSBTIQ-UHFFFAOYSA-N	8.6×10^{-7}		Yaws (2003)	X	237
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	7.7×10^{-7}		Yao et al. (2002)	Q	229
	8.6×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21



Rolf Sander: Compilation of Henry's law constants

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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-diethylhexane $C_{10}H_{22}$ [17302-02-2] WWNGLKDLYKNGGT-UHFFFAOYSA-N	8.5×10^{-7}		Yaws (2003)	X	237
	2.3×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	7.7×10^{-7}		Yao et al. (2002)	Q	229
	8.5×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3,4-diethylhexane $C_{10}H_{22}$ [19398-77-7] VBZCRMTUDYIWIH-UHFFFAOYSA-N	9.3×10^{-7}		Yaws (2003)	X	237
	2.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.8×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	7.9×10^{-7}		Yao et al. (2002)	Q	229
	9.3×10^{-7}		Yaws (1999)	?	21
	1.4×10^{-6}		Yaws and Yang (1992)	?	21
2-methyl-3-(1-methylethyl)-hexane $C_{10}H_{22}$ (3-isopropyl-2-methylhexane) [62016-13-1] YBOXGRMAQIYMGV-UHFFFAOYSA-N	7.5×10^{-7}		Yaws (2003)	X	237
	2.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	8.5×10^{-7}		Yao et al. (2002)	Q	229, 267
	7.5×10^{-7}		Yaws (1999)	?	21
	1.1×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3,3,4-pentamethylpentane $C_{10}H_{22}$ [16747-44-7] WKQBIIUOSATALN-UHFFFAOYSA-N	6.8×10^{-7}		Yaws (2003)	X	237
	2.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.0×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	8.8×10^{-7}		Yao et al. (2002)	Q	229, 267
	6.8×10^{-7}		Yaws (1999)	?	21
	1.0×10^{-6}		Yaws and Yang (1992)	?	21
2,2,3,4,4-pentamethylpentane $C_{10}H_{22}$ [16747-45-8] OWFKEHICSVOVAC-UHFFFAOYSA-N	7.2×10^{-7}		Yaws (2003)	X	237
	1.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.0×10^{-6}		Gharagheizi et al. (2010)	Q	246
	8.6×10^{-7}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	1.0×10^{-6}		Yao et al. (2002)	Q	229
	7.2×10^{-7}		Yaws (1999)	?	21
	1.0×10^{-6}		Yaws and Yang (1992)	?	21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-2,2,3-trimethylpentane $C_{10}H_{22}$ [52897-17-3] AJDIFHIHSYVDGP-UHFFFAOYSA-N	6.6×10^{-7}		Yaws (2003)	X	237
	2.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-7}		Gharagheizi et al. (2010)	Q	246
	2.1×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	9.2×10^{-7}		Yao et al. (2002)	Q	229
	6.6×10^{-7}		Yaws (1999)	?	21
	1.0×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,2,4-trimethylpentane $C_{10}H_{22}$ [52897-18-4] VLIZIVHXZQRDE-UHFFFAOYSA-N	9.2×10^{-7}		Yaws (2003)	X	237
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	1.1×10^{-6}		Yao et al. (2002)	Q	229
	9.2×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21
3-ethyl-2,3,4-trimethylpentane $C_{10}H_{22}$ [52897-19-5] OHZNMGSGEFVFTI-UHFFFAOYSA-N	7.0×10^{-7}		Yaws (2003)	X	237
	2.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.0×10^{-6}		Yao et al. (2002)	Q	229
	7.0×10^{-7}		Yaws (1999)	?	21
	1.1×10^{-6}		Yaws and Yang (1992)	?	21
3,3-diethyl-2-methylpentane $C_{10}H_{22}$ [52897-16-2] DSSAZLXYIQXGW-UHFFFAOYSA-N	7.5×10^{-7}		Yaws (2003)	X	237
	2.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	2.3×10^{-6}		Hilal et al. (2008)	Q	
	1.4×10^{-6}		Modarresi et al. (2005)	Q	247
	1.2×10^{-6}		Yao et al. (2002)	Q	229
	7.5×10^{-7}		Yaws (1999)	?	21
	1.1×10^{-6}		Yaws and Yang (1992)	?	21
2,4-dimethyl-3-(1-methylethyl)- pentane $C_{10}H_{22}$ (2,4-dimethyl-3-isopropylpentane) [13475-79-1] YVYHOOYMDHZALB-UHFFFAOYSA-N	9.1×10^{-7}		Yaws (2003)	X	237
	1.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-6}		Gharagheizi et al. (2010)	Q	246
	1.0×10^{-6}		Hilal et al. (2008)	Q	
	1.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.2×10^{-6}		Yao et al. (2002)	Q	229
	9.2×10^{-7}		Yaws (1999)	?	21
	1.3×10^{-6}		Yaws and Yang (1992)	?	21



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dimethylnonane $C_{11}H_{24}$ [17302-24-8] JZUUAUSQCXSTN-UHFFFAOYSA-N	1.1×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethylnonane $C_{11}H_{24}$ [17302-27-1] NQUMJENPNGXAIH-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethylnonane $C_{11}H_{24}$ [17302-28-2] MNGGOEWESNDQAN-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,7-dimethylnonane $C_{11}H_{24}$ [17302-29-3] QYQSPINNJUXEDY-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,8-dimethylnonane $C_{11}H_{24}$ [17302-30-6] FZFRYQHIQUEAAV-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3-dimethylnonane $C_{11}H_{24}$ [17302-15-7] HTRYNYZYFGHKDV-UHFFFAOYSA-N	9.5×10^{-7} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethylnonane $C_{11}H_{24}$ [17302-22-6] PAXLEVPLFYBSQJ-UHFFFAOYSA-N	1.0×10^{-6} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethylnonane $C_{11}H_{24}$ [17302-25-9] BAFVBVRBYKSWCE-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,6-dimethylnonane $C_{11}H_{24}$ [17302-31-7] YHLBUWVGXPXILSW-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,7-dimethylnonane $C_{11}H_{24}$ [17302-32-8] YGPVLXJHRFZYJJ-UHFFFAOYSA-N	1.0×10^{-6} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4-dimethylnonane $C_{11}H_{24}$ [17302-18-0] HARRKRKVTQABSF-UHFFFAOYSA-N	9.9×10^{-7} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,5-dimethylnonane $C_{11}H_{24}$ [17302-23-7] JDNGDDOTBYZAGS-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,6-dimethylnonane $C_{11}H_{24}$ [17302-26-0] JZKWOUUZMBTBDO-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5,5-dimethylnonane $C_{11}H_{24}$ [6414-96-6] BEPKYSJVUZWKMP-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethylnonane $C_{11}H_{24}$ [17302-11-3] FKJSIWPOZCKMIL-UHFFFAOYSA-N	1.1×10^{-6} 1.5×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-ethylnonane $C_{11}H_{24}$ [5911-05-7] UGCQDCMVAKKTQG-UHFFFAOYSA-N	1.1×10^{-6} 1.3×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-ethylnonane $C_{11}H_{24}$ [17302-12-4] QPOVZYGNFWRMJE-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethyloctane $C_{11}H_{24}$ [62016-26-6] XZPXMMWVWDSEMY-UHFFFAOYSA-N	9.0×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4-trimethyloctane $C_{11}H_{24}$ [18932-14-4] IKMGZPRUMVIFYBK-UHFFFAOYSA-N	9.9×10^{-7} 9.6×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5-trimethyloctane $C_{11}H_{24}$ [62016-27-7] CSVNISDVBYGXME-UHFFFAOYSA-N	9.9×10^{-7} 9.5×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,6-trimethyloctane $C_{11}H_{24}$ [62016-28-8] NBHFQKVSFKHGH-UHFFFAOYSA-N	9.6×10^{-7} 1.0×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,7-trimethyloctane $C_{11}H_{24}$ [62016-29-9] QGQAHVJOBYNMFN-UHFFFAOYSA-N	1.0×10^{-6} 9.2×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3-trimethyloctane $C_{11}H_{24}$ [62016-30-2] KFYWDGCDWVPXXCA-UHFFFAOYSA-N	8.7×10^{-7} 1.3×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4-trimethyloctane $C_{11}H_{24}$ [62016-31-3] SJAQEXCGOLTHPG-UHFFFAOYSA-N	9.7×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,5-trimethyloctane $C_{11}H_{24}$ [62016-32-4] CEOHXVQAHSSEG-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,6-trimethyloctane $C_{11}H_{24}$ [62016-33-5] MNFBNLXRMWOY-UHFFFAOYSA-N	9.7×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,7-trimethyloctane $C_{11}H_{24}$ [62016-34-6] XJKKSYAVEVAGFX-UHFFFAOYSA-N	9.8×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4-trimethyloctane $C_{11}H_{24}$ [62016-35-7] CJXXTMWNCYKHU-UHFFFAOYSA-N	9.9×10^{-7} 9.5×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,5-trimethyloctane $C_{11}H_{24}$ [62016-36-8] UJYGOBMOHSFJQP-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,6-trimethyloctane $C_{11}H_{24}$ [62016-37-9] XHNIFDXYGLPJLP-UHFFFAOYSA-N	1.0×10^{-6} 1.0×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,7-trimethyloctane $C_{11}H_{24}$ [62016-38-0] DUHKHXHIPOGMOW-UHFFFAOYSA-N	1.1×10^{-6} 9.4×10^{-7} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5,5-trimethyloctane $C_{11}H_{24}$ [62016-39-1] DZKJZWAIBSEZKB-UHFFFAOYSA-N	9.8×10^{-7} 9.7×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5,6-trimethyloctane $C_{11}H_{24}$ [62016-14-2] VHBZECSSWMMWTMQ-UHFFFAOYSA-N	1.0×10^{-6} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6,6-trimethyloctane $C_{11}H_{24}$ [54166-32-4] RUPXAIGHLDMSOL-UHFFFAOYSA-N	9.3×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4-trimethyloctane $C_{11}H_{24}$ [62016-40-4] IJVIFYHTPOSPSW-UHFFFAOYSA-N	8.7×10^{-7} 1.3×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,5-trimethyloctane $C_{11}H_{24}$ [62016-41-5] BEFCQJHEMBPSK-UHFFFAOYSA-N	9.6×10^{-7} 1.0×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,6-trimethyloctane $C_{11}H_{24}$ [62016-42-6] CFESHXNQRRYSED-UHFFFAOYSA-N	9.2×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,4-trimethyloctane $C_{11}H_{24}$ [62016-43-7] WWCBWKZBTINVDE-UHFFFAOYSA-N	8.8×10^{-7} 1.3×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,5-trimethyloctane $C_{11}H_{24}$ [62016-44-8] BPFOUTQNEVQSFR-UHFFFAOYSA-N	9.6×10^{-7} 1.3×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,6-trimethyloctane $C_{11}H_{24}$ [62016-45-9] RMGAENUTYIFEJO-UHFFFAOYSA-N	9.8×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5,5-trimethyloctane $C_{11}H_{24}$ [61868-94-8] FVYNWISHVUNIOZ-UHFFFAOYSA-N	1.0×10^{-6} 9.2×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4,5-trimethyloctane $C_{11}H_{24}$ [61868-95-9] QGCVKCDWOOWTQ-UHFFFAOYSA-N	8.9×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3-ethyloctane $C_{11}H_{24}$ [62016-16-4] ITDXDXCDBQZEB-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4-ethyloctane $C_{11}H_{24}$ [62016-17-5] ZYEQSLHBOITAM-UHFFFAOYSA-N	1.1×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-5-ethyloctane $C_{11}H_{24}$ [62016-18-6] CQCKNPUKBOITAX-UHFFFAOYSA-N	1.1×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-6-ethyloctane $C_{11}H_{24}$ [62016-19-7] AZXGABNJUBNOHW-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-3-ethyloctane $C_{11}H_{24}$ [17302-16-8] DQNINFLTCGTQGU-UHFFFAOYSA-N	9.1×10^{-7} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-4-ethyloctane $C_{11}H_{24}$ [62016-20-0] BTRAURWAFYPYMW-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-5-ethyloctane $C_{11}H_{24}$ [62016-21-1] LZFCXJTLKGPW-UHFFFAOYSA-N	1.1×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-6-ethyloctane $C_{11}H_{24}$ [62016-22-2] FTQLPWORENXYAZ-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-3-ethyloctane $C_{11}H_{24}$ [62016-23-3] LXRSBMFQRZTMNK-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-4-ethyloctane $C_{11}H_{24}$ [17302-19-1] IXZULXYHNRHENR-UHFFFAOYSA-N	9.7×10^{-7} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-5-ethyloctane $C_{11}H_{24}$ [62016-24-4] DTSHQAHLKUTGAR-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-6-ethyloctane $C_{11}H_{24}$ [62016-25-5] NXUUVZOGBPCPDV-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-propyloctane $C_{11}H_{24}$ [17302-13-5] VFAMBAFLNKONTN-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-isopropyloctane $C_{11}H_{24}$ [62016-15-3] VSJAVEFYQMREHJ-UHFFFAOYSA-N	1.1×10^{-6} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,3-tetramethylheptane $C_{11}H_{24}$ [61868-40-4] YPGGGWSLWOECQF-UHFFFAOYSA-N	7.5×10^{-7} 1.2×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4-tetramethylheptane $C_{11}H_{24}$ [61868-41-5] HPKDRGPKZGWSND-UHFFFAOYSA-N	8.6×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,5-tetramethylheptane $C_{11}H_{24}$ [61868-42-6] KXNFNEAZTWCHIL-UHFFFAOYSA-N	8.8×10^{-7} 1.0×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,6-tetramethylheptane $C_{11}H_{24}$ [61868-43-7] AQHGQPHAJYTM DJ-UHFFFAOYSA-N	9.3×10^{-7} 9.3×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4,4-tetramethylheptane $C_{11}H_{24}$ [61868-44-8] JMRHVFQTDSCACD-UHFFFAOYSA-N	8.6×10^{-7} 9.3×10^{-7} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,5-tetramethylheptane $C_{11}H_{24}$ [61868-45-9] MPDBIZNQOUSUIN-UHFFFAOYSA-N	9.5×10^{-7} 9.0×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,6-tetramethylheptane $C_{11}H_{24}$ [61868-46-0] XSMHBEAIQLABAO-UHFFFAOYSA-N	1.0×10^{-6} 7.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5,5-tetramethylheptane $C_{11}H_{24}$ [61868-47-1] VQJNSRPWQMPDDO-UHFFFAOYSA-N	9.1×10^{-7} 8.3×10^{-7} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5,6-tetramethylheptane $C_{11}H_{24}$ [61868-48-2] ZYJXKOJVCNGFSL-UHFFFAOYSA-N	9.5×10^{-7} 9.0×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,6,6-tetramethylheptane $C_{11}H_{24}$ [40117-45-1] GKNMBVVJQTWDRT-UHFFFAOYSA-N	9.5×10^{-7} 7.6×10^{-7} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,4-tetramethylheptane $C_{11}H_{24}$ [61868-49-3] OHIULFTBGSFAG-UHFFFAOYSA-N	8.0×10^{-7} 1.3×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,5-tetramethylheptane $C_{11}H_{24}$ [61868-50-6] XGCFPCZVDOZHLT-UHFFFAOYSA-N	8.6×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,6-tetramethylheptane $C_{11}H_{24}$ [61868-51-7] ZVRALCAHDAJURU-UHFFFAOYSA-N	8.7×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,4-tetramethylheptane $C_{11}H_{24}$ [61868-52-8] SXHQWTUVNZIMTP-UHFFFAOYSA-N	8.4×10^{-7} 1.2×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4,5-tetramethylheptane $C_{11}H_{24}$ [61868-53-9] LGUFKOOYNDNVNP-UHFFFAOYSA-N	9.1×10^{-7} 1.2×10^{-6} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,6-tetramethylheptane $C_{11}H_{24}$ [61868-54-0] WOHJQOFSYZPITE-UHFFFAOYSA-N	9.6×10^{-7} 1.0×10^{-6} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,5,5-tetramethylheptane $C_{11}H_{24}$ [61868-55-1] QSBIXVGCKCYBBL-UHFFFAOYSA-N	9.1×10^{-7} 9.8×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,5,6-tetramethylheptane $C_{11}H_{24}$ [52670-32-3] RAHGVMDMAJFLTP-UHFFFAOYSA-N	9.5×10^{-7} 1.1×10^{-6} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4,5-tetramethylheptane $C_{11}H_{24}$ [61868-56-2] QALMSCCHYDFGLF-UHFFFAOYSA-N	8.8×10^{-7} 1.0×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4,6-tetramethylheptane $C_{11}H_{24}$ [61868-57-3] DTMSZIVVBLZFEV-UHFFFAOYSA-N	1.0×10^{-6} 7.8×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,5,5-tetramethylheptane $C_{11}H_{24}$ [61868-58-4] JVYVKEOAYQAABU-UHFFFAOYSA-N	8.6×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4,4-tetramethylheptane $C_{11}H_{24}$ [61868-59-5] CFNIIBCZVLNKPV-UHFFFAOYSA-N	7.2×10^{-7} 1.4×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4,5-tetramethylheptane $C_{11}H_{24}$ [61868-60-8] QVCSKDHUHWRTA-UHFFFAOYSA-N	8.1×10^{-7} 1.3×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,5,5-tetramethylheptane $C_{11}H_{24}$ [61868-61-9] GALDMESQGNRJGE-UHFFFAOYSA-N	7.5×10^{-7} 1.2×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4,4,5-tetramethylheptane $C_{11}H_{24}$ [61868-62-0] CXIAIMLBUJNNJR-UHFFFAOYSA-N	7.8×10^{-7} 1.4×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61869-03-2] SBWMIVQVGGUMCE-UHFFFAOYSA-N	9.3×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-4-ethylheptane $C_{11}H_{24}$ [62016-46-0] BJOUMNMMNSZESV-UHFFFAOYSA-N	1.0×10^{-6} 8.7×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-5-ethylheptane $C_{11}H_{24}$ [62016-47-1] HVVFIKMZXFNXKA-UHFFFAOYSA-N	9.8×10^{-7} 9.7×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-21-1] KQUHXOYVQZYOOOF-UHFFFAOYSA-N	8.9×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-22-2] CNEPAGDSOHLVRW-UHFFFAOYSA-N	9.8×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-5-ethylheptane $C_{11}H_{24}$ [61868-23-3] BFCKNSGKYWMUNP-UHFFFAOYSA-N	1.0×10^{-6} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-24-4] OBCGEYFMJYXFJV-UHFFFAOYSA-N	9.8×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-25-5] OETKSNKIFXLJDO-UHFFFAOYSA-N	1.0×10^{-6} 9.2×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-5-ethylheptane $C_{11}H_{24}$ [61868-26-6] RZHNOEUMKYRHIX-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-27-7] DEZOXTLNRYCKNK-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-28-8] CUHCBWKQRDWMN-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-5-ethylheptane $C_{11}H_{24}$ [61868-29-9] GPZDEXDVXFJVLH-UHFFFAOYSA-N	9.1×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-30-2] BFXHSWDHLPKFSH-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-31-3] GBSGJLJGXHBTQQ-UHFFFAOYSA-N	1.1×10^{-6} 9.2×10^{-7} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-32-4] QXJXAHFNWHEQEU-UHFFFAOYSA-N	8.9×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3-dimethyl-5-ethylheptane $C_{11}H_{24}$ [61868-33-5] FLLHBJKZIOYAA-UHFFFAOYSA-N	9.4×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-34-6] HKSCZRRMBTUZLO-UHFFFAOYSA-N	8.5×10^{-7} 1.4×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-35-7] RMVVUAZCGGWZKA-UHFFFAOYSA-N	8.8×10^{-7} 1.3×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-5-ethylheptane $C_{11}H_{24}$ [61868-36-8] PCRCVFLPWIQGNJ-UHFFFAOYSA-N	9.5×10^{-7} 1.3×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-37-9] FQOCKNRDCVODKW-UHFFFAOYSA-N	8.9×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyl-4-ethylheptane $C_{11}H_{24}$ [61868-38-0] IKVNPWSSYMJDKE-UHFFFAOYSA-N	9.6×10^{-7} 1.3×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-dimethyl-3-ethylheptane $C_{11}H_{24}$ [61868-39-1] YMWPSGKMMFSS-UHFFFAOYSA-N	9.3×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4-propylheptane $C_{11}H_{24}$ [61868-96-0] AXOUMHTUGUFOKF-UHFFFAOYSA-N	1.1×10^{-6} 1.0×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-4-propylheptane $C_{11}H_{24}$ [61868-97-1] WAMROSASDOIVDE-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-4-propylheptane $C_{11}H_{24}$ [17302-20-4] RDZFGBZTNOYNAH-UHFFFAOYSA-N	9.9×10^{-7} 1.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3-isopropylheptane $C_{11}H_{24}$ [6876-18-2] GECZBVJYUAPYFD-UHFFFAOYSA-N	9.9×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4-isopropylheptane $C_{11}H_{24}$ [61868-98-2] ADLZFTVQXMDTCY-UHFFFAOYSA-N	1.1×10^{-6} 9.7×10^{-7} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-4-isopropylheptane $C_{11}H_{24}$ [61868-99-3] SRECVVXQFXRBNH-UHFFFAOYSA-N	1.0×10^{-6} 1.1×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-4-isopropylheptane $C_{11}H_{24}$ [61869-00-9] LSJZMBVEVGYTAG-UHFFFAOYSA-N	8.9×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Rolf Sander: Compilation of Henry's law constants

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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-diethylheptane $C_{11}H_{24}$ [17302-17-9] XATIZWAWQAIMQJ-UHFFFAOYSA-N	9.1×10^{-7} 1.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-diethylheptane $C_{11}H_{24}$ [61869-01-0] UWOPVDFSBGDRJR-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-diethylheptane $C_{11}H_{24}$ [61869-02-1] OBHTWTQZINRNAB-UHFFFAOYSA-N	1.1×10^{-6} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-diethylheptane $C_{11}H_{24}$ [17302-21-5] WDTMGYSKSPF-UHFFFAOYSA-N	9.6×10^{-7} 1.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4- <i>tert</i> -butylheptane $C_{11}H_{24}$ [60302-21-8] MDOHZJRFNIIH-UHFFFAOYSA-N	9.6×10^{-7} 1.0×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,3,4-pentamethylhexane $C_{11}H_{24}$ [61868-85-7] RSEBTOONCGVAKN-UHFFFAOYSA-N	6.6×10^{-7} 1.4×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,3,5-pentamethylhexane $C_{11}H_{24}$ [61868-86-8] QGVXFIIIZUSICQO-UHFFFAOYSA-N	7.9×10^{-7} 9.5×10^{-7} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4,4-pentamethylhexane $C_{11}H_{24}$ [61868-87-9] HBVQLCKOFAUQGY-UHFFFAOYSA-N	6.5×10^{-7} 1.5×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4,5-pentamethylhexane $C_{11}H_{24}$ [61868-88-0] LDUJDGROUWHEKU-UHFFFAOYSA-N	8.2×10^{-7} 1.1×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,5,5-pentamethylhexane $C_{11}H_{24}$ [14739-73-2] UKYAYXXQXKPIBL-UHFFFAOYSA-N	8.5×10^{-7} 8.4×10^{-7} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4,4,5-pentamethylhexane $C_{11}H_{24}$ [60302-23-0] JQFZWBZEZYOCQL-UHFFFAOYSA-N	7.3×10^{-7} 1.1×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,4,4-pentamethylhexane $C_{11}H_{24}$ [61868-89-1] GHRPCKCGHFDDOH-UHFFFAOYSA-N	6.4×10^{-7} 1.5×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,4,5-pentamethylhexane $C_{11}H_{24}$ [52670-33-4] STMIMOZUYGUOQZ-UHFFFAOYSA-N	7.5×10^{-7} 1.3×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-72-2] HUAYVMMWWLHZAB-UHFFFAOYSA-N	7.5×10^{-7} 1.2×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-73-3] ZSUMTZIXJNZKBI-UHFFFAOYSA-N	8.6×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-74-4] UDUTWNYTAVENNO-UHFFFAOYSA-N	8.7×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-75-5] YFQDCXGMLYJDSG-UHFFFAOYSA-N	7.7×10^{-7} 1.2×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-76-6] GJVFFOLLEVKEKMU-UHFFFAOYSA-N	9.3×10^{-7} 9.3×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-77-7] UKTBERWYLDSDZQ-UHFFFAOYSA-N	9.9×10^{-7} 8.3×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-78-8] DNDCULLMOLSZER-UHFFFAOYSA-N	7.9×10^{-7} 1.4×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Rolf Sander: Compilation of Henry's law constants

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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-79-9] XCNOKZUAQAZTAJ-UHFFFAOYSA-N	7.6×10^{-7} 1.5×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-80-2] HNNSQDJQJRTMMW-UHFFFAOYSA-N	8.2×10^{-7} 1.2×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,5-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-81-3] VYVPEEFLIYVOTH-UHFFFAOYSA-N	8.6×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,5-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-82-4] LDKMZLRIVWQQRW-UHFFFAOYSA-N	9.3×10^{-7} 1.1×10^{-6} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4-trimethyl-3-ethylhexane $C_{11}H_{24}$ [61868-83-5] MTYPKDRKJRWXKB-UHFFFAOYSA-N	8.4×10^{-7} 1.2×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4-trimethyl-4-ethylhexane $C_{11}H_{24}$ [61868-84-6] ADDYWUNUHVKQGT-UHFFFAOYSA-N	6.8×10^{-7} 1.7×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-3-isopropylhexane $C_{11}H_{24}$ [61868-63-1] VKABOTNMFKIVDN-UHFFFAOYSA-N	9.1×10^{-7} 9.8×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-3-isopropylhexane $C_{11}H_{24}$ [61868-64-2] XVWGUCNHEXRNU-UHFFFAOYSA-N	8.2×10^{-7} 1.2×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-3-isopropylhexane $C_{11}H_{24}$ [61868-65-3] QRNSQXWYPPLHTL-UHFFFAOYSA-N	9.5×10^{-7} 1.1×10^{-6} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-3-isopropylhexane $C_{11}H_{24}$ [61868-66-4] QKICRGDGLQROM-UHFFFAOYSA-N	1.0×10^{-6} 9.2×10^{-7} 9.6×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-3,3-diethylhexane $C_{11}H_{24}$ [61868-67-5] QNRHKXCWHYUEKP-UHFFFAOYSA-N	8.4×10^{-7} 1.5×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3,4-diethylhexane $C_{11}H_{24}$ [61868-68-6] MWHIPTVSAPEYPC-UHFFFAOYSA-N	9.8×10^{-7} 1.2×10^{-6} 9.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4,4-diethylhexane $C_{11}H_{24}$ [61868-69-7] UNPXTJSCIHOMKB-UHFFFAOYSA-N	9.0×10^{-7} 1.2×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-3,4-diethylhexane $C_{11}H_{24}$ [61868-70-0] ZFMWVWVLOKHXC-UHFFFAOYSA-N	8.4×10^{-7} 1.5×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-4,4-diethylhexane $C_{11}H_{24}$ [61868-71-1] CUHCCZRBXHOAMW-UHFFFAOYSA-N	8.1×10^{-7} 1.6×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,3,4,4-hexamethylpentane $C_{11}H_{24}$ [60302-27-4] JKJQSSSRKPVEM-UHFFFAOYSA-N	5.0×10^{-7} 1.9×10^{-6} 7.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4-tetramethyl-3-ethylpentane $C_{11}H_{24}$ [61868-93-7] HBSINJYUKWVYBC-UHFFFAOYSA-N	6.5×10^{-7} 1.5×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,4-tetramethyl-3-ethylpentane $C_{11}H_{24}$ [3178-30-1] FNWCWFQEEKFGHB-UHFFFAOYSA-N	6.9×10^{-7} 1.3×10^{-6} 8.1×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4-trimethyl-3-isopropylpentane $C_{11}H_{24}$ [61868-90-4] SZPCILWZDHUKLW-UHFFFAOYSA-N	8.7×10^{-7} 9.4×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4-trimethyl-3-isopropylpentane $C_{11}H_{24}$ [61868-91-5] FHBVPOXLRZPP-UHFFFAOYSA-N	7.1×10^{-7} 1.5×10^{-6} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-methylundecane $C_{12}H_{26}$ [1632-70-8] OULNVKABFWNUCW-UHFFFAOYSA-N	1.1×10^{-6} 2.5×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
6-methylundecane $C_{12}H_{26}$ [17302-33-9] VPYZCUCKYWHJGX-UHFFFAOYSA-N	1.1×10^{-6} 2.5×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyldecane $C_{12}H_{26}$ [17302-37-3] WBWYXWILSHQILH-UHFFFAOYSA-N	9.1×10^{-7} 3.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyldecane $C_{12}H_{26}$ [17312-44-6] ZCTGYLNFWOQVHV-UHFFFAOYSA-N	1.0×10^{-6} 2.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyldecane $C_{12}H_{26}$ [2801-84-5] OJAFEXESSIONPMH-UHFFFAOYSA-N	1.0×10^{-6} 2.1×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyldecane $C_{12}H_{26}$ [17312-50-4] DQHKBYZSYRJBMD-UHFFFAOYSA-N	1.0×10^{-6} 2.0×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethyldecane $C_{12}H_{26}$ [13150-81-7] DHJGXZWEQBKLN-UHFFFAOYSA-N	1.0×10^{-6} 2.0×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,7-dimethyldecane $C_{12}H_{26}$ [17312-51-5] RVQIXUWWPOTVNP-UHFFFAOYSA-N	1.0×10^{-6} 2.2×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,8-dimethyldecane $C_{12}H_{26}$ [17312-52-6] KSRGGHUVCVWVDW-UHFFFAOYSA-N	1.0×10^{-6} 2.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,9-dimethyldecane $C_{12}H_{26}$ [1002-17-1] HWISDPDDDUZJAW-UHFFFAOYSA-N	1.0×10^{-6} 5.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-dimethyldecane $C_{12}H_{26}$ [17302-38-4] URERYDSQOIHQK-UHFFFAOYSA-N	9.1×10^{-7} 1.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyldecane $C_{12}H_{26}$ [17312-45-7] NRBMEEDORZDRIT-UHFFFAOYSA-N	1.0×10^{-6} 1.6×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyldecane $C_{12}H_{26}$ [17312-48-0] XXSUEVGKGOJMD-UHFFFAOYSA-N	1.0×10^{-6} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,6-dimethyldecane $C_{12}H_{26}$ [17312-53-7] NQWFSCYWTXQNGG-UHFFFAOYSA-N	1.0×10^{-6} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,7-dimethyldecane $C_{12}H_{26}$ [17312-54-8] VDAVEASVPZDNQB-UHFFFAOYSA-N	1.0×10^{-6} 1.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,8-dimethyldecane $C_{12}H_{26}$ [17312-55-9] KMAHIPNGGSOJSM-UHFFFAOYSA-N	1.0×10^{-6} 1.6×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-dimethyldecane $C_{12}H_{26}$ [17312-39-9] WZCACTKWHXCWFZ-UHFFFAOYSA-N	9.2×10^{-7} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,5-dimethyldecane $C_{12}H_{26}$ [17312-46-8] QZFIIYSHODCSV-UHFFFAOYSA-N	1.0×10^{-6} 1.5×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,6-dimethyldecane $C_{12}H_{26}$ [17312-49-1] TVGNRLXJXKVGD-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,7-dimethyldecane $C_{12}H_{26}$ [17312-56-0] GCKWUFQALHAZDH-UHFFFAOYSA-N	1.0×10^{-6} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5,5-dimethyldecane $C_{12}H_{26}$ [17453-92-8] RNXSOUOIPAWOAC-UHFFFAOYSA-N	9.3×10^{-7} 1.3×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5,6-dimethyldecane $C_{12}H_{26}$ [1636-43-7] NCJIZIQFWXMFZ-UHFFFAOYSA-N	1.0×10^{-6} 1.4×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyldecane $C_{12}H_{26}$ [17085-96-0] ZBDDVSBBCGZQDV-UHFFFAOYSA-N	1.1×10^{-6} 2.7×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-ethyldecane $C_{12}H_{26}$ [1636-44-8] IGTKVLJTIZALGL-UHFFFAOYSA-N	1.1×10^{-6} 1.5×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-ethyldecane $C_{12}H_{26}$ [17302-36-2] BCQLAHKMMOGIIS-UHFFFAOYSA-N	1.1×10^{-6} 1.4×10^{-6} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethylnonane $C_{12}H_{26}$ [55499-04-2] XXNUJUNKYOZLAJ-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4-trimethylnonane $C_{12}H_{26}$ [62184-50-3] YYAICGYFLHBIN-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5-trimethylnonane $C_{12}H_{26}$ [62184-51-4] ZIXRFABUOOUIMA-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,6-trimethylnonane $C_{12}H_{26}$ [62184-52-5] BUTMZMIZSWINDK-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,7-trimethylnonane $C_{12}H_{26}$ [62184-53-6] PXOURNMYVAOUML-UHFFFAOYSA-N	8.5×10^{-7} 7.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,8-trimethylnonane $C_{12}H_{26}$ [62184-54-7] WXUAVABOZJOELJ-UHFFFAOYSA-N	8.5×10^{-7} 7.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3-trimethylnonane $C_{12}H_{26}$ [62184-55-8] RSUFJUIYLXRYFG-UHFFFAOYSA-N	8.3×10^{-7} 9.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4-trimethylnonane $C_{12}H_{26}$ [62184-56-9] RRZRZLRUYYPZYEH-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,5-trimethylnonane $C_{12}H_{26}$ [62184-57-0] IESSJVKXJWJFD-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,6-trimethylnonane $C_{12}H_{26}$ [62184-58-1] AUXUELOPRQTQBE-UHFFFAOYSA-N	9.3×10^{-7} 8.6×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,7-trimethylnonane $C_{12}H_{26}$ [62184-59-2] GGUGBCMHEULHJS-UHFFFAOYSA-N	9.2×10^{-7} 9.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,8-trimethylnonane $C_{12}H_{26}$ [62184-60-5] GQHCJRDJABETBJ-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4-trimethylnonane $C_{12}H_{26}$ [62184-61-6] RRLKOZCPQXMIJ-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,5-trimethylnonane $C_{12}H_{26}$ [62184-62-7] NZAPYIGNIYR, JNJ-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,6-trimethylnonane $C_{12}H_{26}$ [62184-10-5] QCQMRLDBNMVKOZ-UHFFFAOYSA-N	9.6×10^{-7} 7.2×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,7-trimethylnonane $C_{12}H_{26}$ [62184-11-6] OHBDIVYOYUFLOTO-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,8-trimethylnonane $C_{12}H_{26}$ [49542-74-7] PZXMOJBRYRFSNJH-UHFFFAOYSA-N	9.6×10^{-7} 7.0×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5,5-trimethylnonane $C_{12}H_{26}$ [62184-12-7] ZRRKWMYBHUMSTG-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5,6-trimethylnonane $C_{12}H_{26}$ [62184-13-8] KXHDWXIQHWSOHI-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5,7-trimethylnonane $C_{12}H_{26}$ [62184-14-9] KMBPYTMBXFKXON-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5,8-trimethylnonane $C_{12}H_{26}$ [49557-09-7] YYZRNFMG AQMLJJ-UHFFFAOYSA-N	9.6×10^{-7} 7.2×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6,6-trimethylnonane $C_{12}H_{26}$ [62184-15-0] MTPVPWZHWOHMQT-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6,7-trimethylnonane $C_{12}H_{26}$ [62184-16-1] PGLYQCHTCUBASV-UHFFFAOYSA-N	9.3×10^{-7} 8.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,7,7-trimethylnonane $C_{12}H_{26}$ [62184-17-2] RCTMUTWYOMEASD-UHFFFAOYSA-N	8.5×10^{-7} 8.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4-trimethylnonane $C_{12}H_{26}$ [62184-18-3] RNCRKMFE LJSFRA-UHFFFAOYSA-N	8.3×10^{-7} 9.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3,5-trimethylnonane $C_{12}H_{26}$ [62184-19-4] KRWQPUYFIGHZNF-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,6-trimethylnonane $C_{12}H_{26}$ [62184-20-7] GPSMOBMYMZBKGU-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,7-trimethylnonane $C_{12}H_{26}$ [62184-21-8] NZYGFHSHEQXPFT-UHFFFAOYSA-N	8.5×10^{-7} 7.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,4-trimethylnonane $C_{12}H_{26}$ [62184-22-9] UYNWXBDBPKCTRS-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,5-trimethylnonane $C_{12}H_{26}$ [62184-23-0] PFVDUOFBPLPHEQ-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,6-trimethylnonane $C_{12}H_{26}$ [62184-24-1] VSRUKIVBxBGRDU-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,7-trimethylnonane $C_{12}H_{26}$ [27802-85-3] HQIBDLHPQGDJEW-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5,5-trimethylnonane $C_{12}H_{26}$ [62184-25-2] MUVSDRJGHVJLQX-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5,6-trimethylnonane $C_{12}H_{26}$ [62184-26-3] HMCPPWBQUPZETF-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5,7-trimethylnonane $C_{12}H_{26}$ [62184-27-4] LLVWEFHXBQAEJX-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,6,6-trimethylnonane $C_{12}H_{26}$ [62184-28-5] CBDYLMAJISNHBH-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4,5-trimethylnonane $C_{12}H_{26}$ [62184-29-6] QLJZSYCAASGFGU-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4,6-trimethylnonane $C_{12}H_{26}$ [62184-30-9] KBTTWWLCAOXOSV-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,5,5-trimethylnonane $C_{12}H_{26}$ [62184-31-0] QVDLUCCOJXIINS-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,5,6-trimethylnonane $C_{12}H_{26}$ [62211-85-2] BBEKERHGCZOIX-UHFFFAOYSA-N	9.3×10^{-7} 8.6×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3-ethylnonane $C_{12}H_{26}$ [62184-73-0] NVCDNLWOUSWNRQ-UHFFFAOYSA-N	1.0×10^{-6} 9.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4-ethylnonane $C_{12}H_{26}$ [62184-37-6] GRYPXYDXCQOVAY-UHFFFAOYSA-N	1.0×10^{-6} 8.5×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-5-ethylnonane $C_{12}H_{26}$ [62184-38-7] WZWWWJMDQQIPJZ-UHFFFAOYSA-N	1.0×10^{-6} 8.1×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-6-ethylnonane $C_{12}H_{26}$ [62184-39-8] GBMUXXDAAUUNLY-UHFFFAOYSA-N	1.0×10^{-6} 8.5×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-7-ethylnonane $C_{12}H_{26}$ [62184-40-1] PHPGTUZXJVCKP-UHFFFAOYSA-N	1.0×10^{-6} 9.6×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-3-ethylnonane $C_{12}H_{26}$ [17302-39-5] MJZXPBAAXOUJF-UHFFFAOYSA-N	9.1×10^{-7} 1.0×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-4-ethylnonane $C_{12}H_{26}$ [62184-41-2] ZELDGOVWPZHJVS-UHFFFAOYSA-N	1.0×10^{-6} 9.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-5-ethylnonane $C_{12}H_{26}$ [62184-42-3] GDUZVOIDJDZQBC-UHFFFAOYSA-N	1.0×10^{-6} 7.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-6-ethylnonane $C_{12}H_{26}$ [62184-43-4] WSMCXXNPFLZSMY-UHFFFAOYSA-N	1.0×10^{-6} 8.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-7-ethylnonane $C_{12}H_{26}$ [62184-44-5] FSGFZSLYTXQNCW-UHFFFAOYSA-N	1.0×10^{-6} 9.0×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-3-ethylnonane $C_{12}H_{26}$ [62184-45-6] AUMKRFNJSTUECA-UHFFFAOYSA-N	1.0×10^{-6} 9.0×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-4-ethylnonane $C_{12}H_{26}$ [17312-40-2] LXQCGRFCISXKQC-UHFFFAOYSA-N	9.2×10^{-7} 8.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-5-ethylnonane $C_{12}H_{26}$ [62184-46-7] BDJIXOFXGLDYLN-UHFFFAOYSA-N	1.0×10^{-6} 8.5×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-6-ethylnonane $C_{12}H_{26}$ [62184-47-8] SULZKBWLMOBACQ-UHFFFAOYSA-N	1.0×10^{-6} 8.1×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-7-ethylnonane $C_{12}H_{26}$ [62184-48-9] HYIBWPIYSSTZLB-UHFFFAOYSA-N	1.0×10^{-6} 9.0×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-methyl-3-ethylnonane $C_{12}H_{26}$ [62184-49-0] ZBALIHUORTBQR-UHFFFAOYSA-N	1.0×10^{-6} 8.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl-4-ethylnonane $C_{12}H_{26}$ [1632-71-9] HKUUNAOHRKAJIY-UHFFFAOYSA-N	1.0×10^{-6} 8.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl-5-ethylnonane $C_{12}H_{26}$ [14531-16-9] DZSBQMNPPIKBNF-UHFFFAOYSA-N	9.2×10^{-7} 8.6×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-propylnonane $C_{12}H_{26}$ [6165-37-3] QLKPGWNXMMBQMG-UHFFFAOYSA-N	1.1×10^{-6} 8.7×10^{-7} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-propylnonane $C_{12}H_{26}$ [998-35-6] ISHSSTRAYNPQFX-UHFFFAOYSA-N	1.1×10^{-6} 8.2×10^{-7} 1.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-isopropylnonane $C_{12}H_{26}$ [62184-71-8] BXYKZQOGHMLDIE-UHFFFAOYSA-N	1.0×10^{-6} 8.5×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-isopropylnonane $C_{12}H_{26}$ [62184-72-9] ALZCRHWYCQKQK-UHFFFAOYSA-N	1.0×10^{-6} 8.5×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,3-tetramethyloctane $C_{12}H_{26}$ [62183-74-8] UXQAEOWCSOPBLF-UHFFFAOYSA-N	6.9×10^{-7} 9.3×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4-tetramethyloctane $C_{12}H_{26}$ [62183-75-9] HEJULKHHKGYPT-UHFFFAOYSA-N	7.8×10^{-7} 8.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,5-tetramethyloctane $C_{12}H_{26}$ [62183-76-0] MRBTZFDZTJYCAO-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,6-tetramethyloctane $C_{12}H_{26}$ [62183-77-1] YRSBZJIBIXVOME-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,7-tetramethyloctane $C_{12}H_{26}$ [62183-78-2] CPEHPCZXBBEYOL-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,4-tetramethyloctane $C_{12}H_{26}$ [62183-79-3] TYUFTNSABIBNRY-UHFFFAOYSA-N	7.2×10^{-7} 7.3×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,5-tetramethyloctane $C_{12}H_{26}$ [62183-80-6] SNJCVBPFQJMFU-UHFFFAOYSA-N	8.3×10^{-7} 6.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,6-tetramethyloctane $C_{12}H_{26}$ [62183-81-7] ODZRFEPMTWHMBK-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,7-tetramethyloctane $C_{12}H_{26}$ [62183-82-8] QHDQKPZLRKHEHV-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5,5-tetramethyloctane $C_{12}H_{26}$ [62183-83-9] RJJMKVKQLGGDK-UHFFFAOYSA-N	7.8×10^{-7} 5.8×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5,6-tetramethyloctane $C_{12}H_{26}$ [62183-84-0] BQUVPJLOJUCQGM-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5,7-tetramethyloctane $C_{12}H_{26}$ [62199-19-3] ISTINYWNHRBEDQ-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,6,6-tetramethyloctane $C_{12}H_{26}$ [62199-20-6] BANZIZHQGFRTMI-UHFFFAOYSA-N	7.7×10^{-7} 6.0×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,6,7-tetramethyloctane $C_{12}H_{26}$ [62199-21-7] ZSXJNQURTCJFGP-UHFFFAOYSA-N	8.0×10^{-7} 7.1×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,7,7-tetramethyloctane $C_{12}H_{26}$ [1071-31-4] QZUFNKONEPLWBC-UHFFFAOYSA-N	7.7×10^{-7} 6.0×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,4-tetramethyloctane $C_{12}H_{26}$ [62199-22-8] ITTRGXKGDYDX-UHFFFAOYSA-N	7.6×10^{-7} 9.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,5-tetramethyloctane $C_{12}H_{26}$ [62199-23-9] RVOIBAZQSHFKMM-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,6-tetramethyloctane $C_{12}H_{26}$ [62199-24-0] MBJHOSHYIFXPL-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,7-tetramethyloctane $C_{12}H_{26}$ [62199-25-1] WWQBZXREQWIXFF-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,4-tetramethyloctane $C_{12}H_{26}$ [62199-26-2] MELCVUZPHQRNTK-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,5-tetramethyloctane $C_{12}H_{26}$ [62199-27-3] AMIZVDCXDXOHL-UHFFFAOYSA-N	8.5×10^{-7} 8.4×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,6-tetramethyloctane $C_{12}H_{26}$ [62199-28-4] OYZWGSWTBSWCLN-UHFFFAOYSA-N	8.6×10^{-7} 8.0×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,7-tetramethyloctane $C_{12}H_{26}$ [62199-29-5] YUCNZDFGMLKYFT-UHFFFAOYSA-N	8.7×10^{-7} 7.7×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,5,5-tetramethyloctane $C_{12}H_{26}$ [62199-30-8] RQOLUXQWYAKKTG-UHFFFAOYSA-N	7.8×10^{-7} 8.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,5,6-tetramethyloctane $C_{12}H_{26}$ [62199-31-9] IPYLOMHOPWIUFA-UHFFFAOYSA-N	8.6×10^{-7} 8.0×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,5,7-tetramethyloctane $C_{12}H_{26}$ [62199-32-0] AIUMUQTYGQPMV-UHFFFAOYSA-N	8.9×10^{-7} 6.9×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,6,6-tetramethyloctane $C_{12}H_{26}$ [62199-33-1] CVRMZIOMFWYAPV-UHFFFAOYSA-N	7.9×10^{-7} 7.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,6,7-tetramethyloctane $C_{12}H_{26}$ [52670-34-5] FZCGYGCYZRXLDY-UHFFFAOYSA-N	8.6×10^{-7} 8.2×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4,5-tetramethyloctane $C_{12}H_{26}$ [62199-34-2] OBWRJGVWBWXXAO-UHFFFAOYSA-N	8.0×10^{-7} 7.1×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4,6-tetramethyloctane $C_{12}H_{26}$ [62199-35-3] UQCGTRPILZWACX-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4,7-tetramethyloctane $C_{12}H_{26}$ [35866-96-7] QYUWMFZODNLLRJ-UHFFFAOYSA-N	8.5×10^{-7} 5.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,5,5-tetramethyloctane $C_{12}H_{26}$ [62199-36-4] OMFWIGPPTXQHH-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,5,6-tetramethyloctane $C_{12}H_{26}$ [62199-37-5] YJMGKHXCSEVVKG-UHFFFAOYSA-N	8.7×10^{-7} 7.7×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,5,7-tetramethyloctane $C_{12}H_{26}$ [2217-17-6] PWYLDJLMYGOPSR-UHFFFAOYSA-N	9.1×10^{-7} 6.2×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,6,6-tetramethyloctane $C_{12}H_{26}$ [62199-38-6] VVEPRQWGSASPPP-UHFFFAOYSA-N	8.3×10^{-7} 6.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5,5,6-tetramethyloctane $C_{12}H_{26}$ [62199-39-7] DLCPMTDXNVOOLU-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5,6,6-tetramethyloctane $C_{12}H_{26}$ [62199-40-0] SQOVOQLOSZFJGI-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4,4-tetramethyloctane $C_{12}H_{26}$ [62199-41-1] VXEUNQVVVNDLTL-UHFFFAOYSA-N	6.8×10^{-7} 9.8×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4,5-tetramethyloctane $C_{12}H_{26}$ [62199-42-2] FATMBSLXTUXZBP-UHFFFAOYSA-N	7.7×10^{-7} 8.7×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4,6-tetramethyloctane $C_{12}H_{26}$ [62199-43-3] VCXMKRQQDPQALS-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,5,5-tetramethyloctane $C_{12}H_{26}$ [62199-44-4] UJLDJWVNZROTLS-UHFFFAOYSA-N	7.0×10^{-7} 8.5×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,5,6-tetramethyloctane $C_{12}H_{26}$ [62199-45-5] AQPSWWWUVHSZJK-UHFFFAOYSA-N	7.9×10^{-7} 7.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,6,6-tetramethyloctane $C_{12}H_{26}$ [62199-46-6] PAEUGKMMSQUAGH-UHFFFAOYSA-N	7.4×10^{-7} 6.9×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4,4,5-tetramethyloctane $C_{12}H_{26}$ [62199-47-7] HWNTXBYEGXKWKG-UHFFFAOYSA-N	7.6×10^{-7} 9.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,4,6-tetramethyloctane $C_{12}H_{26}$ [62185-19-7] LNRFGUGPGLBLV-UHFFFAOYSA-N	7.8×10^{-7} 8.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,5,5-tetramethyloctane $C_{12}H_{26}$ [62185-20-0] NCNZUEBQNGRARF-UHFFFAOYSA-N	7.7×10^{-7} 8.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,5,6-tetramethyloctane $C_{12}H_{26}$ [62185-21-1] NADJQGPTQSFHIB-UHFFFAOYSA-N	8.5×10^{-7} 8.9×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4,5,5-tetramethyloctane $C_{12}H_{26}$ [62185-22-2] INTYEXUWOYUVGJ-UHFFFAOYSA-N	6.9×10^{-7} 9.3×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-95-3] LIZQPVBTUZZCL-UHFFFAOYSA-N	8.5×10^{-7} 8.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-96-4] PEGJUFSTZJFH-UHFFFAOYSA-N	9.0×10^{-7} 6.3×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-97-5] ACWGGQUVVQOZPJ-UHFFFAOYSA-N	8.9×10^{-7} 6.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-98-6] SHNILMSRTWRKG-UHFFFAOYSA-N	8.6×10^{-7} 7.5×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-99-7] NDFHPGVSCVJNFR-UHFFFAOYSA-N	8.3×10^{-7} 9.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62184-00-3] DCBIYDZULXWXTQ-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62184-01-4] NPUNZBBVZZNRNS-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62184-02-5] BWSXPPUMTZVKPA-UHFFFAOYSA-N	9.3×10^{-7} 8.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62184-03-6] QYHDQDAUJCPVFJ-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62184-04-7] XAKSPVTVTMAMDT-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62184-05-8] JHDZOLPKXSWZKD-UHFFFAOYSA-N	9.5×10^{-7} 7.5×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62184-06-9] VGDSKYXZZCASQ-UHFFFAOYSA-N	9.6×10^{-7} 7.2×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62184-07-0] BCQWMBQACXNHGP-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62184-08-1] IMMDGMKEESKIQT-UHFFFAOYSA-N	9.6×10^{-7} 7.2×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62184-09-2] BVAIFAWSJOPLJD-UHFFFAOYSA-N	8.6×10^{-7} 7.5×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-50-0] CYTDZGRTFHXLS-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-51-1] WAFCPUFGSNTFSP-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-52-2] JIOQMLJPQDNFA-UHFFFAOYSA-N	9.7×10^{-7} 6.8×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-53-3] ZBMWKURVBLDBAH-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-54-4] DGFWFJRTTJTVEQ-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,7-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-55-5] XEMFRSYZKNPRTA-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,7-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-56-6] KSVMIUVYLYZDMT-UHFFFAOYSA-N	9.7×10^{-7} 6.8×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-57-7] BKNJDUXGYCILJT-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-58-8] GQTCKTISADWVNV-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-59-9] DDRNTRVXHMVLA-UHFFFAOYSA-N	8.5×10^{-7} 8.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62212-28-6] AOQVLRSMPNHJPF-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-60-2] WBKPODGAYHVUMM-UHFFFAOYSA-N	8.3×10^{-7} 9.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-61-3] LEPWFUNEXVKPDO-UHFFFAOYSA-N	9.3×10^{-7} 8.6×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-62-4] DPDGQUDZYGOBAM-UHFFFAOYSA-N	9.3×10^{-7} 8.6×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-63-5] QYJKERUDQYOWRC-UHFFFAOYSA-N	8.5×10^{-7} 8.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-64-6] OMAJEXDENFMCIN-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-65-7] OLBJDMSGRVKJMF-UHFFFAOYSA-N	8.8×10^{-7} 6.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-66-8] LLHGAWREVJAITE-UHFFFAOYSA-N	9.3×10^{-7} 8.4×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,6-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-67-9] MNXPIOFJFYQCKE-UHFFFAOYSA-N	8.4×10^{-7} 8.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,6-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-68-0] RTVRGUBUFZDOPIH-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-69-1] RHSANRLUOZFDW-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-dimethyl-5-ethyloctane $C_{12}H_{26}$ [62183-70-4] BETVNWPSZXTJLK-UHFFFAOYSA-N	8.5×10^{-7} 8.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-dimethyl-6-ethyloctane $C_{12}H_{26}$ [62183-71-5] UGEWSKWSWHZABT-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,5-dimethyl-3-ethyloctane $C_{12}H_{26}$ [62183-72-6] MNDPOEACQSQPCJ-UHFFFAOYSA-N	9.3×10^{-7} 8.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,5-dimethyl-4-ethyloctane $C_{12}H_{26}$ [62183-73-7] MOEUNMMPAYEJOZ-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3-diethyloctane $C_{12}H_{26}$ [17302-40-8] DGJISSKLLWWXTG-UHFFFAOYSA-N	9.1×10^{-7} 1.0×10^{-6} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-diethyloctane $C_{12}H_{26}$ [62183-92-0] HILZBOWVGZXYGQ-UHFFFAOYSA-N	1.0×10^{-6} 8.8×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-diethyloctane $C_{12}H_{26}$ [62183-93-1] DSYIMNMBWBEOHY-UHFFFAOYSA-N	1.0×10^{-6} 8.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,6-diethyloctane $C_{12}H_{26}$ [62183-94-2] UTCTYSTYZOAAOS-UHFFFAOYSA-N	1.0×10^{-6} 9.6×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-diethyloctane $C_{12}H_{26}$ [17312-42-4] FTEQKVNFDZNDQJG-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,5-diethyloctane $C_{12}H_{26}$ [1636-41-5] XRVGHXCONYJHLU-UHFFFAOYSA-N	1.0×10^{-6} 8.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4-propyloctane $C_{12}H_{26}$ [62184-33-2] FJPVBTBEYVNWCA-UHFFFAOYSA-N	1.1×10^{-6} 7.0×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-5-propyloctane $C_{12}H_{26}$ [62184-34-3] NYBDGQCJCAJL-UHFFFAOYSA-N	1.1×10^{-6} 7.0×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-4-propyloctane $C_{12}H_{26}$ [62184-35-4] CTXPEFTVFFFIBQ-UHFFFAOYSA-N	1.0×10^{-6} 8.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-5-propyloctane $C_{12}H_{26}$ [62184-36-5] VOSHMCRSZWNTLJ-UHFFFAOYSA-N	1.0×10^{-6} 7.6×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-4-propyloctane $C_{12}H_{26}$ [17312-41-3] RNK CZSBPRRHTOZ-UHFFFAOYSA-N	9.3×10^{-7} 7.9×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-5-propyloctane $C_{12}H_{26}$ [62183-85-1] MVUWSCFPURGAJF-UHFFFAOYSA-N	1.0×10^{-6} 8.1×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3-isopropyloctane $C_{12}H_{26}$ [13287-19-9] KBIUKRVYBYJVSS-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4-isopropyloctane $C_{12}H_{26}$ [62183-86-2] NRRICFUUPCDSKW-UHFFFAOYSA-N	9.7×10^{-7} 6.8×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-5-isopropyloctane $C_{12}H_{26}$ [62183-87-3] OPKVPKXVSDEOXZ-UHFFFAOYSA-N	9.6×10^{-7} 7.0×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-4-isopropyloctane $C_{12}H_{26}$ [62183-88-4] UXTHXSNAZBLVOD-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-5-isopropyloctane $C_{12}H_{26}$ [62183-89-5] VEJPAYNPRZYJNN-UHFFFAOYSA-N	9.6×10^{-7} 7.2×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-4-isopropyloctane $C_{12}H_{26}$ [62183-90-8] KCNISWXEVSJYRS-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-5-isopropyloctane $C_{12}H_{26}$ [62183-91-9] HEFVKUUZAXCMQX-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4- <i>tert</i> -butyloctane $C_{12}H_{26}$ [62184-32-1] RWILNGDOCMDMJW-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,6,6-pentamethylheptane $C_{12}H_{26}$ [13475-82-6] VKPSYDESGTFR-UHFFFAOYSA-N	7.7×10^{-7} 4.9×10^{-7} 1.1×10^{-6} 2.3×10^{-7} 2.4×10^{-5} 5.1×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Gharagheizi et al. (2010)	X Q Q Q Q Q Q	237 287, 288 287, 289 287, 290 287, 291 246
2,2,3,3,4-pentamethylheptane $C_{12}H_{26}$ [62198-80-5] NTDYBHYVUCYILC-UHFFFAOYSA-N	6.3×10^{-7} 9.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,3,5-pentamethylheptane $C_{12}H_{26}$ [62198-81-6] ZLCPPIJAFIYIPV-UHFFFAOYSA-N	6.5×10^{-7} 7.9×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,3,6-pentamethylheptane $C_{12}H_{26}$ [62198-82-7] LYTFNNQFUUFUDH-UHFFFAOYSA-N	6.6×10^{-7} 7.6×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,4,4-pentamethylheptane $C_{12}H_{26}$ [62198-83-8] SUFPUVGFEWPIFA-UHFFFAOYSA-N	6.2×10^{-7} 9.9×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4,5-pentamethylheptane $C_{12}H_{26}$ [62198-84-9] XYDYIKVIGCXDLV-UHFFFAOYSA-N	7.2×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4,6-pentamethylheptane $C_{12}H_{26}$ [62198-85-0] XRJGBYMRUIWAJP-UHFFFAOYSA-N	7.5×10^{-7} 6.6×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,5,5-pentamethylheptane $C_{12}H_{26}$ [62198-86-1] OSZLORKBJVWZNT-UHFFFAOYSA-N	6.9×10^{-7} 6.4×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,5,6-pentamethylheptane $C_{12}H_{26}$ [62198-87-2] MHJUEZDXDYXCPA-UHFFFAOYSA-N	7.5×10^{-7} 6.7×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,6,6-pentamethylheptane $C_{12}H_{26}$ [62198-88-3] SLGYOGBODYIQGW-UHFFFAOYSA-N	7.1×10^{-7} 6.1×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,4,5-pentamethylheptane $C_{12}H_{26}$ [62199-61-5] XRGPEBQZXVFCRE-UHFFFAOYSA-N	6.4×10^{-7} 8.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,4,6-pentamethylheptane $C_{12}H_{26}$ [62199-62-6] NOFQKTWPZFUCCO-UHFFFAOYSA-N	7.0×10^{-7} 6.2×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,5,5-pentamethylheptane $C_{12}H_{26}$ [62199-63-7] JGOKXUSMFJOVQT-UHFFFAOYSA-N	7.0×10^{-7} 6.2×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,5,6-pentamethylheptane $C_{12}H_{26}$ [62199-64-8] JVESFBBMJIZLO-UHFFFAOYSA-N	7.8×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,5,5,6-pentamethylheptane $C_{12}H_{26}$ [62199-65-9] FMJMMNPKKCFHTH-UHFFFAOYSA-N	7.0×10^{-7} 6.2×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,4,4-pentamethylheptane $C_{12}H_{26}$ [62199-66-0] VBOBCKMZHQJDQA-UHFFFAOYSA-N	6.2×10^{-7} 1.0×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,4,5-pentamethylheptane $C_{12}H_{26}$ [62199-67-1] OLZJEASBDLLWCY-UHFFFAOYSA-N	7.0×10^{-7} 9.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,4,6-pentamethylheptane $C_{12}H_{26}$ [62199-68-2] YENAHMOHMFYKPC-UHFFFAOYSA-N	7.2×10^{-7} 8.1×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,5,5-pentamethylheptane $C_{12}H_{26}$ [62199-69-3] DTLBRJVRUQMSQN-UHFFFAOYSA-N	6.3×10^{-7} 9.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,5,6-pentamethylheptane $C_{12}H_{26}$ [52670-35-6] SZQDOCSTKXRAR-UHFFFAOYSA-N	7.3×10^{-7} 7.4×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,4,5-pentamethylheptane $C_{12}H_{26}$ [62199-70-6] CHHJLGDSEYTKKE-UHFFFAOYSA-N	7.0×10^{-7} 9.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,4,6-pentamethylheptane $C_{12}H_{26}$ [62199-71-7] DHXWMADSONSWTL-UHFFFAOYSA-N	7.4×10^{-7} 7.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,5,5-pentamethylheptane $C_{12}H_{26}$ [62199-72-8] BDFJISGXUJUJYCX-UHFFFAOYSA-N	7.1×10^{-7} 8.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,5,6-pentamethylheptane $C_{12}H_{26}$ [27574-98-7] YIKFFSNUOIJPSI-UHFFFAOYSA-N	7.9×10^{-7} 8.0×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,4,5,5-pentamethylheptane $C_{12}H_{26}$ [62199-73-9] TXGUYEKSMMHSHB-UHFFFAOYSA-N	6.4×10^{-7} 8.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4,4,5-pentamethylheptane $C_{12}H_{26}$ [62199-74-0] YFXNIDIHYOGTEN-UHFFFAOYSA-N	6.1×10^{-7} 1.1×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4,5,5-pentamethylheptane $C_{12}H_{26}$ [62199-75-1] NZIFKVSORPBQXS-UHFFFAOYSA-N	6.1×10^{-7} 1.2×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62199-04-6] CVXGCQXACVZXQR-UHFFFAOYSA-N	6.9×10^{-7} 9.3×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62199-05-7] COHRBFNOOUABCT-UHFFFAOYSA-N	7.9×10^{-7} 7.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62199-06-8] OOIGDPTZPWRGHN-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62199-07-9] TYGUUZVWCBDKW-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62199-08-0] XMUXASPVQBQLPC-UHFFFAOYSA-N	7.1×10^{-7} 7.8×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62199-09-1] QADOHJKDWMLCQT-UHFFFAOYSA-N	8.3×10^{-7} 6.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62199-10-4] SUDWTPMZYLBGKW-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62199-11-5] GDPLKYYKURLRKJ-UHFFFAOYSA-N	8.4×10^{-7} 6.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62199-12-6] KJWMMFYTYSUWMH-UHFFFAOYSA-N	7.4×10^{-7} 6.7×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,6-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62199-13-7] RIIDJOQRWGTQEN-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,6-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62199-14-8] QGYSVVWKEDKPTP-UHFFFAOYSA-N	8.9×10^{-7} 5.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,6-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62199-15-9] LYZRWXZZVRWJHX-UHFFFAOYSA-N	8.3×10^{-7} 6.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62199-16-0] VIIXOXRHJWHIBP-UHFFFAOYSA-N	7.6×10^{-7} 9.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62199-17-1] JHGOLBUJAILGX-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62199-18-2] YZXMDESZKHUODO-UHFFFAOYSA-N	7.5×10^{-7} 1.0×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-55-4] QDWZIZQKVLSDK-UHFFFAOYSA-N	7.7×10^{-7} 8.7×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-56-5] URFFXJPJMCXFR-UHFFFAOYSA-N	8.5×10^{-7} 8.4×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,5-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-57-6] QHACFORXSGHTJG-UHFFFAOYSA-N	7.7×10^{-7} 8.6×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-58-7] UEZAASCWBVAHRO-UHFFFAOYSA-N	8.6×10^{-7} 8.2×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,5-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-59-8] LTSLSBVPXXAMB-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,6-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-60-1] KOVQAKVRXODFNL-UHFFFAOYSA-N	7.8×10^{-7} 8.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,6-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-61-2] RBVKVRIWSQXPO-UHFFFAOYSA-N	8.9×10^{-7} 6.9×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,6-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-62-3] JXCQTSFHNKTOLJ-UHFFFAOYSA-N	8.7×10^{-7} 7.5×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-63-4] BNFUBMCCIACHFX-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-64-5] YSCJXRHNKUXHLH-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,5-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-65-6] JFKSTTDMBQAPCT-UHFFFAOYSA-N	8.6×10^{-7} 8.2×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-66-7] HSVLOEWHJNAWLC-UHFFFAOYSA-N	7.8×10^{-7} 8.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,5-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-67-8] JAUBFUIZENVVAG-UHFFFAOYSA-N	7.7×10^{-7} 8.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,6-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-68-9] KQBJYFJWQOUHCI-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,6-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-69-0] LPNPQCHEMFXBSW-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5,5-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-70-3] MARFNXCIPCRAJU-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-71-4] HGYOEMXZYDBOKQ-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-72-5] QLOXTBGCIUOWIG-UHFFFAOYSA-N	6.8×10^{-7} 1.1×10^{-6} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-73-6] CUWOOQVXUDOHOC-UHFFFAOYSA-N	7.6×10^{-7} 9.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-74-7] QXCHZKHHIUTBOU-UHFFFAOYSA-N	7.7×10^{-7} 8.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,5-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-75-8] GCWLDOMARVHVOZ-UHFFFAOYSA-N	6.8×10^{-7} 9.8×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,4-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-76-9] SIIFYRMARKBLER-UHFFFAOYSA-N	6.8×10^{-7} 1.1×10^{-6} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4,4-trimethyl-5-ethylheptane $C_{12}H_{26}$ [62198-77-0] XSLWCLUAFIVTLD-UHFFFAOYSA-N	7.6×10^{-7} 9.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,5-trimethyl-3-ethylheptane $C_{12}H_{26}$ [62198-78-1] ZHILUIHUWKDTM-UHFFFAOYSA-N	7.6×10^{-7} 9.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,5-trimethyl-4-ethylheptane $C_{12}H_{26}$ [62198-79-2] SZOKDASFURUJDF-UHFFFAOYSA-N	7.5×10^{-7} 1.1×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-4-propylheptane $C_{12}H_{26}$ DWEXNJRCPKKJBQ-UHFFFAOYSA-N	9.2×10^{-7} 5.8×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-30-2] AZUDVOIXPNEOLR-UHFFFAOYSA-N	9.5×10^{-7} 7.7×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-31-3] FDVJFPZZPSPQAO-UHFFFAOYSA-N	8.9×10^{-7} 6.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-32-4] PJXVWVKRCASATD-UHFFFAOYSA-N	9.7×10^{-7} 6.8×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-33-5] UFJZYHSURMZROL-UHFFFAOYSA-N	1.0×10^{-6} 5.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-34-6] XVWBLUKOUJTCDO-UHFFFAOYSA-N	8.5×10^{-7} 8.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-35-7] UGSAJWKYCFZRD-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dimethyl-4-propylheptane $C_{12}H_{26}$ [62185-36-8] GKVRDSIZILZQJE-UHFFFAOYSA-N	9.4×10^{-7} 8.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-3-isopropylheptane $C_{12}H_{26}$ [62185-37-9] XPOSVKCTMHOWTN-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-38-0] HFRVMJCEWUXCMP-UHFFFAOYSA-N	8.7×10^{-7} 5.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-3-isopropylheptane $C_{12}H_{26}$ [62185-39-1] IAWDNHPMOJTEEN-UHFFFAOYSA-N	7.6×10^{-7} 9.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-40-4] GEQDAUMUCVOARW-UHFFFAOYSA-N	8.8×10^{-7} 7.3×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-3-isopropylheptane $C_{12}H_{26}$ [62185-41-5] MWVRZCOXSIAHLW-UHFFFAOYSA-N	8.8×10^{-7} 7.3×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-42-6] MTPOSRRQPOBWFQC-UHFFFAOYSA-N	8.0×10^{-7} 7.3×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-3-isopropylheptane $C_{12}H_{26}$ [62185-43-7] XSKMFUBSJXETFW-UHFFFAOYSA-N	8.9×10^{-7} 6.9×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-44-8] OOYWQZAQFKOCKA-UHFFFAOYSA-N	9.0×10^{-7} 6.7×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethyl-3-isopropylheptane $C_{12}H_{26}$ [62185-45-9] NOAGKIODSFDOTA-UHFFFAOYSA-N	8.8×10^{-7} 7.1×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,6-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [35866-89-8] BIBHNAJLMRUJLS-UHFFFAOYSA-N	9.4×10^{-7} 5.6×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-46-0] MACIOLXBYDNTTI-UHFFFAOYSA-N	7.9×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-47-1] QFKXRROMVRXZIF-UHFFFAOYSA-N	7.6×10^{-7} 9.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyl-4-isopropylheptane $C_{12}H_{26}$ [62198-89-4] XJRRTENBDSNHQB-UHFFFAOYSA-N	8.7×10^{-7} 7.7×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3,3-diethylheptane $C_{12}H_{26}$ [62198-90-7] VBKOVDPJLQIMSZ-UHFFFAOYSA-N	8.3×10^{-7} 1.0×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3,4-diethylheptane $C_{12}H_{26}$ [62198-91-8] PRSHREOBBOUSO-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3,5-diethylheptane $C_{12}H_{26}$ [62198-92-9] KZTGLPPJUZINLQ-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4,4-diethylheptane $C_{12}H_{26}$ [62198-93-0] VJTVFYMTOXDIID-UHFFFAOYSA-N	8.6×10^{-7} 7.7×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4,5-diethylheptane $C_{12}H_{26}$ [62198-94-1] SRLQJPCYGKMUSM-UHFFFAOYSA-N	9.5×10^{-7} 7.5×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-5,5-diethylheptane $C_{12}H_{26}$ [62198-95-2] XPAWKGLXSPHNAN-UHFFFAOYSA-N	8.4×10^{-7} 8.6×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-3,4-diethylheptane $C_{12}H_{26}$ [62198-96-3] VRVWVJIPKQWWJB-UHFFFAOYSA-N	8.3×10^{-7} 9.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-3,5-diethylheptane $C_{12}H_{26}$ [62198-97-4] RGRSPNWZJFXFAN-UHFFFAOYSA-N	8.5×10^{-7} 8.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-4,4-diethylheptane $C_{12}H_{26}$ [62198-98-5] WSBKWCXGZHVUHW-UHFFFAOYSA-N	8.3×10^{-7} 1.0×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-4,5-diethylheptane $C_{12}H_{26}$ [62198-99-6] NVBVLQDXCRDBBU-UHFFFAOYSA-N	9.3×10^{-7} 8.6×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-5,5-diethylheptane $C_{12}H_{26}$ [62199-00-2] JOJSCBROPYJHJX-UHFFFAOYSA-N	8.4×10^{-7} 8.9×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-3,3-diethylheptane $C_{12}H_{26}$ [62199-01-3] KGSWPXUAXYDMO-UHFFFAOYSA-N	8.2×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-3,4-diethylheptane $C_{12}H_{26}$ [62199-02-4] RAFABRWSQNCWEY-UHFFFAOYSA-N	8.3×10^{-7} 9.4×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-3,5-diethylheptane $C_{12}H_{26}$ [62199-03-5] XUVBJZPYCGZQDK-UHFFFAOYSA-N	9.2×10^{-7} 9.1×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4- <i>tert</i> -butylheptane $C_{12}H_{26}$ [62185-23-3] HIHQJZLWJQHTEJ-UHFFFAOYSA-N	8.4×10^{-7} 6.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-4- <i>tert</i> -butylheptane $C_{12}H_{26}$ [62185-24-4] IKKVFRPBQQTTPK-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-4- <i>tert</i> -butylheptane $C_{12}H_{26}$ [62185-25-5] JABLMQZBFVBNBS-UHFFFAOYSA-N	7.0×10^{-7} 8.7×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-4-propylheptane $C_{12}H_{26}$ [62185-26-6] FPODIYZXVCXXQE-UHFFFAOYSA-N	1.0×10^{-6} 8.1×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-ethyl-4-propylheptane $C_{12}H_{26}$ [17312-43-5] J TZJHTZCYBYCSZ-UHFFFAOYSA-N	9.3×10^{-7} 8.3×10^{-7} 1.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-27-7] VENQCMSDFBOTMS-UHFFFAOYSA-N	9.4×10^{-7} 7.9×10^{-7} 9.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-ethyl-4-isopropylheptane $C_{12}H_{26}$ [62185-28-8] IKRHMKIYGHBTGZ-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,3,4,4-hexamethylhexane $C_{12}H_{26}$ [62185-11-9] ACZDZCRQHVVGEF-UHFFFAOYSA-N	4.9×10^{-7} 1.5×10^{-6} 6.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,3,4,5-hexamethylhexane $C_{12}H_{26}$ [62185-12-0] IFHVEHXJQMYGHH-UHFFFAOYSA-N	5.8×10^{-7} 9.1×10^{-7} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,3,5,5-hexamethylhexane $C_{12}H_{26}$ [60302-24-1] YFGLJPQISFJQSO-UHFFFAOYSA-N	5.4×10^{-7} 8.2×10^{-7} 6.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4,4,5-hexamethylhexane $C_{12}H_{26}$ [62185-13-1] QJVUKMHIEDVCDT-UHFFFAOYSA-N	5.6×10^{-7} 1.1×10^{-6} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4,4,5,5-hexamethylhexane $C_{12}H_{26}$ [62185-14-2] NXZMBOYMLHOPD-UHFFFAOYSA-N	6.2×10^{-7} 7.0×10^{-7} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3,4,4,5-hexamethylhexane $C_{12}H_{26}$ [52670-36-7] GRVNDHRZJGSRDC-UHFFFAOYSA-N	5.6×10^{-7} 1.1×10^{-6} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,3-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62184-98-9] CRTTYRRLFPOTC-UHFFFAOYSA-N	6.3×10^{-7} 9.6×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62184-99-0] SYWRGACXWPDMM-UHFFFAOYSA-N	6.2×10^{-7} 1.0×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62185-00-6] WVLMCSYUMSZJQJ-UHFFFAOYSA-N	6.1×10^{-7} 1.2×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,5-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-01-7] CHURHVBNTYCJDL-UHFFFAOYSA-N	6.5×10^{-7} 7.9×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,5-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62185-02-8] GYAMSLKQDQYJGT-UHFFFAOYSA-N	7.4×10^{-7} 7.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,4-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-03-9] HWHADLCAKCOTRI-UHFFFAOYSA-N	6.3×10^{-7} 9.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,5-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-04-0] KZHIDSBQFJFWDV-UHFFFAOYSA-N	7.4×10^{-7} 7.0×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,5-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62185-05-1] HAVVIZEMKFOFL-UHFFFAOYSA-N	6.4×10^{-7} 8.6×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5,5-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-06-2] GJJUHGLRQQDIFN-UHFFFAOYSA-N	7.5×10^{-7} 5.2×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3,4-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62185-07-3] YVKQGHGRZXUTNK-UHFFFAOYSA-N	6.1×10^{-7} 1.2×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,5-tetramethyl-4-ethylhexane $C_{12}H_{26}$ [62185-08-4] AMMSTTMNZHWREI-UHFFFAOYSA-N	7.1×10^{-7} 8.5×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,4-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-09-5] VYCKEOSFJUAFGK-UHFFFAOYSA-N	6.1×10^{-7} 1.2×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,5-tetramethyl-3-ethylhexane $C_{12}H_{26}$ [62185-10-8] IBPLCPRMAQRHHK-UHFFFAOYSA-N	6.9×10^{-7} 9.6×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethyl-3-isopropylhexane $C_{12}H_{26}$ [62199-79-5] UTCSLOLGOKPGW-UHFFFAOYSA-N	6.3×10^{-7} 9.6×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4-trimethyl-3-isopropylhexane $C_{12}H_{26}$ [62199-80-8] VEMACPZMOMAUAN-UHFFFAOYSA-N	7.5×10^{-7} 6.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5-trimethyl-3-isopropylhexane $C_{12}H_{26}$ [62199-81-9] GZFXOCUKPGWEA-UHFFFAOYSA-N	8.2×10^{-7} 5.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,5-trimethyl-4-isopropylhexane $C_{12}H_{26}$ [62199-82-0] QFLYTOVYLBZBJC-UHFFFAOYSA-N	8.2×10^{-7} 5.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4-trimethyl-3-isopropylhexane $C_{12}H_{26}$ [62199-83-1] SXELEUFFBZGXIC-UHFFFAOYSA-N	6.8×10^{-7} 1.0×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,5-trimethyl-3-isopropylhexane $C_{12}H_{26}$ [62199-84-2] GUMUKRVQSSIBJO-UHFFFAOYSA-N	7.2×10^{-7} 7.8×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,5-trimethyl-4-isopropylhexane $C_{12}H_{26}$ [62199-85-3] VBRDSJSWPGXVIR-UHFFFAOYSA-N	8.2×10^{-7} 6.9×10^{-7} 9.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4-trimethyl-3-isopropylhexane $C_{12}H_{26}$ [62199-86-4] UGPHXQWIHGHOH-UHFFFAOYSA-N	7.3×10^{-7} 7.4×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-3,4-diethylhexane $C_{12}H_{26}$ [62199-89-7] ZAKPEOVUOZWBNO-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-4,4-diethylhexane $C_{12}H_{26}$ [62184-89-8] CYPRMBGQWCLJBN-UHFFFAOYSA-N	6.9×10^{-7} 9.3×10^{-7} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-3,4-diethylhexane $C_{12}H_{26}$ [62184-90-1] BUUBMKJLVCTKU-UHFFFAOYSA-N	7.5×10^{-7} 1.0×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-4,4-diethylhexane $C_{12}H_{26}$ [62184-91-2] YNHBDJNMYMZVLM-UHFFFAOYSA-N	7.5×10^{-7} 1.0×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-3,3-diethylhexane $C_{12}H_{26}$ [62184-92-3] OXAROVXPKXMTIV-UHFFFAOYSA-N	7.6×10^{-7} 9.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-3,4-diethylhexane $C_{12}H_{26}$ [62184-93-4] AUVJTUXGNKLTIN-UHFFFAOYSA-N	7.6×10^{-7} 9.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-3,3-diethylhexane $C_{12}H_{26}$ [62184-94-5] XHDPVTDRZGCFV-UHFFFAOYSA-N	8.1×10^{-7} 6.9×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-3,4-diethylhexane $C_{12}H_{26}$ [62184-95-6] WCPAKUFSQFCWTQ-UHFFFAOYSA-N	8.9×10^{-7} 6.9×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-dimethyl-4,4-diethylhexane $C_{12}H_{26}$ [62184-96-7] XFUAJHJXXMVZCQ-UHFFFAOYSA-N	6.7×10^{-7} 1.2×10^{-6} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-3,4-diethylhexane $C_{12}H_{26}$ [62184-97-8] NTQKWVJMJSYRDX-UHFFFAOYSA-N	6.7×10^{-7} 1.2×10^{-6} 7.5×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-3- <i>tert</i> -butylhexane $C_{12}H_{26}$ [62199-76-2] VZAYJUSYQVNGBC-UHFFFAOYSA-N	6.4×10^{-7} 8.3×10^{-7} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3-ethyl-3-isopropylhexane $C_{12}H_{26}$ [62199-77-3] TXYYDQJNRQJTOX-UHFFFAOYSA-N	8.3×10^{-7} 9.2×10^{-7} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4-ethyl-3-isopropylhexane $C_{12}H_{26}$ [62199-78-4] JXHSGKIMXDNKIS-UHFFFAOYSA-N	9.7×10^{-7} 6.8×10^{-7} 8.9×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4-triethylhexane $C_{12}H_{26}$ [62199-87-5] YGNQREHYJPLYX-UHFFFAOYSA-N	8.2×10^{-7} 1.1×10^{-6} 8.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4,4-pentamethyl-3-ethylpentane $C_{12}H_{26}$ [66576-21-4] IZNAUALMSCRPBS-UHFFFAOYSA-N	4.9×10^{-7} 1.4×10^{-6} 6.7×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3,4-tetramethyl-3-isopropylpentane $C_{12}H_{26}$ [62185-17-5] OKGFCJOAXUYCBG-UHFFFAOYSA-N	5.6×10^{-7} 1.1×10^{-6} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,4,4-tetramethyl-3-isopropylpentane $C_{12}H_{26}$ [62185-18-6] BYIFHEDQKBFSW-UHFFFAOYSA-N	6.0×10^{-7} 7.9×10^{-7} 7.4×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4-trimethyl-3,3-diethylpentane $C_{12}H_{26}$ [62185-15-3] GIKXQMPMOJVRDN-UHFFFAOYSA-N	6.1×10^{-7} 1.1×10^{-6} 7.2×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-3-ethyl-3-isopropylpentane $C_{12}H_{26}$ [62185-16-4] ASDDXPPGGPFNIL-UHFFFAOYSA-N	6.8×10^{-7} 1.1×10^{-6} 8.0×10^{-7}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
tridecane $C_{13}H_{28}$ [629-50-5] IIFYFAKIEWZDVP-UHFFFAOYSA-N	3.4×10^{-6} 1.4×10^{-6} 4.4×10^{-4} 5.9×10^{-6} 2.2×10^{-6} 7.9×10^{-7} 1.5×10^{-6} 4.3×10^{-6}		Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	V X Q Q Q Q ? ?	186 237 246 21 21
2-methyldodecane $C_{13}H_{28}$ [1560-97-0] HGEMCUOAMCILCP-UHFFFAOYSA-N	1.5×10^{-6} 4.8×10^{-6} 1.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyldodecane $C_{13}H_{28}$ [17312-57-1] GRJUENNHNVNYCHD-UHFFFAOYSA-N	1.5×10^{-6} 4.9×10^{-6} 1.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethylundecane $C_{13}H_{28}$ [17312-64-0] QDKSGHXRXVMPF-UHFFFAOYSA-N	1.1×10^{-6} 3.8×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethylundecane $C_{13}H_{28}$ [17312-77-5] QSSUTSOGIQHRIU-UHFFFAOYSA-N	1.3×10^{-6} 4.6×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethylundecane $C_{13}H_{28}$ [17312-80-0] WMZNFELFMFOGCC-UHFFFAOYSA-N	1.2×10^{-6} 2.1×10^{-6} 1.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetradecane $C_{14}H_{30}$ [629-59-4] BGHCVCJVXZWKCC-UHFFFAOYSA-N	9.3×10^{-7} 1.1×10^{-6} 1.1×10^{-6} 2.6×10^{-6} 7.4×10^{-6} 7.2×10^{-6} 4.4×10^{-4} 6.5×10^{-6} 3.7×10^{-6} 5.6×10^{-7} 2.9×10^{-5} 2.2×10^{-6} 7.2×10^{-6} 8.7×10^{-6}		Plyasunov and Shock (2000) Duchowicz et al. (2020) HSDB (2015) Eastcott et al. (1988) Abraham (1984) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaffe et al. (2003) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	L V V V V X Q Q Q Q Q Q ? ?	186 237 246 248, 249 229 21 21
2-methyltridecane $C_{14}H_{30}$ [1560-96-9] CJBFZKZYIPBBTO-UHFFFAOYSA-N	2.4×10^{-6} 5.2×10^{-6} 2.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyltridecane $C_{14}H_{30}$ [6418-41-3] NLHRRMKILFRDGV-UHFFFAOYSA-N	2.5×10^{-6} 5.4×10^{-6} 2.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyldodecane $C_{14}H_{30}$ [49598-54-1] ATWISEHEXAEGKB-UHFFFAOYSA-N	1.6×10^{-6} 4.3×10^{-6} 1.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyldodecane $C_{14}H_{30}$ [6117-98-2] QBIXLGJCVGNDBJ-UHFFFAOYSA-N	2.1×10^{-6} 5.2×10^{-6} 1.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyldodecane $C_{14}H_{30}$ [6117-99-3] AFELDWXNIFIYOC-UHFFFAOYSA-N	1.6×10^{-6} 3.6×10^{-6} 1.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
pentadecane $C_{15}H_{32}$ [629-62-9] YCOZIPAWZNQLMR-UHFFFAOYSA-N	7.8×10^{-7} 7.6×10^{-7} 1.1×10^{-5} 4.4×10^{-4} 7.1×10^{-6} 7.9×10^{-6} 4.0×10^{-7} 1.1×10^{-5} 2.1×10^{-5}		Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	V V X Q Q Q Q ? ?	186 237 246 246 21 21



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Table A2.1: Alkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyltetradecane $C_{15}H_{32}$ [1560-95-8] KUVMKLGGXIYSNH-UHFFFAOYSA-N	4.9×10^{-6} 5.7×10^{-6} 4.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyltetradecane $C_{15}H_{32}$ [18435-22-8] HXUYUZCPGPKNGS-UHFFFAOYSA-N	5.1×10^{-6} 5.9×10^{-6} 4.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyltridecane $C_{15}H_{32}$ [61869-04-3] NVEUWWMNWPXOC-UHFFFAOYSA-N	2.9×10^{-6} 4.5×10^{-6} 3.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyltridecane $C_{15}H_{32}$ [18435-20-6] SWUJSLXRUPXTQB-UHFFFAOYSA-N	4.3×10^{-6} 5.7×10^{-6} 3.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyltridecane $C_{15}H_{32}$ [61868-05-1] JDFJCBQSZLDMZ-UHFFFAOYSA-N	2.6×10^{-6} 3.8×10^{-6} 3.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
hexadecane $C_{16}H_{34}$ [544-76-3] DCAYPVUWAIABOU-UHFFFAOYSA-N	2.1×10^{-5} 2.6×10^{-6} 2.7×10^{-5} 2.1×10^{-5} 4.4×10^{-4} 7.2×10^{-6} 2.2×10^{-5} 2.9×10^{-7} 2.1×10^{-5} 4.3×10^{-5}		Duchowicz et al. (2020) Eastcott et al. (1988) Abraham (1984) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	V V V X Q Q Q Q ? ?	186 237 246 21 21
2-methylpentadecane $C_{16}H_{34}$ [1560-93-6] BANXPJUEBPWEOT-UHFFFAOYSA-N	1.2×10^{-5} 5.9×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methylpentadecane $C_{16}H_{34}$ [2882-96-4] FWXKXJPHSAYMK-UHFFFAOYSA-N	1.2×10^{-5} 6.0×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyltetradecane $C_{16}H_{34}$ [59222-86-5] VCAMXEBNASZVEZ-UHFFFAOYSA-N	6.5×10^{-6} 4.8×10^{-6} 7.9×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethyltetradecane $C_{16}H_{34}$ [18435-23-9] ZQRVEWIJXCRTFW-UHFFFAOYSA-N	1.1×10^{-5} 6.0×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyltetradecane $C_{16}H_{34}$ [61868-06-2] NWTFLDYNCLTSAR-UHFFFAOYSA-N	5.1×10^{-6} 3.8×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
heptadecane $C_{17}H_{36}$ [629-78-7] NDJKXXJCMXVBJW-UHFFFAOYSA-N	2.2×10^{-7} 2.1×10^{-4} 1.8×10^{-4}		Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	Q ? ?	21 21
octadecane $C_{18}H_{38}$ [593-45-3] RZJRJXONCZWCBN-UHFFFAOYSA-N	1.6×10^{-6} 7.8×10^{-4} 1.5×10^{-7} 6.1×10^{-4} 3.6×10^{-4} 1.1×10^{-3}		Eastcott et al. (1988) Abraham (1984) Hilal et al. (2008) Yaffe et al. (2003) Yaws (1999) Yaws and Yang (1992)	V V Q Q ? ?	248, 249 21 21
nonadecane $C_{19}H_{40}$ [629-92-5] LQERIDTXQFOHKA-UHFFFAOYSA-N	1.3×10^{-7} 9.3×10^{-4} 3.4×10^{-3}		Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	Q ? ?	21 21
eicosane $C_{20}H_{42}$ [112-95-8] CBFCDFDHPHCNY-UHFFFAOYSA-N	5.0×10^{-6} 1.4×10^{-2} 9.7×10^{-8} 2.3×10^{-3} 3.0×10^{-2}		Eastcott et al. (1988) Abraham (1984) Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	V V Q ? ?	21 21
heneicosane $C_{21}H_{44}$ [629-94-7] FNAZRRHPUDJQCJ-UHFFFAOYSA-N	7.3×10^{-8}		Hilal et al. (2008)	Q	
docosane $C_{22}H_{46}$ [629-97-0] HOWGUJZVBDQJKV-UHFFFAOYSA-N	5.4×10^{-8}		Hilal et al. (2008)	Q	
tricosane $C_{23}H_{48}$ [638-67-5] FIGVVZUWCLSUEI-UHFFFAOYSA-N	4.1×10^{-8}		Hilal et al. (2008)	Q	



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Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetracosane $C_{24}H_{50}$ [646-31-1] POOSGDOYLQONASK-UHFFFAOYSA-N	3.1×10^{-8}		Hilal et al. (2008)	Q	
pentacosane $C_{25}H_{52}$ [629-99-2] YKNWILGEFFOPE-UHFFFAOYSA-N	1.5×10^{-8}		Hilal et al. (2008)	Q	
hexacosane $C_{26}H_{54}$ [630-01-3] HMSWAIKSFDLKN-UHFFFAOYSA-N	5.0×10^{-5} 1.3×10^2 1.1×10^{-8}		Eastcott et al. (1988) Abraham (1984) Hilal et al. (2008)	V V Q	
heptacosane $C_{27}H_{56}$ [593-49-7] BJQWYEJQWHSSCJ-UHFFFAOYSA-N	7.7×10^{-9}		Hilal et al. (2008)	Q	
octacosane $C_{28}H_{58}$ [630-02-4] ZYURHZPYMFLWSH-UHFFFAOYSA-N	5.6×10^{-9}		Hilal et al. (2008)	Q	
nonacosane $C_{29}H_{60}$ [630-03-5] IGGUPRCHHJZPBS-UHFFFAOYSA-N	4.0×10^{-9}		Hilal et al. (2008)	Q	
triacontane $C_{30}H_{62}$ [638-68-6] JXTPJDDICSTXJX-UHFFFAOYSA-N	2.9×10^{-9}		Hilal et al. (2008)	Q	
dotriacontane $C_{32}H_{66}$ [544-85-4] QHMGJGNTMQDRQA-UHFFFAOYSA-N	1.5×10^{-9}		Hilal et al. (2008)	Q	
pentatriacontane $C_{35}H_{72}$ [630-07-9] VHQQPFLOGSTQPC-UHFFFAOYSA-N	5.8×10^{-10}		Hilal et al. (2008)	Q	
hexatriacontane $C_{36}H_{74}$ [630-06-8] YDLYQMBWCWFRAI-UHFFFAOYSA-N	8.6×10^8		Abraham (1984)	V	



Table A2.1: Alkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
octatriacontane $\text{C}_{38}\text{H}_{78}$ [7194-85-6] BVKCQBBZBGYNOP-UHFFFAOYSA-N	2.2×10^{-10}		Hilal et al. (2008)	Q	



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A2.2 Cycloalkanes

Table A2.2: Cycloalkanes

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyclopropane	1.2×10^{-4}	2800	Plyasunov and Shock (2000)	L	
C_3H_6	1.1×10^{-4}	1600	Wilhelm et al. (1977)	L	
[75-19-4]	8.1×10^{-5}		Steward et al. (1973)	L	14
LVZWSLJZHVIQJ-UHFFFAOYSA-N	1.1×10^{-4}	2300	Allott et al. (1973)	L	
	7.8×10^{-5}		Guitart et al. (1989)	M	14
	1.1×10^{-4}	2000	Saidman et al. (1966)	M	
	1.2×10^{-5}		Duchowicz et al. (2020)	V	186
	1.2×10^{-5}		HSDB (2015)	V	
	1.3×10^{-4}		Irmann (1965)	V	
	1.3×10^{-4}		Yaws (2003)	X	237, 294
	1.1×10^{-4}		Hayer et al. (2022)	Q	20
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-5}		Raventos-Duran et al. (2010)	Q	271, 243
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-4}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-4}		Hilal et al. (2008)	Q	
	2.3×10^{-5}		Modarresi et al. (2007)	Q	67
		2500	Kühne et al. (2005)	Q	
	1.2×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	7.3×10^{-5}		English and Carroll (2001)	Q	230, 231
	3.9×10^{-5}		Katritzky et al. (1998)	Q	
	9.0×10^{-5}		Nirmalakhandan et al. (1997)	Q	
		2200	Kühne et al. (2005)	?	
	1.3×10^{-4}		Yaws (1999)	?	21, 294
	1.1×10^{-4}	1600	Yaws et al. (1999)	?	21
	1.3×10^{-4}		Yaws and Yang (1992)	?	21, 294
	1.1×10^{-4}		Abraham et al. (1990)	?	
cyclobutane	1.3×10^{-6}		Hayer et al. (2022)	Q	20
C_4H_8	7.0×10^{-5}		HSDB (2015)	Q	99
[287-23-0] PMPVIKIVABFJJI-UHFFFAOYSA-N					
cyclopentane	5.8×10^{-5}	3500	Brockbank (2013)	L	1
C_5H_{10}	5.5×10^{-5}	3200	Plyasunov and Shock (2000)	L	
[287-92-3]	5.4×10^{-5}		Mackay and Shiu (1981)	L	
RGSFGYAAUTVSQA-UHFFFAOYSA-N	6.5×10^{-5}	3400	Hansen et al. (1993)	M	281
	5.6×10^{-5}		Mackay et al. (2006a)	V	
	5.2×10^{-5}		Mackay et al. (1993)	V	
	5.5×10^{-5}		Hwang et al. (1992)	V	
	5.4×10^{-5}		Eastcott et al. (1988)	V	
	5.3×10^{-5}		Hine and Mookerjee (1975)	V	
	5.6×10^{-5}		McAuliffe (1963)	V	
	5.3×10^{-5}		Yaws (2003)	X	258



Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.2×10^{-5}		Yaws (2003)	X	237
	6.2×10^{-5}		Dupeux et al. (2022)	Q	259
	4.9×10^{-5}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	184
	5.2×10^{-5}		HSDB (2015)	Q	99
	3.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	5.8×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-5}		Modarresi et al. (2007)	Q	67
		3200	Kühne et al. (2005)	Q	
	3.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	4.8×10^{-5}		Yao et al. (2002)	Q	229
	3.8×10^{-5}		English and Carroll (2001)	Q	230, 231
	3.5×10^{-5}		Katritzky et al. (1998)	Q	
	4.3×10^{-5}		Suzuki et al. (1992)	Q	232
	5.7×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	6.5×10^{-5}		Duchowicz et al. (2020)	?	185, 21
		4300	Kühne et al. (2005)	?	
	5.3×10^{-5}		Yaws (1999)	?	21
	5.2×10^{-5}		Yaws and Yang (1992)	?	21
	5.3×10^{-5}		Abraham et al. (1990)	?	
	5.3×10^{-5}		Abraham (1979)	?	
cyclohexane	5.1×10^{-5}	3900	Brockbank (2013)	L	1, 295
C_6H_{12}	5.3×10^{-5}	4000	Plyasunov and Shock (2000)	L	
[110-82-7]	5.6×10^{-5}		Mackay and Shiu (1981)	L	
XDTMQSROBMDMFD-UHFFFAOYSA-N	3.2×10^{-4}	5400	Hiatt (2013)	M	
	8.0×10^{-5}		Helburn et al. (2008)	M	
	5.2×10^{-5}	4500	Dewulf et al. (1999)	M	296
	6.0×10^{-5}		Hansen et al. (1993)	M	297
	5.4×10^{-5}	3800	Kolb et al. (1992)	M	277
	3.4×10^{-5}		Guitart et al. (1989)	M	14
	5.5×10^{-5}	3200	Ashworth et al. (1988)	M	278
	5.4×10^{-5}	3400	Tsonopoulos and Wilson (1983)	M	1
	5.4×10^{-5}	3800	Tucker et al. (1981)	M	
	5.3×10^{-5}		Mackay et al. (2006a)	V	
	5.1×10^{-5}		Mackay et al. (1993)	V	
	6.0×10^{-5}		Hwang et al. (1992)	V	
	5.4×10^{-5}		Eastcott et al. (1988)	V	
	5.1×10^{-5}		Hine and Mookerjee (1975)	V	
	5.6×10^{-5}		McAuliffe (1963)	V	
	5.4×10^{-5}	4000	Plyasunov et al. (2001)	T	
		4000	Gill et al. (1976)	T	
	5.0×10^{-5}		Yaws (2003)	X	258
	5.1×10^{-5}		Yaws (2003)	X	237



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Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^{-5}	710	Goldstein (1982)	X	298
	6.7×10^{-5}		Dupeux et al. (2022)	Q	259
	6.6×10^{-5}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	299
	1.6×10^{-4}		Wang et al. (2017)	Q	80, 238
	9.6×10^{-5}		Wang et al. (2017)	Q	80, 239
	1.5×10^{-4}		Wang et al. (2017)	Q	80, 240
	2.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	5.0×10^{-5}		Gharagheizi et al. (2010)	Q	246
	9.5×10^{-5}		Hilal et al. (2008)	Q	
	2.3×10^{-5}		Modarresi et al. (2007)	Q	67
		3600	Kühne et al. (2005)	Q	
	5.8×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	3.4×10^{-5}		Yao et al. (2002)	Q	229
	2.7×10^{-5}		English and Carroll (2001)	Q	230, 274
	3.4×10^{-5}		Katritzky et al. (1998)	Q	
	3.4×10^{-5}		Suzuki et al. (1992)	Q	232
	4.5×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	6.6×10^{-5}		Duchowicz et al. (2020)	?	185, 21
		3900	Kühne et al. (2005)	?	
	5.1×10^{-5}		Yaws (1999)	?	21
	3.1×10^{-5}		Abraham and Weathersby (1994)	?	21
	5.1×10^{-5}		Yaws and Yang (1992)	?	21
	5.1×10^{-5}		Abraham et al. (1990)	?	
	5.1×10^{-5}		Abraham (1979)	?	
methylcyclopentane $C_5H_9CH_3$ [96-37-7] GDOPTJXRTPNYNR-UHFFFAOYSA-N	2.8×10^{-5}	5500	Brockbank (2013)	L	
	2.8×10^{-5}		Plyasunov and Shock (2000)	L	
	2.7×10^{-5}		Mackay and Shiu (1981)	L	
	2.7×10^{-5}		Duchowicz et al. (2020)	V	186
	2.7×10^{-5}		HSDB (2015)	V	
	2.8×10^{-5}		Mackay et al. (2006a)	V	
	2.7×10^{-5}		Mackay et al. (1993)	V	
	2.7×10^{-5}		Eastcott et al. (1988)	V	
	2.7×10^{-5}		Hine and Mookerjee (1975)	V	
	2.9×10^{-5}		McAuliffe (1963)	V	
	2.8×10^{-5}		Yaws (2003)	X	237
	1.4×10^{-3}		Duchowicz et al. (2020)	Q	
	1.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	271, 243
	4.9×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	3.2×10^{-5}		Gharagheizi et al. (2010)	Q	246
	4.4×10^{-5}		Hilal et al. (2008)	Q	
	1.1×10^{-5}		Modarresi et al. (2007)	Q	67
	2.9×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	2.6×10^{-5}		Yao et al. (2002)	Q	229
	2.7×10^{-5}		English and Carroll (2001)	Q	230, 231



Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.6×10^{-5}		Katritzky et al. (1998)	Q	
	3.1×10^{-5}		Suzuki et al. (1992)	Q	232
	3.9×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	2.8×10^{-5}		Yaws (1999)	?	21
	1.7×10^{-5}		Abraham and Weathersby (1994)	?	21
	2.8×10^{-5}		Yaws and Yang (1992)	?	21
cycloheptane C_7H_{14} [291-64-5] DMEGYFMYUHOHGS-UHFFFAOYSA-N	6.7×10^{-5}	3100	Brockbank (2013)	L	
	1.0×10^{-4}		Plyasunov and Shock (2000)	L	
	1.1×10^{-4}		Duchowicz et al. (2020)	V	186
	8.2×10^{-5}		Mackay et al. (2006a)	V	
	1.0×10^{-4}		Mackay et al. (1993)	V	
	1.1×10^{-4}		Cabani et al. (1981)	V	
	1.1×10^{-4}		Yaws (2003)	X	258
	1.1×10^{-4}		Yaws (2003)	X	237
	1.2×10^{-4}		Dupeux et al. (2022)	Q	259
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.5×10^{-5}		HSDB (2015)	Q	99
	3.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	5.7×10^{-5}		Gharagheizi et al. (2010)	Q	246
	5.1×10^{-5}		Hilal et al. (2008)	Q	
	8.3×10^{-6}		Modarresi et al. (2007)	Q	67
	1.1×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	3.2×10^{-5}		Katritzky et al. (1998)	Q	
	1.1×10^{-4}		Yaws (1999)	?	21
	1.6×10^{-3}		Hoff et al. (1993)	?	21
	1.1×10^{-4}		Yaws and Yang (1992)	?	21
methylcyclohexane $C_6H_{11}CH_3$ [108-87-2] UAEPNZWRGJTJPN-UHFFFAOYSA-N	2.6×10^{-5}	4500	Brockbank (2013)	L	1
	2.4×10^{-5}		Plyasunov and Shock (2000)	L	
	2.5×10^{-5}		Mackay and Shiu (1981)	L	
	3.2×10^{-4}	5300	Hiatt (2013)	M	
	1.5×10^{-4}		Ramachandran et al. (1996)	M	
	9.6×10^{-5}	9400	Hansen et al. (1993)	M	281
	5.0×10^{-6}		Abraham and Acree (2007)	V	
	2.5×10^{-5}		Mackay et al. (2006a)	V	
	2.3×10^{-5}		Mackay et al. (1993)	V	
	2.3×10^{-5}		Meylan and Howard (1991)	V	
	2.6×10^{-5}		Eastcott et al. (1988)	V	
	2.3×10^{-5}		Hine and Mookerjee (1975)	V	
	2.7×10^{-5}		McAuliffe (1963)	V	
	2.3×10^{-5}		Yaws (2003)	X	237
	8.9×10^{-5}		Keshavarz et al. (2022)	Q	
	1.4×10^{-3}		Duchowicz et al. (2020)	Q	299
	1.5×10^{-5}		Gharagheizi et al. (2012)	Q	



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Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.4×10^{-5}		Gharagheizi et al. (2010)	Q	246
	3.5×10^{-5}		Hilal et al. (2008)	Q	
	2.1×10^{-5}		Modarresi et al. (2007)	Q	67
		3900	Kühne et al. (2005)	Q	
	2.5×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	2.7×10^{-5}		Yao et al. (2002)	Q	229
	1.9×10^{-5}		English and Carroll (2001)	Q	230, 260
	3.5×10^{-5}		Katritzky et al. (1998)	Q	
	8.6×10^{-5}		Russell et al. (1992)	Q	279
	2.3×10^{-5}		Suzuki et al. (1992)	Q	232
	2.9×10^{-5}		Meylan and Howard (1991)	Q	
	3.1×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	2.3×10^{-5}		Duchowicz et al. (2020)	?	185, 21
		3100	Kühne et al. (2005)	?	
	2.3×10^{-5}		Yaws (1999)	?	21
	2.3×10^{-5}		Yaws and Yang (1992)	?	21
methylocyclohexane-d14 $C_6D_{11}CD_3$ [10120-28-2] UAEPNZWRGJTJPN-OBKGMMLSA-N	3.1×10^{-4}	5600	Hiatt (2013)	M	
ethylcyclopentane C_7H_{14} [1640-89-7] IFTRQJLVEBNKJK-UHFFFAOYSA-N	1.8×10^{-5}		Yaws (2003)	X	237
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.4×10^{-5}		Yao et al. (2002)	Q	229
	1.8×10^{-5}		Yaws (1999)	?	21
1,1-dimethylcyclopentane C_7H_{14} [1638-26-2] QWHNJUXXYKPLQM-UHFFFAOYSA-N	2.3×10^{-5}		Yaws (2003)	X	237
	1.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-5}		Yao et al. (2002)	Q	229
	2.3×10^{-5}		Yaws (1999)	?	21
<i>cis</i> -1,2-dimethylcyclopentane C_7H_{14} [1192-18-3] RIRARCHMRDHZAR-KNVOCYPGSA-N	1.9×10^{-5}		Yaws (2003)	X	237
	1.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-5}		Yaws (1999)	?	21
<i>cis</i> -1,3-dimethylcyclopentane C_7H_{14} [2532-58-3] XAZKFISIRYLAEE-KNVOCYPGSA-N	2.2×10^{-5}		Yaws (2003)	X	237
	1.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-5}		Yaws (1999)	?	21



Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>trans</i> -1,2-dimethylcyclopentane C_7H_{14} [822-50-4] RIRARCHMRDHZAR-RNFRBKRXSA-N	2.2×10^{-5}		Yaws (2003)	X	237
	1.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -1,3-dimethylcyclopentane C_7H_{14} [1759-58-6] XAZKFISIRYLAE-E-RNFRBKRXSA-N	2.2×10^{-5}		Yaws (2003)	X	237
	1.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-5}		Yaws (1999)	?	21
cyclooctane C_8H_{16} [292-64-8] WJTCGQSWYFHTAC-UHFFFAOYSA-N	7.3×10^{-5}	4800	Brockbank (2013)	L	1
	9.3×10^{-5}	3800	Plyasunov and Shock (2000)	L	
	6.9×10^{-5}	4700	Dohányosová et al. (2004)	M	300
	6.9×10^{-5}		Mackay et al. (2006a)	V	
	9.3×10^{-5}		Mackay et al. (1993)	V	
	9.5×10^{-5}		Cabani et al. (1981)	V	
	9.7×10^{-5}		Yaws (2003)	X	237
	3.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	7.5×10^{-5}		Hilal et al. (2008)	Q	
	7.4×10^{-6}		Modarresi et al. (2007)	Q	67
		4300	Kühne et al. (2005)	Q	
		5000	Kühne et al. (2005)	?	
	9.8×10^{-5}		Hoff et al. (1993)	?	21
	9.5×10^{-5}		Yaws and Yang (1992)	?	21
methylcycloheptane C_8H_{16} [4126-78-7] GYNNXHKOJHMOHS-UHFFFAOYSA-N	2.1×10^{-5}		Hilal et al. (2008)	Q	
1,1-dimethylcyclohexane C_8H_{16} [590-66-9] QEGNUYASOUJEHD-UHFFFAOYSA-N	1.8×10^{-5}		Yaws (2003)	X	237
	8.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.0×10^{-5}		Yao et al. (2002)	Q	229
	1.8×10^{-5}		Yaws (1999)	?	21
1,2-dimethylcyclohexane $C_8H_{16}(\text{CH}_3)_2$ [583-57-3] KVZJLSYJROEPSQ-UHFFFAOYSA-N	2.8×10^{-5}		Duchowicz et al. (2020)	V	186
	2.1×10^{-5}		Mackay et al. (1993)	V	
	5.5×10^{-4}		Duchowicz et al. (2020)	Q	
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	271, 243
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	1.4×10^{-5}		Hilal et al. (2008)	Q	
	3.1×10^{-5}		Katritzky et al. (1998)	Q	
	1.7×10^{-5}		Suzuki et al. (1992)	Q	232
2.3×10^{-5}		Nirmalakhandan and Speece (1988)	Q		



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Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
<i>cis</i> -1,2-dimethylcyclohexane $C_6H_{10}(CH_3)_2$ [2207-01-4] KVZJLSYJROEPSQ-OCAPTIKFS-A-N	2.6×10^{-5}	4600	Brockbank (2013)	L	1	
	2.8×10^{-5}		Plyasunov and Shock (2000)	L		
	2.8×10^{-5}		Mackay and Shiu (1981)	L		
	2.7×10^{-5}	4600	Dohányosová et al. (2004)	M	301	
	2.8×10^{-5}		Duchowicz et al. (2020)	V	186	
	4.6×10^{-6}		Abraham and Acree (2007)	V		
	2.8×10^{-5}		Mackay et al. (2006a)	V		
	2.8×10^{-5}		Meylan and Howard (1991)	V		
	2.8×10^{-5}		Eastcott et al. (1988)	V		
	2.8×10^{-5}		Hine and Mookerjee (1975)	V		
	2.8×10^{-5}		Yaws (2003)	X	237	
	5.5×10^{-4}		Duchowicz et al. (2020)	Q		
	1.1×10^{-5}		Gharagheizi et al. (2012)	Q		
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	246	
	2.3×10^{-5}		Modarresi et al. (2007)	Q	67	
			4300	Kühne et al. (2005)	Q	
2.9×10^{-5}			Yaffe et al. (2003)	Q	248, 249	
1.4×10^{-5}			English and Carroll (2001)	Q	230, 231	
4.3×10^{-5}			Nirmalakhandan et al. (1997)	Q		
2.2×10^{-5}			Meylan and Howard (1991)	Q		
		4900	Kühne et al. (2005)	?		
2.8×10^{-5}			Yaws (1999)	?	21	
2.8×10^{-5}			Yaws and Yang (1992)	?	21	
<i>trans</i> -1,2-dimethylcyclohexane $C_6H_{10}(CH_3)_2$ [6876-23-9] KVZJLSYJROEPSQ-HTQZYQBOSA-N		1.6×10^{-5}	4000	Brockbank (2013)	L	1
		1.6×10^{-5}	4300	Dohányosová et al. (2004)	M	302
	1.8×10^{-5}		Duchowicz et al. (2020)	V	186	
	5.7×10^{-6}		Abraham and Acree (2007)	V		
	1.3×10^{-5}		Mackay et al. (1993)	V		
	1.6×10^{-5}		Yaws (2003)	X	237	
	5.5×10^{-4}		Duchowicz et al. (2020)	Q		
	9.5×10^{-6}		Gharagheizi et al. (2012)	Q		
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	246	
		4300	Kühne et al. (2005)	Q		
		4600	Kühne et al. (2005)	?		
1.6×10^{-5}		Yaws (1999)	?	21		
2.1×10^{-5}		Yaws and Yang (1992)	?	21		
		Haynes (2014)	W	303		
<i>cis</i> -1,3-dimethylcyclohexane C_8H_{16} [638-04-0] SGVUHPSBDNVHKL-OCAPTIKFS-A-N	1.8×10^{-5}		Yaws (2003)	X	237	
	8.7×10^{-6}		Gharagheizi et al. (2012)	Q		
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	246	
	1.8×10^{-5}		Yaws (1999)	?	21	
<i>trans</i> -1,3-dimethylcyclohexane C_8H_{16} [2207-03-6] SGVUHPSBDNVHKL-HTQZYQBOSA-N	1.7×10^{-5}		Yaws (2003)	X	237	
	9.8×10^{-6}		Gharagheizi et al. (2012)	Q		
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	246	
	1.7×10^{-5}		Yaws (1999)	?	21	



Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4-dimethylcyclohexane $C_6H_{10}(CH_3)_2$ [589-90-2] QRMPKOFEUHIBNM-UHFFFAOYSA-N	1.5×10^{-5}		Hilal et al. (2008)	Q	
<i>cis</i> -1,4-dimethylcyclohexane C_8H_{16} [624-29-3] QRMPKOFEUHIBNM-OCAPTIKFSAN	1.7×10^{-5}		Yaws (2003)	X	237
	9.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -1,4-dimethylcyclohexane $C_6H_{10}(CH_3)_2$ [2207-04-7] QRMPKOFEUHIBNM-ZKCHVJHJHSA-N	1.1×10^{-5}		Plyasunov and Shock (2000)	L	
	1.1×10^{-5}		Mackay and Shiu (1981)	L	
	1.1×10^{-5}		Duchowicz et al. (2020)	V	186
	1.1×10^{-5}		Mackay et al. (2006a)	V	
	1.1×10^{-5}		Mackay et al. (1993)	V	
	1.1×10^{-5}		Eastcott et al. (1988)	V	
	1.1×10^{-5}		Yaws (2003)	X	237
	5.5×10^{-4}		Duchowicz et al. (2020)	Q	
	8.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	1.4×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.9×10^{-5}		Yaffe et al. (2003)	Q	248, 272
	1.4×10^{-5}		English and Carroll (2001)	Q	230, 231
2.2×10^{-5}		Nirmalakhandan et al. (1997)	Q		
1.1×10^{-5}		Yaws (1999)	?	21	
1.1×10^{-5}		Yaws and Yang (1992)	?	21	
ethylcyclohexane C_8H_{16} [1678-91-7] HIEWJVIFRVWJOD-UHFFFAOYSA-N	2.1×10^{-5}	4100	Brockbank (2013)	L	1, 304
	2.0×10^{-5}	4400	Dohányosová et al. (2004)	M	305
	3.1×10^{-5}	4600	Heidman et al. (1985)	M	1
	3.3×10^{-5}		Duchowicz et al. (2020)	V	186
	7.3×10^{-6}		Abraham and Acree (2007)	V	
	1.5×10^{-5}		Yaws (2003)	X	237
	1.4×10^{-3}		Duchowicz et al. (2020)	Q	
	1.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.3×10^{-5}		Hilal et al. (2008)	Q	
		4300	Kühne et al. (2005)	Q	
	3.3×10^{-5}		Yaffe et al. (2003)	Q	248, 249
3.5×10^{-5}		Yao et al. (2002)	Q	229, 267	
3.4×10^{-5}		Katritzky et al. (1998)	Q		
	4700	Kühne et al. (2005)	?		
1.5×10^{-5}		Yaws (1999)	?	21	



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Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,2-trimethylcyclopentane $C_5H_7(CH_3)_3$ [4259-00-1] WINGSBAYCULVDU-UHFFFAOYSA-N	1.3×10^{-5} 8.0×10^{-6} 1.2×10^{-5} 6.9×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008)	X Q Q Q	237 246
1,1,3-trimethylcyclopentane $C_5H_7(CH_3)_3$ [4516-69-2] OBKHYUIZSOIEPG-UHFFFAOYSA-N	6.2×10^{-6} 6.3×10^{-6} 6.3×10^{-6} 6.3×10^{-6} 6.3×10^{-6} 1.5×10^{-5} 6.2×10^{-6} 1.6×10^{-5} 6.2×10^{-6} 2.0×10^{-5} 1.2×10^{-5} 6.2×10^{-6}		Plyasunov and Shock (2000) Mackay and Shiu (1981) Mackay et al. (2006a) Mackay et al. (1993) Eastcott et al. (1988) Yaws (2003) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Yaffe et al. (2003)	L L V V V X Q Q Q Q Q Q	237 271, 243 244 245 246 248, 249
1,cis-2,cis-3-trimethylcyclopentane C_8H_{16} [2613-69-6] VCWNHOPGKQCXIQ-RNLVFOAGSA-N	1.1×10^{-5} 8.9×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,cis-2,trans-3-trimethylcyclopentane C_8H_{16} [15890-40-1] VCWNHOPGKQCXIQ-JIGDXULJSA-N	1.2×10^{-5} 7.6×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,trans-2,cis-3-trimethylcyclopentane C_8H_{16} [19374-46-0] VCWNHOPGKQCXIQ-RNFRBKRXSA-N	1.4×10^{-5} 6.2×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,cis-2,cis-4-trimethylcyclopentane C_8H_{16} [2613-72-1] PNUFYSGVPVMNRN-RNLVFOAGSA-N	1.3×10^{-5} 7.5×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,cis-2,trans-4-trimethylcyclopentane C_8H_{16} [4850-28-6] PNUFYSGVPVMNRN-WHUPJOBBSA-N	1.2×10^{-5} 7.5×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>trans</i> -2, <i>cis</i> -4-trimethylcyclopentane C_8H_{16} [16883-48-0] PNUFYSGVPVMNRN-HTQZYQBOSA-N	1.4×10^{-5} 6.0×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-1-ethylcyclopentane C_8H_{16} [16747-50-5] LETYIFNDQBJGPJ-UHFFFAOYSA-N	1.1×10^{-5} 9.5×10^{-6} 1.2×10^{-5} 1.5×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X Q Q Q ?	237 246 246 229 21
1-methyl- <i>cis</i> -2-ethylcyclopentane C_8H_{16} [930-89-2] BSKOLJVTLRLTHE-SFYZADRCSA-N	1.1×10^{-5} 1.1×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>trans</i> -2-ethylcyclopentane C_8H_{16} [930-90-5] BSKOLJVTLRLTHE-HTQZYQBOSA-N	1.2×10^{-5} 9.1×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>cis</i> -3-ethylcyclopentane C_8H_{16} [2613-66-3] PQXAPVOKLYINEI-SFYZADRCSA-N	1.2×10^{-5} 9.0×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>trans</i> -3-ethylcyclopentane C_8H_{16} [2613-65-2] PQXAPVOKLYINEI-HTQZYQBOSA-N	1.2×10^{-5} 9.0×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
propylcyclopentane $C_5H_9C_3H_7$ [2040-96-2] KDIAMAVWIJYWHN-UHFFFAOYSA-N	1.1×10^{-5} 1.1×10^{-5} 1.1×10^{-5} 1.1×10^{-5} 1.1×10^{-5} 1.1×10^{-5} 1.4×10^{-3} 1.2×10^{-5} 1.6×10^{-5} 2.5×10^{-5} 2.0×10^{-5} 1.2×10^{-5} 2.0×10^{-5} 1.1×10^{-5} 2.5×10^{-5}		Plyasunov and Shock (2000) Mackay and Shiu (1981) Duchowicz et al. (2020) Mackay et al. (2006a) Mackay et al. (1993) Eastcott et al. (1988) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Yaffe et al. (2003) Yao et al. (2002)	L L V V V V X Q Q Q Q Q Q Q Q	186 237 242, 243 244 245 246 248, 249 229



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Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.2×10^{-5}		Katritzky et al. (1998)	Q	
	2.5×10^{-5}		Nirmalakhandan et al. (1997)	Q	
	1.1×10^{-5}		Yaws (1999)	?	21
	1.1×10^{-5}		Yaws and Yang (1992)	?	21
isopropylcyclopentane C_8H_{16} [3875-51-2] TVSBRLGQVHJIKT-UHFFFAOYSA-N	1.1×10^{-5}		Yaws (2003)	X	237
	1.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-5}		Gharagheizi et al. (2010)	Q	246
5,5-dimethylbicyclo[2.1.1]hexane C_8H_{14} (MCM:C8BC) WZXMFVYGAOEAT-UHFFFAOYSA-N	3.1×10^{-4}		Wang et al. (2017)	Q	80, 238
	1.7×10^{-5}		Wang et al. (2017)	Q	80, 239
	2.1×10^{-4}		Wang et al. (2017)	Q	80, 240
1,1,2-trimethylcyclohexane C_9H_{18} [7094-26-0] MEBONNVPKOBPEA-UHFFFAOYSA-N	9.0×10^{-6}		Yaws (2003)	X	237
	8.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.0×10^{-6}		Gharagheizi et al. (2010)	Q	246
1,1,3-trimethylcyclohexane C_9H_{18} [3073-66-3] PYOLJOJPIPCRPD-UHFFFAOYSA-N	9.3×10^{-6}		Plyasunov and Shock (2000)	L	
	9.5×10^{-6}		Mackay et al. (2006a)	V	
	9.5×10^{-6}		Mackay et al. (1993)	V	
	1.2×10^{-5}		Yaws (2003)	X	237
	6.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.0×10^{-6}		Gharagheizi et al. (2010)	Q	246
1,1,4-trimethylcyclohexane C_9H_{18} [7094-27-1] UIWORXHEVNIOJG-UHFFFAOYSA-N	1.1×10^{-5}		Yaws (2003)	X	237
	5.9×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.0×10^{-6}		Gharagheizi et al. (2010)	Q	246
1,cis-2,cis-3-trimethylcyclohexane C_9H_{18} [1839-88-9] DQTVJLHNWPRPPH-AYMMMOKOSA-N	5.6×10^{-6}		Yaws (2003)	X	237
	8.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	8.8×10^{-6}		Gharagheizi et al. (2010)	Q	246
1,cis-2,trans-3-trimethylcyclohexane C_9H_{18} [7667-55-2] DQTVJLHNWPRPPH-BRPSZJMVSA-N	6.2×10^{-6}		Yaws (2003)	X	237
	8.1×10^{-6}		Gharagheizi et al. (2012)	Q	
	8.8×10^{-6}		Gharagheizi et al. (2010)	Q	246
1,cis-2,cis-4-trimethylcyclohexane C_9H_{18} [1678-80-4] VCJPCVEVERINRSQ-YIZRAAEISA-N	6.2×10^{-6}		Yaws (2003)	X	237
	7.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	8.8×10^{-6}		Gharagheizi et al. (2010)	Q	246



Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>cis</i> -2, <i>trans</i> -4-trimethylcyclohexane C_9H_{18} [7667-58-5] VCJPCEVERINRSG-HLTSFMKQSA-N	6.7×10^{-6} 7.5×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>cis,cis</i> -1,3,5-trimethylcyclohexane C_9H_{18} [1795-27-3] ODNRTOSCFYDTKF-AYMMKQSA-N	1.7×10^{-5} 5.7×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>cis,trans</i> -1,3,5-trimethylcyclohexane C_9H_{18} [1795-26-2] ODNRTOSCFYDTKF-FBJGQNJSA-N	1.6×10^{-5} 6.0×10^{-6} 6.1×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q	237 246
1, <i>trans</i> -2, <i>cis</i> -3-trimethylcyclohexane C_9H_{18} [1678-81-5] DQTVJLHNWPRPPH-HTQZYQBOSA-N	7.8×10^{-6} 6.7×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1, <i>trans</i> -2, <i>cis</i> -4-trimethylcyclohexane C_9H_{18} [7667-59-6] VCJPCEVERINRSG-DJLDLDEBSA-N	7.1×10^{-6} 6.9×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1, <i>trans</i> -2, <i>trans</i> -4-trimethylcyclohexane C_9H_{18} [7667-60-9] VCJPCEVERINRSG-IWSPJZSA-N	7.8×10^{-6} 6.1×10^{-6} 8.8×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-1-ethylcyclohexane C_9H_{18} [4926-90-3] YPJRYQGOKHKNKZ-UHFFFAOYSA-N	8.1×10^{-6} 1.0×10^{-5} 1.0×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>cis</i> -2-ethylcyclohexane C_9H_{18} [4923-77-7] XARGIVYWQPXRTC-BDAKNGLRSA-N	9.7×10^{-6} 1.0×10^{-5} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>cis</i> -3-ethylcyclohexane C_9H_{18} [19489-10-2] UDDVMPHNQKRNS-BDAKNGLRSA-N	1.1×10^{-5} 7.9×10^{-6} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl- <i>cis</i> -4-ethylcyclohexane C_9H_{18} [4926-78-7] CYISMTMRBPPERU-DTORHVGOSA-N	1.2×10^{-5} 8.6×10^{-6} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>trans</i> -2-ethylcyclohexane C_9H_{18} [4923-78-8] XARGIVYWQPXRTC-RKDXNWHRSA-N	1.0×10^{-5} 8.8×10^{-6} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>trans</i> -3-ethylcyclohexane C_9H_{18} [4926-76-5] UDDVMPHNQKRNNNS-RKDXNWHRSA-N	1.1×10^{-5} 8.6×10^{-6} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>trans</i> -4-ethylcyclohexane C_9H_{18} [6236-88-0] CYISMTMRBPPERU-KYZUINATSA-N	8.4×10^{-6} 7.9×10^{-6} 8.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
propylcyclohexane C_9H_{18} [1678-92-8] DEDZSLCZHWTGOR-UHFFFAOYSA-N	9.6×10^{-6} 1.1×10^{-5} 1.1×10^{-5} 4.9×10^{-5} 9.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X Q Q Q ?	237 246 229 21
isopropylcyclohexane C_9H_{18} [696-29-7] GWESVXSMPKAFAS-UHFFFAOYSA-N	9.4×10^{-6} 1.0×10^{-5} 1.1×10^{-5} 2.7×10^{-5} 9.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X Q Q Q ?	237 246 229, 267 21
1,1,2,2-tetramethylcyclopentane C_9H_{18} [52688-89-8] YXDMSFJDVHXFCV-UHFFFAOYSA-N	8.0×10^{-6} 5.8×10^{-6} 8.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>cis</i> -1,1,2,3-tetramethylcyclopentane C_9H_{18} CXCBKSYSKZEEJB-YUMQZZPRSA-N	7.2×10^{-6} 5.8×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>trans</i> -1,1,2,3-tetramethylcyclopentane C_9H_{18} [62016-70-0] CXCBKSYSKZEEJB-SFYZADRCSA-N	8.4×10^{-6} 4.6×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>cis</i> -1,1,2,4-tetramethylcyclopentane C_9H_{18} [62016-71-1] AVBGJNNMIBMQG-SFYZADRCSA-N	8.4×10^{-6} 4.6×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>trans</i> -1,1,2,4-tetramethylcyclopentane C_9H_{18} AVBGJNNMIBMQG-YUMQZZPRSA-N	8.4×10^{-6} 4.6×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,1,3,3-tetramethylcyclopentane C_9H_{18} [50876-33-0] YWYCGTZNHWYQBD-UHFFFAOYSA-N	1.1×10^{-5} 3.8×10^{-6} 8.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>cis</i> -1,1,3,4-tetramethylcyclopentane C_9H_{18} [53907-60-1] OWHFMVURUNNXMJ-OCAPTIKFSAN	8.0×10^{-6} 5.0×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>trans</i> -1,1,3,4-tetramethylcyclopentane C_9H_{18} [20309-77-7] OWHFMVURUNNXMJ-HTQZYQBOSAN	9.9×10^{-6} 3.6×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>cis</i> -1,2,2,3-tetramethylcyclopentane C_9H_{18} [18938-68-6] DHLYDHNCPUAVHP-OCAPTIKFSAN	7.2×10^{-6} 5.8×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>trans</i> -1,2,2,3-tetramethylcyclopentane C_9H_{18} DHLYDHNCPUAVHP-YUMQZZPRSA-N	7.2×10^{-6} 5.8×10^{-6} 8.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1, <i>cis</i> -2, <i>cis</i> -3, <i>cis</i> -4-tetramethylcyclopentane C_9H_{18} [2532-65-2] INYXDKODFMWKER-FNCVBFRFSA-N	6.3×10^{-6} 6.2×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1, <i>cis</i> -2, <i>cis</i> -3, <i>trans</i> -4-tetramethylcyclopentane C_9H_{18} [2532-69-6] INYXDKODFMWKER-BGZDPUMWSAN	7.2×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246



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Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>cis</i> -2, <i>trans</i> -3, <i>cis</i> -4-tetramethylcyclopentane C ₉ H ₁₈ [2532-68-5] IN1YXDKODFMWKER-BZNPZCIMSAN	8.2 × 10 ⁻⁶		Yaws (2003)	X	237
	4.2 × 10 ⁻⁶		Gharagheizi et al. (2012)	Q	
	7.5 × 10 ⁻⁶		Gharagheizi et al. (2010)	Q	246
1, <i>trans</i> -2, <i>cis</i> -3, <i>trans</i> -4-tetramethylcyclopentane C ₉ H ₁₈ [2532-67-4] IN1YXDKODFMWKER-HXFLIBJXSAN	8.8 × 10 ⁻⁶		Yaws (2003)	X	237
	3.7 × 10 ⁻⁶		Gharagheizi et al. (2012)	Q	
	7.5 × 10 ⁻⁶		Gharagheizi et al. (2010)	Q	246
1, <i>trans</i> -2, <i>trans</i> -3, <i>cis</i> -4-tetramethylcyclopentane C ₉ H ₁₈ [19907-40-5] IN1YXDKODFMWKER-OJOKCITNSAN	8.2 × 10 ⁻⁶		Yaws (2003)	X	237
	4.2 × 10 ⁻⁶		Gharagheizi et al. (2012)	Q	
	7.5 × 10 ⁻⁶		Gharagheizi et al. (2010)	Q	246
1,1-dimethyl-2-ethylcyclopentane C ₉ H ₁₈ [54549-80-3] RXPIHZJWAFCHJEJ-UHFFFAOYSAN	7.7 × 10 ⁻⁶		Yaws (2003)	X	237
	6.2 × 10 ⁻⁶		Gharagheizi et al. (2012)	Q	
	6.7 × 10 ⁻⁶		Gharagheizi et al. (2010)	Q	246
1,1-dimethyl-3-ethylcyclopentane C ₉ H ₁₈ [62016-61-9] WXHYOGXBESULU-UHFFFAOYSAN	8.3 × 10 ⁻⁶		Yaws (2003)	X	237
	5.5 × 10 ⁻⁶		Gharagheizi et al. (2012)	Q	
	6.7 × 10 ⁻⁶		Gharagheizi et al. (2010)	Q	246
1, <i>cis</i> -2-dimethyl-1-ethylcyclopentane C ₉ H ₁₈ [62016-63-1] DRWDWIMYUGHJBR-DTWKUNHWSAN	6.9 × 10 ⁻⁶		Yaws (2003)	X	237
	7.3 × 10 ⁻⁶		Gharagheizi et al. (2012)	Q	
	6.7 × 10 ⁻⁶		Gharagheizi et al. (2010)	Q	246
1, <i>trans</i> -2-dimethyl-1-ethylcyclopentane C ₉ H ₁₈ [62016-62-0] DRWDWIMYUGHJBR-RKDXNWHRSAN	6.9 × 10 ⁻⁶		Yaws (2003)	X	237
	7.3 × 10 ⁻⁶		Gharagheizi et al. (2012)	Q	
	6.7 × 10 ⁻⁶		Gharagheizi et al. (2010)	Q	246
1, <i>cis</i> -2-dimethyl- <i>cis</i> -3-ethylcyclopentane C ₉ H ₁₈ UMUGNPFWQJAOJI-HLTSFMKQSAN	6.0 × 10 ⁻⁶		Yaws (2003)	X	237
	8.0 × 10 ⁻⁶		Gharagheizi et al. (2012)	Q	
	6.7 × 10 ⁻⁶		Gharagheizi et al. (2010)	Q	246
1, <i>trans</i> -2-dimethyl- <i>trans</i> -3-ethylcyclopentane C ₉ H ₁₈ UMUGNPFWQJAOJI-HRDYMLBCSAN	6.7 × 10 ⁻⁶		Yaws (2003)	X	237
	6.6 × 10 ⁻⁶		Gharagheizi et al. (2012)	Q	
	6.7 × 10 ⁻⁶		Gharagheizi et al. (2010)	Q	246



Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>cis</i> -2-dimethyl- <i>trans</i> -3-ethylcyclopentane C_9H_{18} UMUGNPFWQJAOJI-IWSPJJDZSA-N	6.7×10^{-6}		Yaws (2003)	X	237
	6.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.7×10^{-6}		Gharagheizi et al. (2010)	Q	246
1, <i>trans</i> -2-dimethyl- <i>cis</i> -3-ethylcyclopentane C_9H_{18} UMUGNPFWQJAOJI-VGMNWLOBSA-N	7.7×10^{-6}		Yaws (2003)	X	237
	5.4×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.7×10^{-6}		Gharagheizi et al. (2010)	Q	246
1, <i>cis</i> -2-dimethyl- <i>cis</i> -4-ethylcyclopentane C_9H_{18} [62016-64-2] QKXQNVXTYSGKS-BRPSZJMVSA-N	6.5×10^{-6}		Yaws (2003)	X	237
	7.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.7×10^{-6}		Gharagheizi et al. (2010)	Q	246
1, <i>cis</i> -2-dimethyl- <i>trans</i> -4-ethylcyclopentane C_9H_{18} [62016-65-3] QKXQNVXTYSGKS-AYMMMOKOSA-N	6.5×10^{-6}		Yaws (2003)	X	237
	7.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.7×10^{-6}		Gharagheizi et al. (2010)	Q	246
1, <i>trans</i> -2-dimethyl- <i>cis</i> -4-ethylcyclopentane C_9H_{18} [62016-66-4] QKXQNVXTYSGKS-HTQZYQBOSA-N	7.4×10^{-6}		Yaws (2003)	X	237
	5.7×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.7×10^{-6}		Gharagheizi et al. (2010)	Q	246
1, <i>cis</i> -3-dimethyl-1-ethylcyclopentane C_9H_{18} [62016-68-6] OAWOMHRJVJMDLZ-DTWKUNHWSA-N	8.0×10^{-6}		Yaws (2003)	X	237
	5.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.7×10^{-6}		Gharagheizi et al. (2010)	Q	246
1, <i>trans</i> -3-dimethyl-1-ethylcyclopentane C_9H_{18} [62016-67-5] OAWOMHRJVJMDLZ-RKDXNWHRSA-N	8.0×10^{-6}		Yaws (2003)	X	237
	5.8×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.7×10^{-6}		Gharagheizi et al. (2010)	Q	246
1, <i>cis</i> -3-dimethyl- <i>cis</i> -2-ethylcyclopentane C_9H_{18} [19903-00-5] JREISGVVJTVFBL-AYMMMOKOSA-N	6.0×10^{-6}		Yaws (2003)	X	237
	8.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.7×10^{-6}		Gharagheizi et al. (2010)	Q	246
1, <i>cis</i> -3-dimethyl- <i>trans</i> -2-ethylcyclopentane C_9H_{18} [19902-98-8] JREISGVVJTVFBL-BRPSZJMVSA-N	7.8×10^{-6}		Yaws (2003)	X	237
	5.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.7×10^{-6}		Gharagheizi et al. (2010)	Q	246



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Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>trans</i> -3-dimethyl- <i>cis</i> -2-ethylcyclopentane C_9H_{18} [19902-99-9] JREISGVVJTVFBL-HTQZYQBOSA-N	6.9×10^{-6} 6.4×10^{-6} 6.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1, <i>cis</i> -3-dimethyl- <i>cis</i> -4-ethylcyclopentane C_9H_{18} VMCXXGFUCWAIIN-YIZRAAEISA-N	6.7×10^{-6} 6.6×10^{-6} 6.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1, <i>cis</i> -3-dimethyl- <i>trans</i> -4-ethylcyclopentane C_9H_{18} VMCXXGFUCWAIIN-DJLDLDEBSA-N	7.8×10^{-6} 5.2×10^{-6} 6.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1, <i>trans</i> -3-dimethyl- <i>cis</i> -4-ethylcyclopentane C_9H_{18} VMCXXGFUCWAIIN-CIUDSAMLSA-N	3.5×10^{-6} 2.5×10^{-5} 6.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1, <i>trans</i> -3-dimethyl- <i>trans</i> -4-ethylcyclopentane C_9H_{18} VMCXXGFUCWAIIN-XHNCKOQMSA-N	6.7×10^{-6} 6.6×10^{-6} 6.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-1-propylcyclopentane C_9H_{18} [16631-63-3] HICYLMKNNFKEMK-UHFFFAOYSA-N	7.2×10^{-6} 8.3×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>cis</i> -2-propylcyclopentane C_9H_{18} [932-43-4] ADQJFBQXLA AVQA-BDAKNGLRSA-N	6.4×10^{-6} 8.6×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>trans</i> -2-propylcyclopentane C_9H_{18} [932-44-5] ADQJFBQXLA AVQA-RKDXNWHRSA-N	7.1×10^{-6} 7.2×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>cis</i> -3-propylcyclopentane C_9H_{18} [2443-04-1] HRSBIYASWAILIF-BDAKNGLRSA-N	6.9×10^{-6} 7.6×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.2: Cycloalkanes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl- <i>trans</i> -3-propylcyclopentane C_9H_{18} [2443-03-0] HRSBIYASWAILIF-RKDXNWHRSA-N	6.9×10^{-6} 7.6×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-1-isopropylcyclopentane C_9H_{18} [61828-00-0] XFMQGDWBNOQLEG-UHFFFAOYSA-N	6.5×10^{-6} 8.9×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>cis</i> -2-isopropylcyclopentane C_9H_{18} [61868-01-7] CGWXYEIWDQDFIU-RKDXNWHRSA-N	6.5×10^{-6} 7.7×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>trans</i> -2-isopropylcyclopentane C_9H_{18} [61828-01-1] CGWXYEIWDQDFIU-BDAKNGLRSA-N	7.3×10^{-6} 6.3×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>cis</i> -3-isopropylcyclopentane C_9H_{18} [61828-02-2] CDTDMKCVKCGRPD-BDAKNGLRSA-N	7.2×10^{-6} 6.5×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl- <i>trans</i> -3-isopropylcyclopentane C_9H_{18} [61828-03-3] CDTDMKCVKCGRPD-RKDXNWHRSA-N	7.2×10^{-6} 6.5×10^{-6} 7.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,1-diethylcyclopentane C_9H_{18} [2721-38-2] DPGQSDLGKGLNHC-UHFFFAOYSA-N	6.7×10^{-6} 9.4×10^{-6} 7.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1, <i>cis</i> -2-diethylcyclopentane C_9H_{18} [932-39-8] JKMYLSLBFNMSFP-DTORHVGOSA-N	6.3×10^{-6} 8.9×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1, <i>trans</i> -2-diethylcyclopentane C_9H_{18} [932-40-1] JKMYLSLBFNMSFP-RKDXNWHRSA-N	6.9×10^{-6} 7.5×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1, <i>cis</i> -3-diethylcyclopentane C_9H_{18} [62016-59-5] RUUVWUNHERVOAY-DTORHVGOSA-N	6.7×10^{-6} 8.0×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1, <i>trans</i> -3-diethylcyclopentane C_9H_{18} [62016-60-8] RUUVWUNHERVOAY-RKDXNWHRSA-N	6.7×10^{-6} 8.0×10^{-6} 6.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
butylcyclopentane C_9H_{18} [2040-95-1] ZAGHKONXGGSDVDV-UHFFFAOYSA-N	6.5×10^{-6} 1.0×10^{-5} 8.7×10^{-6} 6.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	237 246 21
isobutylcyclopentane C_9H_{18} [3788-32-7] DPUYDFJBHDYVQM-UHFFFAOYSA-N	7.2×10^{-6} 8.2×10^{-6} 8.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>sec</i> -butylcyclopentane C_9H_{18} [4850-32-2] DCEHVBLXWODXCW-UHFFFAOYSA-N	6.5×10^{-6} 9.8×10^{-6} 8.5×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>tert</i> -butylcyclopentane C_9H_{18} [3875-52-3] BFWVYBVSRYIDHI-UHFFFAOYSA-N	6.7×10^{-6} 7.6×10^{-6} 7.7×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
octahydro-1H-indene C_9H_{16} [496-10-6] BNRNAKTVFSZAFA-UHFFFAOYSA-N	8.8×10^{-5}		Hilal et al. (2008)	Q	
butylcyclohexane $C_{10}H_{20}$ [1678-93-9] GGBJHURWWWLEQH-UHFFFAOYSA-N	7.2×10^{-6} 8.5×10^{-6} 9.3×10^{-6} 7.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	237 246 21
pentylcyclopentane $C_{10}H_{20}$ [3741-00-2] HPQURZRDYMUHJI-UHFFFAOYSA-N	5.3×10^{-6} 5.4×10^{-6} 5.4×10^{-6} 5.4×10^{-6} 5.4×10^{-6} 5.2×10^{-6} 8.1×10^{-6} 7.8×10^{-6} 1.2×10^{-5} 1.2×10^{-5} 7.0×10^{-6}		Plyasunov and Shock (2000) Mackay and Shiu (1981) Mackay et al. (2006a) Mackay et al. (1993) Eastcott et al. (1988) Yaws (2003) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010)	L L V V V X Q Q Q Q Q	237 242, 243 244 245 246



Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.2×10^{-6}		Hilal et al. (2008)	Q	
	5.8×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	1.6×10^{-5}		Nirmalakhandan et al. (1997)	Q	
	5.4×10^{-6}		Yaws and Yang (1992)	?	21
decahydronaphthalene $C_{10}H_{18}$ (decalin) [91-17-8] NNBZCPXTIHJBJL-UHFFFAOYSA-N	7.2×10^{-5}	4100	Ashworth et al. (1988)	M	278
	2.1×10^{-5}		Duchowicz et al. (2020)	V	186
	2.1×10^{-5}		HSDB (2015)	V	
	4.4×10^{-3}		Duchowicz et al. (2020)	Q	
	6.5×10^{-5}		Hilal et al. (2008)	Q	
		4500	Kühne et al. (2005)	Q	
	2.1×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	6.5×10^{-5}		Katritzky et al. (1998)	Q	
		4100	Kühne et al. (2005)	?	
(<i>Z</i>)-bicyclo[4.4.0]decane $C_{10}H_{18}$ (<i>cis</i> -decahydronaphthalene; <i>cis</i> -decalin) [493-01-6] NNBZCPXTIHJBJL-AOOOYVTPSA-N	4.3×10^{-4}		Mackay et al. (1993)	V	
	6.1×10^{-5}		Yaws (2003)	X	237
	4.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	8.1×10^{-5}		Gharagheizi et al. (2010)	Q	246
	6.1×10^{-5}		Yaws (1999)	?	21
(<i>E</i>)-bicyclo[4.4.0]decane $C_{10}H_{18}$ (<i>trans</i> -decahydronaphthalene; <i>trans</i> -decalin) [493-02-7] NNBZCPXTIHJBJL-MGCOHNPYSA-N	2.7×10^{-4}		Mackay et al. (1993)	V	
	3.9×10^{-5}		Yaws (2003)	X	237
	2.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	8.1×10^{-5}		Gharagheizi et al. (2010)	Q	246
	4.0×10^{-5}		Yaws (1999)	?	21
2,6,6-trimethylbicyclo[3.1.1]heptane $C_{10}H_{18}$ (dihydropinene) [473-55-2] XOKSLPVRUOBDEW-UHFFFAOYSA-N	2.8×10^{-5}		HSDB (2015)	Q	99
tricyclene $C_{10}H_{16}$ [508-32-7] RRBYUSWBLVXTQN-UHFFFAOYSA-N	4.9×10^{-5}		Plyasunov and Shock (2000)	L	
hexylcyclopentane $C_{11}H_{22}$ [4457-00-5] LKHGKBBAJAFMSQ-UHFFFAOYSA-N	5.1×10^{-6}		Yaws (2003)	X	237
	6.2×10^{-6}		Gharagheizi et al. (2012)	Q	
	6.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
pentylcyclohexane $C_{11}H_{22}$ [4292-92-6] HLTMUYBTNSVOFY-UHFFFAOYSA-N	7.1×10^{-6}		Yaws (2003)	X	237
	6.6×10^{-6}		Gharagheizi et al. (2012)	Q	
	9.2×10^{-6}		Gharagheizi et al. (2010)	Q	246



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Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyclododecane $C_{12}H_{24}$ [294-62-2] DDTBPAQBQHZRDW-UHFFFAOYSA-N	6.4×10^{-6}		HSDB (2015)	Q	99
heptylcyclopentane $C_{12}H_{24}$ [5617-42-5] BOFNAOHMSHEKQL-UHFFFAOYSA-N	6.6×10^{-6} 9.8×10^{-6} 7.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
hexylcyclohexane $C_{12}H_{24}$ [4292-75-5] QHWAGXOSHKKCFK-UHFFFAOYSA-N	8.8×10^{-6} 7.4×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,1'-bicyclohexyl $C_{12}H_{22}$ [92-51-3] WVIMZNLDSIRH-UHFFFAOYSA-N	3.1×10^{-5}		Hilal et al. (2008)	Q	
heptylcyclohexane $C_{13}H_{26}$ [5617-41-4] MSTLSCNJAHAQNU-UHFFFAOYSA-N	1.4×10^{-5} 1.3×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
octylcyclopentane $C_{13}H_{26}$ [1795-20-6] HARXDULSBROLME-UHFFFAOYSA-N	1.1×10^{-5} 1.8×10^{-5} 1.0×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
octylcyclohexane $C_{14}H_{28}$ [1795-15-9] FBXWCEKQCVOOLT-UHFFFAOYSA-N	3.1×10^{-5} 2.1×10^{-5} 3.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
nonylcyclopentane $C_{14}H_{28}$ [2882-98-6] GDCYEUAZVKNHT-UHFFFAOYSA-N	2.3×10^{-5} 2.0×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
octahydro-1,1,2,3,3-pentamethyl-1H-indene $C_{14}H_{26}$ [33704-60-8] TUALLFJCLUYJEN-UHFFFAOYSA-N	9.0×10^{-6} 1.1×10^{-6} 6.5×10^{-4} 3.5×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
nonylcyclohexane $C_{15}H_{30}$ [2883-02-5] CLMFECCMAVQYQA-UHFFFAOYSA-N	8.7×10^{-5} 2.2×10^{-5} 8.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.2: Cycloalkanes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
decylcyclopentane $C_{15}H_{30}$ [1795-21-7] WOUVLFFZQCUYOL-UHFFFAOYSA-N	6.4×10^{-5} 2.0×10^{-5} 4.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
decylcyclohexane $C_{16}H_{32}$ [1795-16-0] STWFZICHPLEOIC-UHFFFAOYSA-N	3.7×10^{-4}		Yaws (1999)	?	21
1,1'-(2-methylpentane-2,4- diyl)dicyclohexane $C_{18}H_{34}$ [38970-72-8] XUVKLBIXLIPDZ-UHFFFAOYSA-N	2.9×10^{-6} 2.1×10^{-6} 1.1×10^{-3} 1.9×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1':3',1''-tercyclohexane $C_{18}H_{32}$ [1706-50-9] JBQRJHVXZMSLNH-UHFFFAOYSA-N	6.7×10^{-6} 1.5×10^{-5} 1.7×10^{-3} 9.0×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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A2.3 Aliphatic alkenes and cycloalkenes

Table A2.3: Aliphatic alkenes and cycloalkenes

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethene	5.9×10^{-5}	2200	Burkholder et al. (2019)	L	1
C_2H_4	5.9×10^{-5}	2200	Burkholder et al. (2015)	L	1
(ethylene)	5.9×10^{-5}	2200	Sander et al. (2011)	L	1
[74-85-1]	5.9×10^{-5}	2200	Sander et al. (2006)	L	1
VGGSQFUCUMXWEO-UHFFFAOYSA-N	4.8×10^{-5}	2000	Plyasunov and Shock (2000)	L	
	4.7×10^{-5}	2000	Hayduk (1994)	L	1
	4.6×10^{-5}		Mackay and Shiu (1981)	L	
	4.7×10^{-5}	1800	Wilhelm et al. (1977)	L	
	3.5×10^{-5}		Steward et al. (1973)	L	14
	4.6×10^{-5}	2200	Allott et al. (1973)	L	
	4.9×10^{-5}	2000	Maaßen (1995)	M	306
	4.8×10^{-5}	1900	Reichl (1995)	M	307
	4.7×10^{-5}		McAuliffe (1966)	M	
	4.7×10^{-5}	2000	Morrison and Billett (1952)	M	308
	4.8×10^{-5}		Orcutt and SeEVERS (1937a)	M	
	3.4×10^{-5}		Grollman (1929)	M	58
	4.8×10^{-5}	2300	Winkler (1906)	M	
	4.6×10^{-5}		Hine and Mookerjee (1975)	V	
	4.7×10^{-5}	1900	Wauchope and Haque (1972)	V	
	3.1×10^{-5}		Pierotti (1965)	T	
	4.7×10^{-5}		Yaws (2003)	X	237
	4.7×10^{-5}		Deno and Berkheimer (1960)	C	
	3.4×10^{-5}		Hayer et al. (2022)	Q	20
	2.0×10^{-5}		Keshavarz et al. (2022)	Q	
	4.0×10^{-3}		Duchowicz et al. (2020)	Q	299
	2.1×10^{-4}		Wang et al. (2017)	Q	80, 238
	2.6×10^{-5}		Wang et al. (2017)	Q	80, 239
	8.3×10^{-5}		Wang et al. (2017)	Q	80, 240
	4.6×10^{-5}		Li et al. (2014)	Q	241
	2.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	6.8×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.9×10^{-5}		Hilal et al. (2008)	Q	
	1.0×10^{-4}		Modarresi et al. (2007)	Q	67
		2700	Kühne et al. (2005)	Q	
	4.7×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	8.2×10^{-5}		English and Carroll (2001)	Q	230, 231
	1.5×10^{-5}		Katritzky et al. (1998)	Q	
	9.5×10^{-5}		Suzuki et al. (1992)	Q	232
	5.2×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	4.3×10^{-5}		Duchowicz et al. (2020)	?	185, 21
		1900	Kühne et al. (2005)	?	
	4.8×10^{-5}		Yaws (1999)	?	21



Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.1×10^{-5}	2400	Yaws et al. (1999)	?	21
	3.9×10^{-5}		Abraham and Weathersby (1994)	?	21
	4.8×10^{-5}	2000	Dean and Lange (1999)	?	309, 23
	4.7×10^{-5}		Yaws and Yang (1992)	?	21
	4.6×10^{-5}		Abraham et al. (1990)	?	
	4.8×10^{-5}		Seinfeld (1986)	?	21
propene C_3H_6 (propylene) [115-07-1] QQONPFPTGQHPMA-UHFFFAOYSA-N	5.6×10^{-5}	2600	Plyasunov and Shock (2000)	L	
	4.7×10^{-5}		Mackay and Shiu (1981)	L	
	7.3×10^{-5}	3400	Wilhelm et al. (1977)	L	
	5.4×10^{-5}	2700	Maaßen (1995)	M	310
	5.4×10^{-5}	2800	Reichl (1995)	M	311
	4.8×10^{-5}		McAuliffe (1966)	M	
	4.7×10^{-5}		Hine and Mookerjee (1975)	V	
	4.4×10^{-5}		Irmann (1965)	V	
	4.8×10^{-5}		Yaws (2003)	X	237
	9.2×10^{-5}		Deno and Berkheimer (1960)	C	
	6.5×10^{-5}		Hayer et al. (2022)	Q	20
	2.7×10^{-5}		Keshavarz et al. (2022)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	299
	2.5×10^{-4}		Wang et al. (2017)	Q	80, 238
	2.7×10^{-5}		Wang et al. (2017)	Q	80, 239
	8.5×10^{-5}		Wang et al. (2017)	Q	80, 240
	2.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	6.6×10^{-5}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-5}		Hilal et al. (2008)	Q	
	5.9×10^{-5}		Modarresi et al. (2007)	Q	67
		3100	Kühne et al. (2005)	Q	
	5.1×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	1.0×10^{-4}		Yao et al. (2002)	Q	229
	6.2×10^{-5}		English and Carroll (2001)	Q	230, 231
	4.4×10^{-5}		Katritzky et al. (1998)	Q	
	6.9×10^{-5}		Suzuki et al. (1992)	Q	232
	4.1×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	4.6×10^{-5}		Irmann (1965)	Q	
	5.0×10^{-5}		Duchowicz et al. (2020)	?	185, 21
		3800	Kühne et al. (2005)	?	
	4.8×10^{-5}		Yaws (1999)	?	21
	6.8×10^{-5}	2800	Yaws et al. (1999)	?	21
	4.8×10^{-5}		Yaws and Yang (1992)	?	21
	4.3×10^{-5}		Abraham et al. (1990)	?	



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-butene	4.2×10^{-5}	3000	Plyasunov and Shock (2000)	L	
C_4H_8	1.3×10^{-4}	6400	Wilhelm et al. (1977)	L	
[106-98-9]	4.5×10^{-5}	3000	Serra and Palavra (2003)	M	312
VXNZUUAJNFGPBY-UHFFFAOYSA-N	4.0×10^{-5}		McAuliffe (1966)	M	
	3.9×10^{-5}		Mackay et al. (2006a)	V	
	3.9×10^{-5}		Mackay et al. (1993)	V	
	3.9×10^{-5}		Hine and Mookerjee (1975)	V	
	4.1×10^{-5}		Irmann (1965)	V	
	4.0×10^{-5}		Yaws (2003)	X	237
	5.5×10^{-5}		Hayer et al. (2022)	Q	20
	3.6×10^{-5}		Keshavarz et al. (2022)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	184
	2.2×10^{-4}		Wang et al. (2017)	Q	80, 238
	3.2×10^{-5}		Wang et al. (2017)	Q	80, 239
	8.5×10^{-5}		Wang et al. (2017)	Q	80, 240
	3.9×10^{-5}		Li et al. (2014)	Q	241
	3.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	4.6×10^{-5}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-5}		Hilal et al. (2008)	Q	
	5.7×10^{-5}		Modarresi et al. (2007)	Q	67
	6.0×10^{-6}		Modarresi et al. (2005)	Q	247
	3.9×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	7.1×10^{-5}		Yao et al. (2002)	Q	229
	4.7×10^{-5}		English and Carroll (2001)	Q	230, 231
	5.6×10^{-5}		Katritzky et al. (1998)	Q	
	5.2×10^{-5}		Suzuki et al. (1992)	Q	232
	3.4×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	4.1×10^{-5}		Irmann (1965)	Q	
	4.2×10^{-5}		Duchowicz et al. (2020)	?	185, 21
	4.0×10^{-5}		Yaws (1999)	?	21
	4.0×10^{-5}		Yaws and Yang (1992)	?	21
	3.9×10^{-5}		Abraham et al. (1990)	?	
			Mackay and Shiu (1981)	W	313
2-butene	5.1×10^{-5}		Hilal et al. (2008)	Q	
C_4H_8					
[107-01-7]					
IAQRGUVFOMEM-UHFFFAOYSA-N					



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>cis</i> -2-butene C_4H_8 [590-18-1] IAQRGUVFOMOMEM-ARJAWSKDSA-N	5.5×10^{-5}		Irmann (1965)	V	
	4.1×10^{-5}		Yaws (2003)	X	237
	3.6×10^{-5}		Keshavarz et al. (2022)	Q	
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	299
	3.2×10^{-4}		Wang et al. (2017)	Q	314, 80, 238
	5.4×10^{-5}		Wang et al. (2017)	Q	314, 80, 239
	6.0×10^{-5}		Wang et al. (2017)	Q	314, 80, 240
	3.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	5.7×10^{-5}		Gharagheizi et al. (2010)	Q	246
	4.5×10^{-5}		Modarresi et al. (2007)	Q	67
	6.9×10^{-6}		Modarresi et al. (2005)	Q	247
	9.1×10^{-5}		Yao et al. (2002)	Q	229
	5.9×10^{-5}		Irmann (1965)	Q	
4.3×10^{-5}		Duchowicz et al. (2020)	?	185, 21	
4.1×10^{-5}		Yaws (1999)	?	21	
<i>trans</i> -2-butene C_4H_8 [624-64-6] IAQRGUVFOMOMEM-ONEGZZNKSAN	3.9×10^{-5}		Irmann (1965)	V	
	4.3×10^{-5}		Yaws (2003)	X	237
	1.0×10^{-4}		Hayer et al. (2022)	Q	20
	3.6×10^{-5}		Keshavarz et al. (2022)	Q	
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	3.2×10^{-4}		Wang et al. (2017)	Q	314, 80, 238
	5.4×10^{-5}		Wang et al. (2017)	Q	314, 80, 239
	6.0×10^{-5}		Wang et al. (2017)	Q	314, 80, 240
	2.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	5.7×10^{-5}		Gharagheizi et al. (2010)	Q	246
	4.5×10^{-5}		Modarresi et al. (2007)	Q	67
	8.5×10^{-6}		Modarresi et al. (2005)	Q	247
	7.9×10^{-5}		Yao et al. (2002)	Q	229
5.4×10^{-5}		Irmann (1965)	Q		
4.4×10^{-5}		Duchowicz et al. (2020)	?	185, 21	
4.3×10^{-5}		Yaws (1999)	?	21	
2-methylpropene C_4H_8 (isobutene) [115-11-7] VQTUBCCCKSQIDNK-UHFFFAOYSA-N	5.7×10^{-5}	3000	Plyasunov and Shock (2000)	L	
	5.6×10^{-5}	3000	Wilhelm et al. (1977)	L	
	4.8×10^{-5}		McAuliffe (1966)	M	
	4.6×10^{-5}		Mackay et al. (2006a)	V	
	4.6×10^{-5}		Mackay et al. (1993)	V	
	4.6×10^{-5}		Hine and Mookerjee (1975)	V	
	4.8×10^{-5}		Yaws (2003)	X	237
	6.1×10^{-5}		Hayer et al. (2022)	Q	20
	3.6×10^{-5}		Keshavarz et al. (2022)	Q	



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.1×10^{-4}		Duchowicz et al. (2020)	Q	299
	1.6×10^{-4}		Wang et al. (2017)	Q	80, 238
	3.9×10^{-5}		Wang et al. (2017)	Q	80, 239
	9.3×10^{-5}		Wang et al. (2017)	Q	80, 240
	2.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	6.1×10^{-5}		Gharagheizi et al. (2010)	Q	246
	8.6×10^{-5}		Hilal et al. (2008)	Q	
	4.6×10^{-5}		Modarresi et al. (2007)	Q	67
		3400	Kühne et al. (2005)	Q	
	8.2×10^{-6}		Modarresi et al. (2005)	Q	247
	4.7×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	6.5×10^{-5}		Yao et al. (2002)	Q	229
	4.8×10^{-5}		English and Carroll (2001)	Q	230, 231
	5.3×10^{-5}		Katritzky et al. (1998)	Q	
	4.5×10^{-5}		Suzuki et al. (1992)	Q	232
	2.8×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	4.5×10^{-5}		Duchowicz et al. (2020)	?	185, 21
		3000	Kühne et al. (2005)	?	
	4.8×10^{-5}		Yaws (1999)	?	21
	5.6×10^{-5}	3000	Yaws et al. (1999)	?	21
	4.8×10^{-5}		Yaws and Yang (1992)	?	21
			Mackay and Shiu (1981)	W	313
1-pentene	3.0×10^{-5}		Brockbank (2013)	L	
C_5H_{10}	2.4×10^{-5}		Plyasunov and Shock (2000)	L	
[109-67-1]	2.5×10^{-5}		Mackay and Shiu (1981)	L	
YWAKXRMUMFPDSH-UHFFFAOYSA-N	2.5×10^{-5}		Duchowicz et al. (2020)	V	186
	2.5×10^{-5}		HSDB (2015)	V	
	2.5×10^{-5}		Mackay et al. (2006a)	V	
	2.5×10^{-5}		Mackay et al. (1993)	V	
	2.5×10^{-5}		Eastcott et al. (1988)	V	
	1.8×10^{-5}		Amoore and Buttery (1978)	V	
	2.4×10^{-5}		Hine and Mookerjee (1975)	V	
	2.7×10^{-5}		McAuliffe (1966)	V	24
	2.5×10^{-5}		Yaws (2003)	X	237
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.7×10^{-4}		Wang et al. (2017)	Q	80, 238
	2.3×10^{-5}		Wang et al. (2017)	Q	80, 239
	7.6×10^{-5}		Wang et al. (2017)	Q	80, 240
	3.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	271, 243
	3.1×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	3.2×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.5×10^{-5}		Hilal et al. (2008)	Q	



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.7×10^{-5}		Modarresi et al. (2007)	Q	67
	5.4×10^{-6}		Modarresi et al. (2005)	Q	247
	2.5×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	5.1×10^{-5}		Yao et al. (2002)	Q	229
	3.6×10^{-5}		English and Carroll (2001)	Q	230, 260
	6.0×10^{-5}		Katritzky et al. (1998)	Q	
	4.0×10^{-5}		Suzuki et al. (1992)	Q	232
	2.7×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	2.5×10^{-5}		Yaws (1999)	?	21
	2.5×10^{-5}		Yaws and Yang (1992)	?	21
	2.4×10^{-5}		Abraham et al. (1990)	?	
2-pentene C_5H_{10} [109-68-2] QMMOXUPEWRXHJS-UHFFFAOYSA-N	4.1×10^{-5}		Plyasunov and Shock (2000)	L	
	4.1×10^{-5}		Duchowicz et al. (2020)	V	186
	4.4×10^{-5}		Eastcott et al. (1988)	V	
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	3.6×10^{-5}		Hilal et al. (2008)	Q	
	4.7×10^{-5}		Yaffe et al. (2003)	Q	248, 272
	6.1×10^{-5}		Katritzky et al. (1998)	Q	
<i>cis</i> -2-pentene C_5H_{10} [627-20-3] QMMOXUPEWRXHJS-HYXAFHYSA-N	4.4×10^{-5}		Brockbank (2013)	L	
	4.4×10^{-5}		Mackay and Shiu (1981)	L	
	4.4×10^{-5}		Duchowicz et al. (2020)	V	186
	4.4×10^{-5}		Yaws (2003)	X	237
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	2.6×10^{-4}		Wang et al. (2017)	Q	314, 80, 238
	3.7×10^{-5}		Wang et al. (2017)	Q	314, 80, 239
	5.8×10^{-5}		Wang et al. (2017)	Q	314, 80, 240
	4.5×10^{-5}		HSDB (2015)	Q	99
	2.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.6×10^{-5}		Gharagheizi et al. (2010)	Q	246
	5.4×10^{-6}		Modarresi et al. (2005)	Q	247
	4.7×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	7.3×10^{-5}		Yao et al. (2002)	Q	229
	4.4×10^{-5}		Yaws (1999)	?	21
	4.4×10^{-5}		Yaws and Yang (1992)	?	21
<i>trans</i> -2-pentene C_5H_{10} [646-04-8] QMMOXUPEWRXHJS-HWKANZROSA-N	4.3×10^{-5}		Brockbank (2013)	L	
	4.3×10^{-5}		Duchowicz et al. (2020)	V	186
	4.2×10^{-5}		Hine and Mookerjee (1975)	V	
	4.3×10^{-5}		Yaws (2003)	X	237
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	2.6×10^{-4}		Wang et al. (2017)	Q	314, 80, 238
	3.7×10^{-5}		Wang et al. (2017)	Q	314, 80, 239



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.9×10^{-5}		Wang et al. (2017)	Q	314, 80, 240
	3.1×10^{-5}		HSDB (2015)	Q	99
	2.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.6×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.0×10^{-5}		Modarresi et al. (2005)	Q	247
	6.7×10^{-5}		Yao et al. (2002)	Q	229
	3.6×10^{-5}		English and Carroll (2001)	Q	230, 231
	4.0×10^{-5}		Suzuki et al. (1992)	Q	232
	2.7×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	4.3×10^{-5}		Yaws (1999)	?	21
	4.3×10^{-5}		Yaws and Yang (1992)	?	21
2-methyl-1-butene C_5H_{10} [563-46-2] MHNNAWXXUZQSNM-UHFFFAOYSA-N	2.3×10^{-5}		Duchowicz et al. (2020)	V	186
	2.3×10^{-5}		HSDB (2015)	V	
	3.3×10^{-5}		Yaws (2003)	X	237
	5.1×10^{-4}		Duchowicz et al. (2020)	Q	
	1.5×10^{-4}		Wang et al. (2017)	Q	80, 238
	4.6×10^{-5}		Wang et al. (2017)	Q	80, 239
	8.7×10^{-5}		Wang et al. (2017)	Q	80, 240
	1.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.8×10^{-5}		Gharagheizi et al. (2010)	Q	246
	4.2×10^{-6}		Modarresi et al. (2005)	Q	247
	5.1×10^{-5}		Yao et al. (2002)	Q	229, 267
	3.4×10^{-5}		Yaws (1999)	?	21
2-methyl-2-butene C_5H_{10} [513-35-9] BKOOMYPCUNDGP-UHFFFAOYSA-N	5.7×10^{-5}	3500	Brockbank (2013)	L	1
	6.7×10^{-5}	3600	Plyasunov and Shock (2000)	L	
	4.4×10^{-5}		Duchowicz et al. (2020)	V	186
	7.4×10^{-5}		Mackay et al. (2006a)	V	
	4.4×10^{-5}		Hine and Mookerjee (1975)	V	
	3.4×10^{-5}		Yaws (2003)	X	237
	1.7×10^{-4}		Duchowicz et al. (2020)	Q	
	2.1×10^{-4}		Wang et al. (2017)	Q	80, 238
	6.0×10^{-5}		Wang et al. (2017)	Q	80, 239
	6.3×10^{-5}		Wang et al. (2017)	Q	80, 240
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	4.3×10^{-5}		Gharagheizi et al. (2010)	Q	246
	7.5×10^{-5}		Hilal et al. (2008)	Q	
	9.7×10^{-6}		Modarresi et al. (2005)	Q	247
	4.7×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	5.4×10^{-5}		Yao et al. (2002)	Q	229
	4.8×10^{-5}		English and Carroll (2001)	Q	230, 274
	5.8×10^{-5}		Katritzky et al. (1998)	Q	
	3.6×10^{-5}		Suzuki et al. (1992)	Q	232
	2.3×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	3.5×10^{-5}		Yaws (1999)	?	21



Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-1-butene C_5H_{10} [563-45-1] YHQXBTXEYIZIOV-UHFFFAOYSA-N	1.9×10^{-5}		Plyasunov and Shock (2000)	L	
	1.8×10^{-5}		Mackay and Shiu (1981)	L	
	1.9×10^{-5}		McAuliffe (1966)	M	
	1.8×10^{-5}		HSDB (2015)	V	
	1.8×10^{-5}		Mackay et al. (2006a)	V	
	1.8×10^{-5}		Mackay et al. (1993)	V	
	1.8×10^{-5}		Hine and Mookerjee (1975)	V	
	1.9×10^{-5}		Yaws (2003)	X	237
	2.1×10^{-4}		Wang et al. (2017)	Q	80, 238
	1.4×10^{-5}		Wang et al. (2017)	Q	80, 239
	6.9×10^{-5}		Wang et al. (2017)	Q	80, 240
	2.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	3.7×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-5}		Hilal et al. (2008)	Q	
	3.7×10^{-5}		Modarresi et al. (2007)	Q	67
	7.2×10^{-6}		Modarresi et al. (2005)	Q	247
	1.8×10^{-5}		Yaffe et al. (2003)	Q	248, 249
2.6×10^{-5}		Yao et al. (2002)	Q	229	
3.6×10^{-5}		English and Carroll (2001)	Q	230, 231	
5.7×10^{-5}		Katritzky et al. (1998)	Q		
3.6×10^{-5}		Suzuki et al. (1992)	Q	232	
2.3×10^{-5}		Nirmalakhandan and Speece (1988)	Q		
1.9×10^{-5}		Yaws (1999)	?	21	
1.9×10^{-5}		Yaws and Yang (1992)	?	21	
1-hexene C_6H_{12} [592-41-6] LIKMAJRDDTEIG-UHFFFAOYSA-N	2.5×10^{-5}		Brockbank (2013)	L	
	2.3×10^{-5}	3900	Plyasunov and Shock (2000)	L	
	2.4×10^{-5}		Mackay and Shiu (1981)	L	
	2.4×10^{-5}		Duchowicz et al. (2020)	V	186
	2.4×10^{-5}		HSDB (2015)	V	
	2.4×10^{-5}		Mackay et al. (2006a)	V	
	2.4×10^{-5}		Mackay et al. (1993)	V	
	2.4×10^{-5}		Hwang et al. (1992)	V	
	2.4×10^{-5}		Eastcott et al. (1988)	V	
	2.4×10^{-5}		Hine and Mookerjee (1975)	V	
	2.7×10^{-5}		McAuliffe (1966)	V	24
	2.4×10^{-5}		Yaws (2003)	X	237
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.4×10^{-4}		Wang et al. (2017)	Q	80, 238
	1.7×10^{-5}		Wang et al. (2017)	Q	80, 239
	7.1×10^{-5}		Wang et al. (2017)	Q	80, 240
	2.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	245



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.8×10^{-5}		Hilal et al. (2008)	Q	
	3.6×10^{-5}	4100	Modarresi et al. (2007)	Q	67
			Kühne et al. (2005)	Q	
	4.0×10^{-6}		Modarresi et al. (2005)	Q	247
	2.5×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	2.5×10^{-5}		Yao et al. (2002)	Q	229, 267
	2.7×10^{-5}		English and Carroll (2001)	Q	230, 231
	6.1×10^{-5}		Katritzky et al. (1998)	Q	
	3.1×10^{-5}		Suzuki et al. (1992)	Q	232
	2.1×10^{-5}	4000	Nirmalakhandan and Speece (1988)	Q	
			Kühne et al. (2005)	?	
	3.3×10^{-5}		Yaws (1999)	?	21
	3.3×10^{-5}		Yaws and Yang (1992)	?	21
	2.8×10^{-5}		Abraham et al. (1990)	?	
<i>cis</i> -2-hexene C_6H_{12}	2.6×10^{-5}		Yaws (2003)	X	237
	2.3×10^{-4}		Wang et al. (2017)	Q	314, 80, 238
[7688-21-3]	2.4×10^{-5}		Wang et al. (2017)	Q	314, 80, 239
RYPKRALMXUUNKS-HYXAFXHYSA-N	5.0×10^{-5}		Wang et al. (2017)	Q	314, 80, 240
	2.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-5}		Gharagheizi et al. (2010)	Q	246
	5.8×10^{-6}		Modarresi et al. (2005)	Q	247
	3.0×10^{-5}		Yao et al. (2002)	Q	229
	2.6×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -2-hexene C_6H_{12}	2.6×10^{-5}		Yaws (2003)	X	237
	2.3×10^{-4}		Wang et al. (2017)	Q	314, 80, 238
[4050-45-7]	2.4×10^{-5}		Wang et al. (2017)	Q	314, 80, 239
RYPKRALMXUUNKS-HWKANZROSA-N	5.0×10^{-5}		Wang et al. (2017)	Q	314, 80, 240
	2.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-5}		Gharagheizi et al. (2010)	Q	246
	5.6×10^{-6}		Modarresi et al. (2005)	Q	247
	3.2×10^{-5}		Yao et al. (2002)	Q	229
	2.7×10^{-5}		Yaws (1999)	?	21
<i>cis</i> -3-hexene C_6H_{12}	2.6×10^{-5}		Yaws (2003)	X	237
	2.1×10^{-5}		Gharagheizi et al. (2012)	Q	
[7642-09-3]	2.3×10^{-5}		Gharagheizi et al. (2010)	Q	246
ZQDPJFUHLCOCRG-WAYWQWQTSAN	4.5×10^{-6}		Modarresi et al. (2005)	Q	247
	3.3×10^{-5}		Yao et al. (2002)	Q	229
	2.7×10^{-5}		Yaws (1999)	?	21



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>trans</i> -3-hexene C_6H_{12} [13269-52-8] ZQDPJFUHLCOCRG-AATRIKPKSA-N	2.6×10^{-5}		Yaws (2003)	X	237
	2.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-5}		Gharagheizi et al. (2010)	Q	246
	5.4×10^{-6}		Modarresi et al. (2005)	Q	247
	3.1×10^{-5}		Yao et al. (2002)	Q	229
	2.7×10^{-5}		Yaws (1999)	?	21
2-methyl-1-pentene C_6H_{12} [763-29-1] WWUVJRULCWHUSA-UHFFFAOYSA-N	3.3×10^{-5}		Plyasunov and Shock (2000)	L	
	3.6×10^{-5}		Mackay and Shiu (1981)	L	
	3.6×10^{-5}		Duchowicz et al. (2020)	V	186
	3.6×10^{-5}		Mackay et al. (2006a)	V	
	3.6×10^{-5}		Mackay et al. (1993)	V	
	3.6×10^{-5}		Eastcott et al. (1988)	V	
	3.4×10^{-5}		Cabani et al. (1981)	V	
	3.5×10^{-5}		Yaws (2003)	X	237
	5.1×10^{-4}		Duchowicz et al. (2020)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	271, 243
	3.1×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.3×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-5}		Hilal et al. (2008)	Q	
	5.8×10^{-6}		Modarresi et al. (2005)	Q	247
	3.6×10^{-5}		Yaffe et al. (2003)	Q	248, 249
4.5×10^{-5}		Yao et al. (2002)	Q	229	
2.1×10^{-5}		English and Carroll (2001)	Q	230, 231	
1.9×10^{-5}		Nirmalakhandan et al. (1997)	Q		
3.6×10^{-5}		Yaws (1999)	?	21	
3.5×10^{-5}		Yaws and Yang (1992)	?	21	
3-methyl-1-pentene C_6H_{12} [760-20-3] LDTAOIUHUHHCUMU-UHFFFAOYSA-N	2.8×10^{-5}		Yaws (2003)	X	237
	2.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	6.2×10^{-6}		Modarresi et al. (2005)	Q	247
	2.1×10^{-5}		Yao et al. (2002)	Q	229
	2.8×10^{-5}		Yaws (1999)	?	21
4-methyl-1-pentene C_6H_{12} [691-37-2] WSSSPWUEQFSQQG-UHFFFAOYSA-N	1.5×10^{-5}		Plyasunov and Shock (2000)	L	
	1.6×10^{-5}		Mackay and Shiu (1981)	L	
	1.6×10^{-5}		Duchowicz et al. (2020)	V	186
	1.6×10^{-5}		Mackay et al. (2006a)	V	
	1.6×10^{-5}		Mackay et al. (1993)	V	
	1.6×10^{-5}		Eastcott et al. (1988)	V	
	1.6×10^{-5}		Hine and Mookerjee (1975)	V	
	1.6×10^{-5}		Yaws (2003)	X	237
	6.1×10^{-4}		Duchowicz et al. (2020)	Q	
	2.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	244



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-5}		Hilal et al. (2008)	Q	
	3.4×10^{-5}		Modarresi et al. (2007)	Q	67
	7.3×10^{-6}		Modarresi et al. (2005)	Q	247
	1.6×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	2.7×10^{-5}		Yao et al. (2002)	Q	229
	2.7×10^{-5}		English and Carroll (2001)	Q	230, 231
	5.8×10^{-5}		Katritzky et al. (1998)	Q	
	2.8×10^{-5}		Suzuki et al. (1992)	Q	232
	1.8×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.6×10^{-5}		Yaws (1999)	?	21
	1.6×10^{-5}		Yaws and Yang (1992)	?	21
2-methyl-2-pentene C_6H_{12} [625-27-4] JMMZCWZIJXAGKW-UHFFFAOYSA-N	2.6×10^{-5}		Yaws (2003)	X	237
	1.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	7.9×10^{-6}		Modarresi et al. (2005)	Q	247
	4.8×10^{-5}		Yao et al. (2002)	Q	229, 267
	2.7×10^{-5}		Yaws (1999)	?	21
<i>cis</i> -3-methyl-2-pentene C_6H_{12} [922-62-3] BEQGRRJLJLVQAQ-XQRVVYSFSA-N	2.6×10^{-5}		Yaws (2003)	X	237
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.7×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -3-methyl-2-pentene C_6H_{12} [616-12-6] BEQGRRJLJLVQAQ-GQCTYLIASA-N	2.6×10^{-5}		Yaws (2003)	X	237
	1.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	5.5×10^{-6}		Modarresi et al. (2005)	Q	247
	3.9×10^{-5}		Yao et al. (2002)	Q	229
	2.6×10^{-5}		Yaws (1999)	?	21
<i>cis</i> -4-methyl-2-pentene C_6H_{12} [691-38-3] LGAQJENWWWYGFSN-PLNGDYQASA-N	2.8×10^{-5}		Yaws (2003)	X	237
	1.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.8×10^{-5}		Gharagheizi et al. (2010)	Q	246
	3.7×10^{-6}		Modarresi et al. (2005)	Q	247
	3.3×10^{-5}		Yao et al. (2002)	Q	229
	2.8×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -4-methyl-2-pentene C_6H_{12} [674-76-0] LGAQJENWWWYGFSN-SNAWJCMRSA-N	2.8×10^{-5}		Yaws (2003)	X	237
	1.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.8×10^{-5}		Gharagheizi et al. (2010)	Q	246
	5.0×10^{-6}		Modarresi et al. (2005)	Q	247
	3.1×10^{-5}		Yao et al. (2002)	Q	229
	2.8×10^{-5}		Yaws (1999)	?	21



Table A2.3: Aliphatic alkenes and cycloalkenes (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methylenepentane C_6H_{12} (2-ethyl-1-butene) [760-21-4] RYKZRKKEYSRDNF-UHFFFAOYSA-N	2.7×10^{-5} 2.0×10^{-5} 2.3×10^{-5} 3.9×10^{-6} 4.3×10^{-5} 2.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q ?	237 246 247 229 21
2,3-dimethyl-1-butene C_6H_{12} [563-78-0] OWWIWYDDISJUMY-UHFFFAOYSA-N	2.8×10^{-5} 1.6×10^{-5} 2.9×10^{-5} 1.7×10^{-5} 6.0×10^{-6} 1.9×10^{-5} 2.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q Q ?	237 246 247 229 21
3,3-dimethyl-1-butene C_6H_{12} [558-37-2] PKXHXOTZMFCXSH-UHFFFAOYSA-N	2.8×10^{-5} 1.6×10^{-5} 2.6×10^{-5} 5.2×10^{-6} 1.0×10^{-5} 2.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q ?	237 246 247 229 21
2,3-dimethyl-2-butene C_6H_{12} [563-79-1] WGLLSSPDPJPLOR-UHFFFAOYSA-N	2.5×10^{-5} 1.4×10^{-4} 1.1×10^{-4} 5.5×10^{-5} 1.2×10^{-5} 2.7×10^{-5} 4.9×10^{-6} 2.7×10^{-5} 2.6×10^{-5}		Yaws (2003) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q Q Q Q ?	237 80, 238 80, 239 80, 240 246 247 229 21
1-heptene C_7H_{14} [592-76-7] ZGEGCLOFRBLKSE-UHFFFAOYSA-N	2.0×10^{-5} 2.5×10^{-5} 2.3×10^{-5} 2.3×10^{-5} 2.5×10^{-5} 2.5×10^{-5} 2.5×10^{-5} 1.6×10^{-3} 2.6×10^{-5} 1.6×10^{-5} 1.3×10^{-5} 3.3×10^{-5} 3.2×10^{-6} 2.2×10^{-5} 2.1×10^{-5} 5.8×10^{-5} 1.7×10^{-5}		Brockbank (2013) Plyasunov and Shock (2000) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006a) Mackay et al. (1993) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Modarresi et al. (2005) Yao et al. (2002) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997)	L L V V V V X Q Q Q Q Q Q Q Q Q Q Q	 186 237 246 246 67 247 229 230, 231 237



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-5}		Yaws (1999)	?	21
	2.5×10^{-5}		Yaws and Yang (1992)	?	21
	2.4×10^{-5}		Abraham et al. (1990)	?	
2-heptene C_7H_{14} [592-77-8] OTTZHAVKAVGASB-UHFFFAOYSA-N	2.3×10^{-5}		Plyasunov and Shock (2000)	L	
	2.4×10^{-5}		Duchowicz et al. (2020)	V	186
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	271, 243
	2.0×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	1.7×10^{-5}		Hilal et al. (2008)	Q	
	2.6×10^{-5}		Modarresi et al. (2007)	Q	67
	2.1×10^{-5}		English and Carroll (2001)	Q	230, 274
<i>cis</i> -2-heptene C_7H_{14} [6443-92-1] OTTZHAVKAVGASB-HYXAFXHYSAN	2.4×10^{-5}		Brockbank (2013)	L	
	1.5×10^{-5}		Yaws (2003)	X	237
	2.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	9.1×10^{-6}		Modarresi et al. (2005)	Q	247
	3.0×10^{-5}		Yao et al. (2002)	Q	229, 267
	1.5×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -2-heptene C_7H_{14} [14686-13-6] OTTZHAVKAVGASB-HWKANZROSA-N	2.4×10^{-5}		Brockbank (2013)	L	
	2.4×10^{-5}		Mackay and Shiu (1981)	L	
	2.3×10^{-5}		Duchowicz et al. (2020)	V	186
	2.4×10^{-5}		Mackay et al. (1993)	V	
	2.4×10^{-5}		Eastcott et al. (1988)	V	
	2.4×10^{-5}		Hine and Mookerjee (1975)	V	
	1.5×10^{-5}		Yaws (2003)	X	237
	5.2×10^{-4}		Duchowicz et al. (2020)	Q	
	2.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	2.5×10^{-5}		Modarresi et al. (2007)	Q	67
	4.4×10^{-6}		Modarresi et al. (2005)	Q	247
	2.8×10^{-5}		Yao et al. (2002)	Q	229
	1.7×10^{-5}		Nirmalakhandan et al. (1997)	Q	
	2.4×10^{-5}		Suzuki et al. (1992)	Q	232
	1.5×10^{-5}		Yaws (1999)	?	21
<i>cis</i> -3-heptene C_7H_{14} [7642-10-6] WZHKGJXSXCTSK-ALCCZGGFSA-N	1.6×10^{-5}		Yaws (2003)	X	237
	1.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	3.8×10^{-6}		Modarresi et al. (2005)	Q	247
	3.1×10^{-5}		Yao et al. (2002)	Q	229
	1.6×10^{-5}		Yaws (1999)	?	21



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>trans</i> -3-heptene C_7H_{14} [14686-14-7] WZHKDGSXCTSCCK-FNORWQNLISA-N	1.6×10^{-5} 1.9×10^{-5} 1.5×10^{-5} 4.0×10^{-6} 2.8×10^{-5} 1.6×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q ?	237 246 247 229 21
2-methyl-1-hexene C_7H_{14} [6094-02-6] IRUDSQHLKGNCGF-UHFFFAOYSA-N	1.7×10^{-5} 1.7×10^{-5} 1.5×10^{-5} 3.2×10^{-6} 2.4×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q ?	237 246 247 229 21
2-methyl-2-hexene C_7H_{14} [2738-19-4] BWEKDYGHDCHWEN-UHFFFAOYSA-N	1.6×10^{-5} 1.4×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl- <i>cis</i> -3-hexene C_7H_{14} [15840-60-5] IQANHQBWTVDLTP-WAYWQWQTSAN	1.9×10^{-5} 1.6×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl- <i>trans</i> -3-hexene C_7H_{14} [692-24-0] IQANHQBWTVDLTP-AATRIKPKSANA	1.9×10^{-5} 1.6×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-1-hexene C_7H_{14} [3404-61-3] RITONZMLZWYPHW-UHFFFAOYSA-N	1.9×10^{-5} 2.1×10^{-5} 1.7×10^{-5} 9.9×10^{-6} 1.0×10^{-5} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q ?	237 246 247 229 21
3-methyl- <i>cis</i> -2-hexene C_7H_{14} [10574-36-4] JZMUUSXQSKCZNO-ALCCZGGFSA-N	1.6×10^{-5} 1.5×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl- <i>trans</i> -2-hexene C_7H_{14} [20710-38-7] JZMUUSXQSKCZNO-FNORWQNLISA-N	1.6×10^{-5} 1.4×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl- <i>cis</i> -3-hexene C_7H_{14} [4914-89-0] FHSSXNRVNXBTBG-SREVVHEPSANA	1.7×10^{-5} 1.4×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl- <i>trans</i> -3-hexene C_7H_{14} [3899-36-3] FHHSSXNRVNXBTBG-VOTSOKGWSA-N	1.7×10^{-5} 1.3×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-1-hexene C_7H_{14} [3769-23-1] SUWJESCICIQHO-UHFFFAOYSA-N	1.8×10^{-5} 2.4×10^{-5} 1.7×10^{-5} 4.8×10^{-6} 1.3×10^{-5} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q ?	237 246 247 229, 267 21
4-methyl- <i>cis</i> -2-hexene C_7H_{14} [3683-19-0] MBNDKEPQUVZHCM-XQRVVYSFSA-N	1.9×10^{-5} 1.6×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl- <i>trans</i> -2-hexene C_7H_{14} [3683-22-5] MBNDKEPQUVZHCM-GQCTYLIAA-N	1.9×10^{-5} 1.6×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl-1-hexene C_7H_{14} [3524-73-0] JIUFYGIESXPUL-UHFFFAOYSA-N	1.9×10^{-5} 2.2×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl- <i>cis</i> -2-hexene C_7H_{14} [13151-17-2] GHBKCPRDHLITSE-PLNGDYQASA-N	1.8×10^{-5} 1.7×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl- <i>trans</i> -2-hexene C_7H_{14} [7385-82-2] GHBKCPRDHLITSE-SNAWJCMRSA-N	1.8×10^{-5} 1.7×10^{-5} 1.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-1-pentene C_7H_{14} [3404-72-6] LIMAEKMEXJTSNI-UHFFFAOYSA-N	1.9×10^{-5} 1.5×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-2-pentene C_7H_{14} [10574-37-5] WFHALSLYRWWUGH-UHFFFAOYSA-N	1.5×10^{-5} 1.0×10^{-5} 1.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-1-pentene C_7H_{14} [2213-32-3] LXQPBCHJNMIOMQU-UHFFFAOYSA-N	1.9×10^{-5} 1.4×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dimethyl-2-pentene C_7H_{14} [625-65-0] VVCFYASOGFVJFN-UHFFFAOYSA-N	2.0×10^{-5} 9.9×10^{-6} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3-dimethyl-1-pentene C_7H_{14} [3404-73-7] TXBZITDWMURSEF-UHFFFAOYSA-N	2.1×10^{-5} 1.8×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-1-pentene C_7H_{14} [7385-78-6] WFHXQNMTMDKVJG-UHFFFAOYSA-N	2.0×10^{-5} 2.0×10^{-5} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl- <i>cis</i> -2-pentene C_7H_{14} [4914-91-4] PPBWEVVDNRKEIK-ALCCZGGFSA-N	1.8×10^{-5} 1.2×10^{-5} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl- <i>trans</i> -2-pentene C_7H_{14} [4914-92-5] PPBWEVVDNRKEIK-FNORWQNLISA-N	1.7×10^{-5} 1.3×10^{-5} 1.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-dimethyl-1-pentene C_7H_{14} [762-62-9] KLCNJIQZXOQYTE-UHFFFAOYSA-N	2.1×10^{-5} 1.6×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-dimethyl- <i>cis</i> -2-pentene C_7H_{14} [762-63-0] BIDIHFPLDRSAMB-WAYWQWQTSAN	1.9×10^{-5} 1.4×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-dimethyl- <i>trans</i> -2-pentene C_7H_{14} [690-08-4] BIDIHFPLDRSAMB-AATRIKPKSANA	2.1×10^{-5} 1.2×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-ethyl-1-pentene C_7H_{14} [3404-71-5] TWCRRBJSQAZZQB-UHFFFAOYSA-N	1.6×10^{-5} 1.9×10^{-5} 1.5×10^{-5} 2.9×10^{-6} 2.4×10^{-5} 1.6×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q ?	237 246 247 229 21



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-1-pentene C_7H_{14} [4038-04-4] YPVPQMCSLFDIKA-UHFFFAOYSA-N	1.9×10^{-5}		Yaws (2003)	X	237
	2.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.7×10^{-5}		Gharagheizi et al. (2010)	Q	246
	4.9×10^{-6}		Modarresi et al. (2005)	Q	247
	1.3×10^{-5}		Yao et al. (2002)	Q	229
	1.9×10^{-5}		Yaws (1999)	?	21
3-ethyl-2-pentene C_7H_{14} [816-79-5] XMYFZAWUNVHVGI-UHFFFAOYSA-N	1.6×10^{-5}		Yaws (2003)	X	237
	1.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
3-methyl-2-ethyl-1-butene C_7H_{14} [7357-93-9] ADHCYQWFCLQBFG-UHFFFAOYSA-N	1.9×10^{-5}		Yaws (2003)	X	237
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.8×10^{-5}		Gharagheizi et al. (2010)	Q	246
2,3,3-trimethyl-1-butene C_7H_{14} [594-56-9] AUYRUAVCWAOHQN-UHFFFAOYSA-N	1.9×10^{-5}		Yaws (2003)	X	237
	1.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-5}		Gharagheizi et al. (2010)	Q	246
	3.0×10^{-6}		Modarresi et al. (2005)	Q	247
	7.8×10^{-6}		Yao et al. (2002)	Q	229
	2.0×10^{-5}		Yaws (1999)	?	21
1-octene C_8H_{16} [111-66-0] KWKAKUADMBZCLK-UHFFFAOYSA-N	1.6×10^{-5}		Brockbank (2013)	L	
	1.1×10^{-5}	4400	Plyasunov and Shock (2000)	L	
	1.0×10^{-5}		Mackay and Shiu (1981)	L	
	1.6×10^{-5}		Duchowicz et al. (2020)	V	186
	1.6×10^{-5}		HSDB (2015)	V	
	1.0×10^{-5}		Mackay et al. (2006a)	V	
	1.0×10^{-5}		Mackay et al. (1993)	V	
	1.0×10^{-5}		Hwang et al. (1992)	V	
	1.0×10^{-5}		Meylan and Howard (1991)	V	
	1.0×10^{-5}		Eastcott et al. (1988)	V	
	1.0×10^{-5}		Hine and Mookerjee (1975)	V	
	1.5×10^{-5}		McAuliffe (1966)	V	24
	1.6×10^{-5}		Yaws (2003)	X	237
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-6}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-5}		Gharagheizi et al. (2010)	Q	246
	9.2×10^{-6}		Hilal et al. (2008)	Q	
	2.6×10^{-5}		Modarresi et al. (2007)	Q	67
2.1×10^{-6}		Modarresi et al. (2005)	Q	247	
1.1×10^{-5}		Yaffe et al. (2003)	Q	248, 249	
1.9×10^{-5}		Yao et al. (2002)	Q	229	
1.6×10^{-5}		English and Carroll (2001)	Q	230, 231	



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.7×10^{-5}		Katritzky et al. (1998)	Q	
	8.4×10^{-6}		Russell et al. (1992)	Q	279
	1.8×10^{-5}		Suzuki et al. (1992)	Q	232
	1.6×10^{-5}		Meylan and Howard (1991)	Q	
	1.3×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	1.6×10^{-5}		Yaws (1999)	?	21
	1.6×10^{-5}		Yaws and Yang (1992)	?	21
	1.6×10^{-5}		Abraham et al. (1990)	?	
<i>cis</i> -2-octene C_8H_{16} [7642-04-8] ILPBINAXDRFYPL-HYXAFXHYSA-N	8.3×10^{-6}		Yaws (2003)	X	237
	1.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.6×10^{-6}		Gharagheizi et al. (2010)	Q	246
<i>trans</i> -2-octene C_8H_{16} [13389-42-9] ILPBINAXDRFYPL-HWKANZROSA-N	8.3×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.6×10^{-6}		Gharagheizi et al. (2010)	Q	246
	8.4×10^{-6}		Yaws (1999)	?	21
<i>cis</i> -3-octene C_8H_{16} [14850-22-7] YCTDZYMMFQCTEO-ALCCZGGFSA-N	8.9×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.6×10^{-6}		Gharagheizi et al. (2010)	Q	246
<i>trans</i> -3-octene C_8H_{16} [14919-01-8] YCTDZYMMFQCTEO-FNORWQNLSA-N	8.6×10^{-6}		Yaws (2003)	X	237
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.6×10^{-6}		Gharagheizi et al. (2010)	Q	246
	8.8×10^{-6}		Yaws (1999)	?	21
<i>cis</i> -4-octene C_8H_{16} [7642-15-1] IRUCBBFNLDIMIK-FPLPWBNSA-N	8.9×10^{-6}		Yaws (2003)	X	237
	1.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.6×10^{-6}		Gharagheizi et al. (2010)	Q	246
<i>trans</i> -4-octene C_8H_{16} [14850-23-8] IRUCBBFNLDIMIK-BQYQJAHWSA-N	8.9×10^{-6}		Yaws (2003)	X	237
	1.6×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.6×10^{-6}		Gharagheizi et al. (2010)	Q	246
	9.1×10^{-6}		Yaws (1999)	?	21
2-methyl-1-heptene C_8H_{16} [15870-10-7] RCBGGJURENJHKV-UHFFFAOYSA-N	9.6×10^{-6}		Yaws (2003)	X	237
	1.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.8×10^{-6}		Gharagheizi et al. (2010)	Q	246
2-methyl-2-heptene C_8H_{16} [627-97-4] WEPNJTDVIKRIK-UHFFFAOYSA-N	8.9×10^{-6}		Yaws (2003)	X	237
	1.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.1×10^{-6}		Gharagheizi et al. (2010)	Q	246



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl- <i>cis</i> -3-heptene C_8H_{16} [20488-34-0] CYEZJYAMLNTSKN-SREVVHEPSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl- <i>trans</i> -3-heptene C_8H_{16} [692-96-6] CYEZJYAMLNTSKN-VOTSOKGWSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-1-heptene C_8H_{16} [4810-09-7] QDMFTFWKTYXBWU-UHFFFAOYSA-N	1.1×10^{-5} 1.8×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl- <i>cis</i> -2-heptene C_8H_{16} [22768-19-0] OFKLSPUVNMOIJB-YVMONPNESA-N	9.0×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl- <i>trans</i> -2-heptene C_8H_{16} [22768-20-3] OFKLSPUVNMOIJB-VMPITWQZSA-N	9.0×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl- <i>cis</i> -3-heptene C_8H_{16} [22768-17-8] AAUHUBDBDJONC-FPLPWBNSA-N	9.2×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl- <i>trans</i> -3-heptene C_8H_{16} [22768-18-9] AAUHUBDBDJONC-BQYQJAHWSA-N	9.2×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-1-heptene C_8H_{16} [13151-05-8] BFGOGLKYJXQPJZ-UHFFFAOYSA-N	1.1×10^{-5} 1.9×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl- <i>cis</i> -2-heptene C_8H_{16} [66225-16-9] SVGLFIBXVQUQY-XQRVVYFSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl- <i>trans</i> -2-heptene C_8H_{16} [66225-17-0] SVGLFIBXVQUQY-GQCTYLIIASA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl- <i>cis</i> -3-heptene C_8H_{16} [14255-24-4] KKVVJQGDNYIIMN-VURMDHGXA-N	9.0×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl- <i>trans</i> -3-heptene C_8H_{16} [13714-85-7] KKVVJQGDNYIIMN-SOFGYWHQSA-N	9.0×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl-1-heptene C_8H_{16} [13151-04-7] WNEYWVBECCQRT-UHFFFAOYSA-N	1.1×10^{-5} 1.9×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl- <i>cis</i> -2-heptene C_8H_{16} [24608-84-2] VIHUHUGDEZCPDK-XQRVVYSFSA-N	9.9×10^{-6} 1.5×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl- <i>trans</i> -2-heptene C_8H_{16} [24608-85-3] VIHUHUGDEZCPDK-GQCTYLIASA-N	9.9×10^{-6} 1.5×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl- <i>cis</i> -3-heptene C_8H_{16} [50422-80-5] YMNTZRCUPAYGLG-SREVIHEPSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl- <i>trans</i> -3-heptene C_8H_{16} [53510-18-2] YMNTZRCUPAYGLG-VOTSOKGWSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
6-methyl-1-heptene C_8H_{16} [5026-76-6] DFVOXRAAHOJBN-UHFFFAOYSA-N	1.1×10^{-5} 1.9×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
6-methyl- <i>cis</i> -2-heptene C_8H_{16} [66225-18-1] LXBJRNXXTAWCKU-PLNGDYQASA-N	1.0×10^{-5} 1.5×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
6-methyl- <i>trans</i> -2-heptene C_8H_{16} [51065-65-7] LXBJRNXXTAWCKU-SNAWJCMRSA-N	1.0×10^{-5} 1.5×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
6-methyl- <i>cis</i> -3-heptene C_8H_{16} [66225-19-2] PMPISKBGRHSPEE-WAYWQWQTSA-N	1.1×10^{-5} 1.4×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
6-methyl- <i>trans</i> -3-heptene C_8H_{16} [66225-20-5] PMPISKBGRHSPEE-AATRIKPKSA-N	1.0×10^{-5} 1.4×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl- <i>cis</i> -3-hexene C_8H_{16} [690-92-6] JPLZSSHKOZJYTJ-SREVYHEPSA-N	1.2×10^{-5} 1.1×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl- <i>trans</i> -3-hexene C_8H_{16} [690-93-7] JPLZSSHKOZJYTJ-VOTSOKGWSA-N	1.4×10^{-5} 9.4×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-1-hexene C_8H_{16} [16746-86-4] LVLXQRZPKUFJQ-UHFFFAOYSA-N	1.2×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-2-hexene C_8H_{16} [7145-20-2] RGYAVZGBAJFMIZ-UHFFFAOYSA-N	9.1×10^{-6} 7.8×10^{-6} 9.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl- <i>cis</i> -3-hexene C_8H_{16} [59643-75-3] PRTXQHCLTIKAAJ-VURMDHGXA-N	1.1×10^{-5} 9.2×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl- <i>trans</i> -3-hexene C_8H_{16} [66225-30-7] PRTXQHCLTIKAAJ-SOFGYWHQSA-N	1.1×10^{-5} 9.2×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-1-hexene C_8H_{16} [16746-87-5] PKVDGQHNRICJLA-UHFFFAOYSA-N	1.1×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-2-hexene C_8H_{16} [14255-23-3] IZSBIPQYBGDXJZ-UHFFFAOYSA-N	1.2×10^{-5} 8.4×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dimethyl- <i>cis</i> -3-hexene C_8H_{16} [37549-89-6] VFCHHMABGOYOQI-VURMDHGXA-N	1.2×10^{-5} 8.0×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl- <i>trans</i> -3-hexene C_8H_{16} [61847-78-7] VFCHHMABGOYOQI-SOFGYWHQSA-N	1.2×10^{-5} 7.7×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-1-hexene C_8H_{16} [6975-92-4] ISZWTVCVSJVEOL-UHFFFAOYSA-N	1.1×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-2-hexene C_8H_{16} [3404-78-2] VFZIUUUQFYZBR-UHFFFAOYSA-N	1.2×10^{-5} 8.8×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl- <i>cis</i> -3-hexene C_8H_{16} [10557-44-5] KNCKMKWVOMRUHKZ-WAYWQWQTSAN	1.3×10^{-5} 9.6×10^{-6} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl- <i>trans</i> -3-hexene C_8H_{16} [692-70-6] KNCKMKWVOMRUHKZ-AATRIKPKSAN	1.4×10^{-5} 9.6×10^{-6} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3-dimethyl-1-hexene C_8H_{16} [3404-77-1] RXYYKIMRVXDSFR-UHFFFAOYSA-N	1.3×10^{-5} 1.5×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-1-hexene C_8H_{16} [16745-94-1] OWWRMMIWAOBFBK-UHFFFAOYSA-N	1.1×10^{-5} 1.9×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl- <i>cis</i> -2-hexene C_8H_{16} [19550-81-3] FMNLVKMLDPGPRY-ALCCZGGFSA-N	1.0×10^{-5} 9.8×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl- <i>trans</i> -2-hexene C_8H_{16} [19550-82-4] FMNLVKMLDPGPRY-FNORWQNLNAN	1.0×10^{-5} 9.8×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4-dimethyl- <i>cis</i> -3-hexene C_8H_{16} [19550-87-9] XTUXVDJHGIEBAA-FPLPWBNSA-N	9.0×10^{-6} 7.9×10^{-6} 9.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl- <i>trans</i> -3-hexene C_8H_{16} [19550-88-0] XTUXVDJHGIEBAA-BQYQJAHWSA-N	9.0×10^{-6} 7.9×10^{-6} 9.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyl-1-hexene C_8H_{16} [7423-69-0] FEZKAPRRVNNJTK-UHFFFAOYSA-N	1.3×10^{-5} 1.5×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyl- <i>cis</i> -2-hexene C_8H_{16} [66225-31-8] BQAZYKYBFAMHPG-YVMONPNESA-N	1.1×10^{-5} 8.7×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyl- <i>trans</i> -2-hexene C_8H_{16} [66225-12-5] BQAZYKYBFAMHPG-VMPITWQZSA-N	1.1×10^{-5} 8.7×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-dimethyl-1-hexene C_8H_{16} [1647-08-1] SUJVMIXNUAJEY-UHFFFAOYSA-N	1.2×10^{-5} 1.6×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-dimethyl- <i>cis</i> -2-hexene C_8H_{16} OQEVAISXHCROGF-ALCCZGGFSA-N	1.3×10^{-5} 1.1×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-dimethyl- <i>trans</i> -2-hexene C_8H_{16} [19550-83-5] OQEVAISXHCROGF-FNORWQNLISA-N	1.3×10^{-5} 1.1×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,5-dimethyl-1-hexene C_8H_{16} [16106-59-5] UFWIBUBEFUNVNI-UHFFFAOYSA-N	1.2×10^{-5} 1.7×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,5-dimethyl- <i>cis</i> -2-hexene C_8H_{16} [65036-71-7] OAVNNZUEVHDCKP-WAYWQWQTSAN	1.2×10^{-5} 1.2×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,5-dimethyl- <i>trans</i> -2-hexene C_8H_{16} [66225-14-7] OAVNNZUEVHDCPK-AATRIKPKSA-N	1.2×10^{-5} 1.2×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5,5-dimethyl-1-hexene C_8H_{16} [7116-86-1] KZJIOVQKSAOPOP-UHFFFAOYSA-N	1.4×10^{-5} 1.4×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5,5-dimethyl- <i>cis</i> -2-hexene C_8H_{16} [39761-61-0] NWZJLSKAFZXSQH-WAYWQWQTSA-N	1.2×10^{-5} 1.1×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5,5-dimethyl- <i>trans</i> -2-hexene C_8H_{16} [39782-43-9] NWZJLSKAFZXSQH-AATRIKPKSA-N	1.3×10^{-5} 1.0×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-ethyl-1-hexene C_8H_{16} [1632-16-2] XTVRLCUJHGUXCP-UHFFFAOYSA-N	9.2×10^{-6} 2.0×10^{-5} 9.8×10^{-6} 9.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	237 246 21
3-ethyl-1-hexene C_8H_{16} [3404-58-8] OLGHJTHQWQKJQQ-UHFFFAOYSA-N	1.2×10^{-5} 1.7×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-3-hexene C_8H_{16} [16789-51-8] AUJLDZJNMXNESO-UHFFFAOYSA-N	1.0×10^{-5} 9.6×10^{-6} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl- <i>cis</i> -2-hexene C_8H_{16} [36880-72-5] QEMJIDSLEPYRLM-YVMONPNESA-N	9.2×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl- <i>trans</i> -2-hexene C_8H_{16} [66225-15-8] QEMJIDSLEPYRLM-VMPITWQZSA-N	9.2×10^{-6} 1.1×10^{-5} 9.1×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-ethyl-1-hexene C_8H_{16} [16746-85-3] OPMUAJRVOWSBTP-UHFFFAOYSA-N	1.3×10^{-5} 1.7×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-ethyl- <i>cis</i> -2-hexene C_8H_{16} [54616-49-8] STHONQMAWQLWLX-DAXSKMNVSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-ethyl- <i>trans</i> -2-hexene C_8H_{16} [19781-63-6] STHONQMAWQLWLX-QPJXVBHSA-N	1.1×10^{-5} 1.3×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3-trimethyl-1-pentene C_8H_{16} [560-23-6] TUSBCMPNIOJUBX-UHFFFAOYSA-N	1.2×10^{-5} 1.2×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4-trimethyl-1-pentene C_8H_{16} [565-76-4] FAWUHEYSSPPNSH-UHFFFAOYSA-N	1.2×10^{-5} 1.1×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4-trimethyl-2-pentene C_8H_{16} [565-77-5] SZFRZEBLZFTODC-UHFFFAOYSA-N	1.0×10^{-5} 6.8×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4-trimethyl-1-pentene C_8H_{16} [107-39-1] FXNDIJDIPNCZQJ-UHFFFAOYSA-N	1.2×10^{-5} 1.3×10^{-5} 9.0×10^{-6} 1.2×10^{-5} 2.6×10^{-6} 1.1×10^{-5} 1.2×10^{-5}		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q Q ?	237 99 246 247 229 21
2,4,4-trimethyl-2-pentene C_8H_{16} [107-40-4] LAAVYEUJEMRIGF-UHFFFAOYSA-N	1.2×10^{-5} 1.1×10^{-5} 6.8×10^{-6} 1.2×10^{-5} 5.9×10^{-6} 1.0×10^{-5} 1.2×10^{-5}		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2005) Yao et al. (2002) Yaws (1999)	X Q Q Q Q Q ?	237 99 246 247 229 21
3,3,4-trimethyl-1-pentene C_8H_{16} [560-22-5] LLFHCOPDCJMKY-UHFFFAOYSA-N	1.3×10^{-5} 1.5×10^{-5} 1.4×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,4-trimethyl-1-pentene C_8H_{16} [564-03-4] BOPVNOMJIDZBQB-UHFFFAOYSA-N	1.3×10^{-5} 1.5×10^{-5} 1.4×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4,4-trimethyl-2-pentene C_8H_{16} [598-96-9] FZQMZR XKWHQJAG-UHFFFAOYSA-N	1.1×10^{-5}		HSDB (2015)	Q	99
3,4,4-trimethyl- <i>cis</i> -2-pentene C_8H_{16} [39761-64-3] FZQMZR XKWHQJAG-SREVVHEPSA-N	1.1×10^{-5} 8.9×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,4-trimethyl- <i>trans</i> -2-pentene C_8H_{16} [39761-57-4] FZQMZR XKWHQJAG-VOTSOKGWSA-N	1.1×10^{-5} 8.9×10^{-6} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3-ethyl-1-pentene C_8H_{16} [19780-66-6] HPHHYSWOBXEIRG-UHFFFAOYSA-N	1.1×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3-ethyl-2-pentene C_8H_{16} [19780-67-7] FQYUGAXHZSQHMU-UHFFFAOYSA-N	1.1×10^{-5} 6.8×10^{-6} 9.0×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-2-ethyl-1-pentene C_8H_{16} [3404-67-9] YXLCVBVDFKWWRW-UHFFFAOYSA-N	1.2×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-3-ethyl-1-pentene C_8H_{16} [6196-60-7] PHHHEKOJKDYRIN-UHFFFAOYSA-N	1.1×10^{-5} 1.9×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-2-ethyl-1-pentene C_8H_{16} [3404-80-6] TVBQWTDYXVGWJL-UHFFFAOYSA-N	1.2×10^{-5} 1.2×10^{-5} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-3-ethyl-1-pentene C_8H_{16} [61847-80-1] DTNALCAUPPLROB-UHFFFAOYSA-N	1.2×10^{-5} 1.6×10^{-5} 1.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-3-ethyl- <i>cis</i> -2-pentene C_8H_{16} [42067-48-1] DSTFDBMUTNIZGD-YVMONPNESA-N	1.0×10^{-5} 9.8×10^{-6} 1.1×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-decene $C_{10}H_{20}$ [872-05-9] AFFLGGQVNFPEV-UHFFFAOYSA-N	8.6×10^{-6} 1.8×10^{-5} 3.7×10^{-6} 3.3×10^{-6} 3.7×10^{-6} 1.6×10^{-3} 2.4×10^{-5} 7.3×10^{-6} 4.2×10^{-6} 4.7×10^{-6}		Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (1993) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999)	L V V V X Q Q Q Q ?	186 237 246 21
2-methyl-1-nonene $C_{10}H_{20}$ [2980-71-4] YLZQHQUVNVZGOK-UHFFFAOYSA-N	4.3×10^{-6} 1.0×10^{-5} 5.2×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-undecene $C_{11}H_{22}$ [821-95-4] DCTOHCCUXLBQMS-UHFFFAOYSA-N	4.5×10^{-6} 6.7×10^{-6} 2.9×10^{-5} 6.7×10^{-6} 2.2×10^{-6} 1.2×10^{-5} 4.6×10^{-6}		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	X Q Q Q Q Q ?	237 99 246 229 21
2-methyl-1-decene $C_{11}H_{22}$ [13151-27-4] HLMACKQLXSEXY-UHFFFAOYSA-N	3.4×10^{-6} 1.8×10^{-5} 4.4×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-dodecene $C_{12}H_{24}$ [112-41-4] CRSBERNSMYQZNG-UHFFFAOYSA-N	5.1×10^{-6} 2.3×10^{-6} 3.4×10^{-5} 7.1×10^{-6} 1.5×10^{-6} 9.9×10^{-6} 5.2×10^{-6}		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	X Q Q Q Q Q ?	237 99 246 229 21
2-methyl-1-undecene $C_{12}H_{24}$ [18516-37-5] SJVKHZYVCVKEGM-UHFFFAOYSA-N	3.4×10^{-6} 4.3×10^{-6}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,2,4,6,6-pentamethyl-3-heptene $C_{12}H_{24}$ [123-48-8] NBUMCEJRJRLCA-UHFFFAOYSA-N	3.6×10^{-6} 5.2×10^{-7} 1.8×10^{-5} 1.5×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-tridecene $C_{13}H_{26}$ [2437-56-1] VQOXUMQBYILCKR-UHFFFAOYSA-N	5.8×10^{-6} 5.8×10^{-6} 9.4×10^{-6} 3.8×10^{-6} 3.9×10^{-5} 8.8×10^{-6} 9.2×10^{-6} 5.9×10^{-6}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X X Q Q Q Q Q ?	258 237 259 99 246 229 21
2-methyl-1-dodecene $C_{13}H_{26}$ [16435-49-7] PWRBDKMPAZFCSV-UHFFFAOYSA-N	4.1×10^{-6} 2.4×10^{-5} 4.9×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-tetradecene $C_{14}H_{28}$ [1120-36-1] HFDVRLIODXPAHB-UHFFFAOYSA-N	3.0×10^{-6} 1.4×10^{-5} 1.2×10^{-6} 4.3×10^{-5} 1.3×10^{-5} 1.5×10^{-5}		Brockbank (2013) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	L X Q Q Q ?	 237 99 246 21
2-tetradecene $C_{14}H_{28}$ [638-60-8] OBDUMNZXAIUUTH-UHFFFAOYSA-N	7.5×10^{-6} 4.0×10^{-5} 4.6×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-1-tridecene $C_{14}H_{28}$ [18094-01-4] VNBHQOHLCLURDN-UHFFFAOYSA-N	8.9×10^{-6} 3.0×10^{-5} 6.9×10^{-6}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-pentadecene $C_{15}H_{30}$ [13360-61-7] PJLHTVIBELQURV-UHFFFAOYSA-N	2.2×10^{-6} 3.5×10^{-5} 4.7×10^{-5} 2.6×10^{-5} 8.7×10^{-5} 3.6×10^{-5}		Brockbank (2013) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	L X Q Q Q ?	 237 246 229, 267 21
2-methyl-1-tetradecene $C_{15}H_{30}$ [52254-38-3] WSNMNSLVXDWAFZ-UHFFFAOYSA-N	1.1×10^{-5} 2.9×10^{-5} 1.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-hexadecene $C_{16}H_{32}$ [629-73-2] GQEZCXVZFLOKMC-UHFFFAOYSA-N	5.7×10^{-5} 4.9×10^{-5} 6.7×10^{-5} 5.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	237 246 21



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-1-pentadecene $C_{16}H_{32}$ [29833-69-0] FWQJRKLXMTXDY-UHFFFAOYSA-N	2.5×10^{-5}		Yaws (2003)	X	237
	3.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.8×10^{-5}		Gharagheizi et al. (2010)	Q	246
2,4-dimethylpentadecane $C_{17}H_{36}$ [61868-07-3] TXGHMPJBDYZJLF-UHFFFAOYSA-N	1.1×10^{-5}		Yaws (2003)	X	237
	4.0×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.1×10^{-5}		Gharagheizi et al. (2010)	Q	246
1,2-butadiene C_4H_6 [590-19-2] QNRMTGGDHLBXQZ-UHFFFAOYSA-N	1.2×10^{-4}		Yaws (2003)	X	237
	1.0×10^{-4}		HSDB (2015)	Q	99
	1.5×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-4}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-4}		Yaws (1999)	?	21
1,3-butadiene C_4H_6 [106-99-0] KAKZBPTYRLMSJV-UHFFFAOYSA-N	1.4×10^{-4}	3200	Plyasunov and Shock (2000)	L	
	1.3×10^{-4}		Mackay and Shiu (1981)	L	
	1.4×10^{-4}	4500	Wilhelm et al. (1977)	L	
	1.4×10^{-4}		Ross and Hudson (1957)	M	
	1.3×10^{-4}		Duchowicz et al. (2020)	V	186
	1.3×10^{-4}		HSDB (2015)	V	
	1.3×10^{-4}		Mackay et al. (2006a)	V	
	3.9×10^{-6}		Lide and Frederikse (1995)	V	
	4.8×10^{-5}		Mackay et al. (1993)	V	
	5.0×10^{-5}		Hwang et al. (1992)	V	
	1.6×10^{-4}		Hine and Mookerjee (1975)	V	
	1.2×10^{-4}		Irmann (1965)	V	
	1.4×10^{-4}		Yaws (2003)	X	237
	1.5×10^{-4}		Irmann (1965)	C	
	1.5×10^{-4}		Hayer et al. (2022)	Q	20
	5.6×10^{-3}		Duchowicz et al. (2020)	Q	
	6.3×10^{-4}		Wang et al. (2017)	Q	80, 238
	1.4×10^{-4}		Wang et al. (2017)	Q	80, 239
	2.0×10^{-4}		Wang et al. (2017)	Q	80, 240
	2.7×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
1.4×10^{-4}		Gharagheizi et al. (2010)	Q	246	
1.8×10^{-4}		Hilal et al. (2008)	Q		
1.8×10^{-4}		Modarresi et al. (2007)	Q	67	
		3600	Kühne et al. (2005)	Q	
1.3×10^{-5}		Modarresi et al. (2005)	Q	247	
1.3×10^{-4}		Yaffe et al. (2003)	Q	248, 249	
2.5×10^{-4}		Yao et al. (2002)	Q	229	
1.3×10^{-4}		English and Carroll (2001)	Q	230, 274	
1.8×10^{-4}		Suzuki et al. (1992)	Q	232	



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.2×10^{-5}	4100	Nirmalakhandan and Speece (1988)	Q	
	1.4×10^{-4}		Kühne et al. (2005)	?	
	1.4×10^{-4}		Yaws (1999)	?	21
	1.4×10^{-4}		Yaws and Yang (1992)	?	21
3-methyl-1,2-butadiene C_5H_8	1.1×10^{-4}	2700	Yaws (2003)	X	237
(2-methyl-2,3-butadiene) [598-25-4] PAKGDPCXSUALC-UHFFFAOYSA-N	7.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	9.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.0×10^{-5}		Modarresi et al. (2005)	Q	247
	1.1×10^{-4}	Yaws (1999)	?	21	
2-methyl-1,3-butadiene C_5H_8 (isoprene) [78-79-5] RRHGJUQNOFWUDK-UHFFFAOYSA-N	1.3×10^{-4}	2700	Plyasunov and Shock (2000)	L	
	1.3×10^{-4}		Mackay and Shiu (1981)	L	
	3.0×10^{-4}	4400	Schuhfried et al. (2015)	M	
	3.4×10^{-4}		Leng et al. (2013)	M	
	1.2×10^{-4}		Ooki and Yokouchi (2011)	M	70
	2.9×10^{-4}		Karl et al. (2003)	M	28
	1.3×10^{-4}		Duchowicz et al. (2020)	V	186
	1.3×10^{-4}		Martins et al. (2017)	V	315
	1.3×10^{-4}		HSDB (2015)	V	
	1.3×10^{-4}		Mackay et al. (2006a)	V	
	1.3×10^{-4}		Copolovici and Niinemets (2005)	V	
	1.3×10^{-4}		Mackay et al. (1993)	V	
	1.3×10^{-4}		Hine and Mookerjee (1975)	V	
	1.3×10^{-4}		Yaws (2003)	X	237
	1.8×10^{-3}		Duchowicz et al. (2020)	Q	
	4.1×10^{-4}		Wang et al. (2017)	Q	80, 238
	1.6×10^{-4}	Wang et al. (2017)	Q	80, 239	
	1.9×10^{-4}	Wang et al. (2017)	Q	80, 240	
	1.8×10^{-4}	Gharagheizi et al. (2012)	Q		
	1.6×10^{-4}	Raventos-Duran et al. (2010)	Q	242, 243	
	1.6×10^{-4}	Raventos-Duran et al. (2010)	Q	244	
	7.8×10^{-5}	Raventos-Duran et al. (2010)	Q	245	
	1.0×10^{-4}	Gharagheizi et al. (2010)	Q	246	
	2.7×10^{-4}	Hilal et al. (2008)	Q		
	1.1×10^{-5}	Modarresi et al. (2005)	Q	247	
	1.3×10^{-4}	Yaffe et al. (2003)	Q	248, 249	
	1.0×10^{-4}	Yao et al. (2002)	Q	229	
	1.1×10^{-4}	Yao et al. (2002)	Q	229	
	1.0×10^{-4}	English and Carroll (2001)	Q	230, 231	
	1.4×10^{-4}	Suzuki et al. (1992)	Q	232	
	6.7×10^{-5}	Nirmalakhandan and Speece (1988)	Q		
	1.1×10^{-4}	Yaws (1999)	?	21	
	1.3×10^{-4}	Yaws (1999)	?	21	
	1.3×10^{-4}	Yaws and Yang (1992)	?	21	



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-pentadiene C_5H_8 [591-96-8] PODAMDNDJNMAKAZ-UHFFFAOYSA-N	1.1×10^{-4} 8.8×10^{-5} 9.6×10^{-5} 1.1×10^{-4} 1.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999)	X Q Q Q ?	237 246 21
1,2-hexadiene C_6H_{10} [592-44-9] XIAJQOBRHVKGSP-UHFFFAOYSA-N	7.5×10^{-5} 1.2×10^{-4} 9.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>cis</i> -1,3-hexadiene C_6H_{10} [14596-92-0] AHAREKHAZNPPI-WAYWQWQTSAN	7.7×10^{-5} 2.1×10^{-4} 8.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>trans</i> -1,3-hexadiene C_6H_{10} [20237-34-7] AHAREKHAZNPPI-AATRIKPKSAN	7.7×10^{-5} 2.1×10^{-4} 8.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,4-hexadiene C_6H_{10} [592-45-0] PRBHEGAFDMLAL-UHFFFAOYSA-N	8.4×10^{-5}		HSDB (2015)	Q	99
<i>cis</i> -1,4-hexadiene C_6H_{10} [7318-67-4] PRBHEGAFDMLAL-XQRVVYSFSAN	8.3×10^{-5} 1.7×10^{-4} 8.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
<i>trans</i> -1,4-hexadiene C_6H_{10} [7319-00-8] PRBHEGAFDMLAL-GQCTYLIASAN	8.3×10^{-5} 1.7×10^{-4} 8.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,5-hexadiene C_6H_{10} [592-42-7] PYGSKMBEVAICCR-UHFFFAOYSA-N	6.8×10^{-5} 7.0×10^{-5} 6.9×10^{-5} 6.7×10^{-5} 7.3×10^{-5} 8.1×10^{-5} 5.6×10^{-3} 2.0×10^{-4} 7.7×10^{-5} 5.8×10^{-5} 1.0×10^{-4} 9.4×10^{-6} 5.8×10^{-5} 3.5×10^{-5} 7.5×10^{-5}		Plyasunov and Shock (2000) Duchowicz et al. (2020) Mackay et al. (2006a) Hwang et al. (1992) Hine and Mookerjee (1975) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Modarresi et al. (2005) Yaffe et al. (2003) Yao et al. (2002) English and Carroll (2001)	L V V V V X Q Q Q Q Q Q Q Q Q Q	186 237 248, 249 229 230, 231



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-4}		Suzuki et al. (1992)	Q	232
	5.8×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	8.4×10^{-5}		Yaws (1999)	?	21
2,3-hexadiene C_6H_{10} [592-49-4] DPUXQWOMYBMHRN-UHFFFAOYSA-N	8.1×10^{-5}		Yaws (2003)	X	237
	6.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	8.0×10^{-5}		Gharagheizi et al. (2010)	Q	246
<i>cis</i> -2, <i>cis</i> -4-hexadiene C_6H_{10} [6108-61-8] APPOKADJQUIAHP-GLIMQPGKSA-N	7.1×10^{-5}		Yaws (2003)	X	237
	1.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
<i>cis</i> -2, <i>trans</i> -4-hexadiene C_6H_{10} [5194-50-3] APPOKADJQUIAHP-CIIODKQPSA-N	6.8×10^{-5}		Yaws (2003)	X	237
	1.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	7.0×10^{-5}		Yaws (1999)	?	21
<i>trans</i> -2, <i>trans</i> -4-hexadiene C_6H_{10} [5194-51-4] APPOKADJQUIAHP-GGWOSOGESA-N	7.0×10^{-5}		Yaws (2003)	X	237
	1.7×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	7.2×10^{-5}		Yaws (1999)	?	21
2-methyl-1,4-pentadiene C_6H_{10} [763-30-4] DRWYRROCDFQZQF-UHFFFAOYSA-N	8.8×10^{-5}		Yaws (2003)	X	237
	1.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	9.8×10^{-5}		Gharagheizi et al. (2010)	Q	246
2-methyl-1, <i>cis</i> -3-pentadiene C_6H_{10} [1501-60-6] RCJMVGJKROQDCB-PLNGDYQASA-N	7.3×10^{-5}		Yaws (2003)	X	237
	1.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
2-methyl-1, <i>trans</i> -3-pentadiene C_6H_{10} [926-54-5] RCJMVGJKROQDCB-SNAWJCMRSA-N	7.3×10^{-5}		Yaws (2003)	X	237
	1.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
2-methyl-2,3-pentadiene C_6H_{10} [3043-33-2] JWMDOGMKTRMFDS-UHFFFAOYSA-N	7.6×10^{-5}		Yaws (2003)	X	237
	5.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	8.2×10^{-5}		Gharagheizi et al. (2010)	Q	246
3-methyl-1,2-pentadiene C_6H_{10} [7417-48-3] INFFCVIZNSUFGK-UHFFFAOYSA-N	7.8×10^{-5}		Yaws (2003)	X	237
	7.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	7.9×10^{-5}		Gharagheizi et al. (2010)	Q	246



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Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-1, <i>cis</i> -3-pentadiene C_6H_{10} [2787-45-3] BOGRNZQRTNVZCZ-WAYWQWQTS-A-N	7.2×10^{-5} 1.6×10^{-4} 7.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-1, <i>trans</i> -3-pentadiene C_6H_{10} [2787-43-1] BOGRNZQRTNVZCZ-AATRIKPKSA-N	7.2×10^{-5} 1.6×10^{-4} 7.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-1,4-pentadiene C_6H_{10} [1115-08-8] IKQUUYDRTYXAP-UHFFFAOYSA-N	8.6×10^{-5} 1.9×10^{-4} 9.6×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-1,2-pentadiene C_6H_{10} [13643-05-5] CAAAXQFHDYHTTC-UHFFFAOYSA-N	7.8×10^{-5} 9.7×10^{-5} 9.2×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-1,3-pentadiene C_6H_{10} [926-56-7] CJSBUWDGPXGFGA-UHFFFAOYSA-N	7.3×10^{-5} 1.6×10^{-4} 7.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-ethyl-1,3-butadiene C_6H_{10} [3404-63-5] IGLWCQMINTGCUBB-UHFFFAOYSA-N	7.4×10^{-5} 2.2×10^{-4} 8.3×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-1,3-butadiene C_6H_{10} [513-81-5] SDJHPPZKZZWAKF-UHFFFAOYSA-N	2.0×10^{-4} 2.0×10^{-4} 2.0×10^{-4} 2.0×10^{-4} 2.1×10^{-4} 7.7×10^{-5} 6.0×10^{-4} 1.3×10^{-4} 7.8×10^{-5} 1.9×10^{-4} 8.1×10^{-6} 4.7×10^{-5} 3.8×10^{-5} 9.9×10^{-5} 5.2×10^{-5} 4.7×10^{-5} 8.0×10^{-5}		Duchowicz et al. (2020) Mackay et al. (2006a) Mackay et al. (1993) Meylan and Howard (1991) Hine and Mookerjee (1975) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2005) Yaffe et al. (2003) Yao et al. (2002) Suzuki et al. (1992) Meylan and Howard (1991) Nirmalakhandan and Speece (1988) Yaws (1999)	V V V V V X Q Q Q Q Q Q Q Q Q Q Q Q ?	186 237 246 247 248, 249 229 232



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methylcyclohexene $C_6H_9CH_3$ [591-49-1] CTMHWIWNRWQEG-UHFFFAOYSA-N	1.4×10^{-4} 1.3×10^{-4} 1.2×10^{-4} 1.3×10^{-4} 1.4×10^{-3} 1.9×10^{-4} 1.2×10^{-4} 1.3×10^{-4} 2.4×10^{-4} 1.6×10^{-4} 9.2×10^{-5}		Plyasunov and Shock (2000) Duchowicz et al. (2020) Mackay et al. (2006a) Hine and Mookerjee (1975) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Suzuki et al. (1992)	L V V V Q Q Q Q Q Q Q	186 67 248, 249 230, 231 232
cyclooctene C_8H_{14} [931-88-4] URYVVOIYTNXXBN-UPHR SURJSA-N	2.1×10^{-4} 2.1×10^{-4} 2.1×10^{-4}	4300 4300	Brockbank (2013) Dohányosová et al. (2004) Mackay et al. (2006a) Kühne et al. (2005) Kühne et al. (2005)	L M V Q ?	1 317
1,1,2,3,3-pentamethyl-2,3,4,5,6,7-hexahydro-1H-indene $C_{14}H_{24}$ [33704-59-5] CDEGOUYLXTUDAU-UHFFFAOYSA-N	2.5×10^{-5} 2.5×10^{-6} 1.1×10^{-3} 7.3×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,3-cyclopentadiene C_5H_6 [542-92-7] ZSWFCLXCOIISFI-UHFFFAOYSA-N	1.8×10^{-4} 4.7×10^{-4} 4.7×10^{-4} 5.1×10^{-3} 1.2×10^{-3}		Plyasunov and Shock (2000) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008)	L V V Q Q	186
1,3-cyclohexadiene C_6H_8 [592-57-4] MGNZXYWBUKAI-UHFFFAOYSA-N	6.7×10^{-4} 8.6×10^{-4} 4.4×10^{-4} 1.1×10^{-3} 6.7×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999)	X Q Q Q ?	237 246 21
1,4-cyclohexadiene C_6H_8 (1,4-dihydrobenzene) [628-41-1] UVJHQYIOXKWHFD-UHFFFAOYSA-N	1.3×10^{-3} 1.0×10^{-3} 1.1×10^{-3} 9.7×10^{-4} 1.0×10^{-3} 4.9×10^{-4} 6.2×10^{-4} 9.9×10^{-5} 8.0×10^{-4} 5.4×10^{-4}	4000 3800	Brockbank (2013) Plyasunov and Shock (2000) Mackay et al. (2006a) Mackay et al. (1993) Hilal et al. (2008) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	L L V V C Q Q Q Q Q	1 271, 243 244 245 67



Table A2.3: Aliphatic alkenes and cycloalkenes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3a,4,7,7a-tetrahydro-4,7-methano-1H-indene $C_{10}H_{12}$ (dicyclopentadiene) [77-73-6] HECLRDQVFMWTQS-UHFFFAOYSA-N	1.6×10^{-4}		HSDB (2015)	Q	99
1,5,9-cyclododecatriene $C_{12}H_{18}$ [4904-61-4] ZOLLIQAKMYWTBR-UHFFFAOYSA-N	2.8×10^{-5}		Hilal et al. (2008)	Q	
1,5,9-cyclododecatriene $C_{12}H_{18}$ [4904-61-4] ZOLLIQAKMYWTBR-UHFFFAOYSA-N	3.3×10^{-4}		HSDB (2015)	Q	99
(<i>E,E,Z</i>)-1,5,9-cyclododecatriene $C_{12}H_{18}$ [706-31-0] ZOLLIQAKMYWTBR-RYMQXAEESA-N	1.8×10^{-4}		Ebert et al. (2023)	?	318



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A2.4 Aliphatic alkynes

Table A2.4: Aliphatic alkynes

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyne	4.1×10^{-4}	1800	Burkholder et al. (2019)	L	1
C_2H_2	4.1×10^{-4}	1800	Burkholder et al. (2015)	L	1
(acetylene)	4.1×10^{-4}	1700	Sander et al. (2011)	L	1
[74-86-2]	4.1×10^{-4}	1800	Sander et al. (2006)	L	1
HSFWRNGVRCDJHI-UHFFFAOYSA-N	4.1×10^{-4}	1700	Fogg et al. (2001)	L	
	4.1×10^{-4}	1800	Plyasunov and Shock (2000)	L	
	4.1×10^{-4}	1800	Wilhelm et al. (1977)	L	
	4.0×10^{-4}	2500	Jadkar and Chaudhari (1980)	M	
	2.5×10^{-4}		Maillard and Rosenthal (1952)	M	319
	3.3×10^{-4}		Grollman (1929)	M	58
	4.2×10^{-4}	1900	Gatterer (1926)	M	
	3.7×10^{-4}		Kremann and Hönel (1913)	M	
	4.1×10^{-4}	2000	Winkler (1906)	M	
	5.1×10^{-4}		Billitzer (1902)	M	80, 320
	4.5×10^{-4}		Duchowicz et al. (2020)	V	186
	4.5×10^{-4}		HSDB (2015)	V	
	3.9×10^{-4}		Hwang et al. (1992)	V	
	4.1×10^{-4}		Hine and Mookerjee (1975)	V	
	1.8×10^{-5}		Pierotti (1965)	T	
	3.9×10^{-4}		Yaws (2003)	X	237
	4.1×10^{-4}	1800	Schoen (1923)	X	321
	4.4×10^{-4}		Vítovec (1968)	X	321, 12
	4.1×10^{-4}		Deno and Berkheimer (1960)	C	
	4.2×10^{-4}		Hayer et al. (2022)	Q	20
	8.9×10^{-3}		Duchowicz et al. (2020)	Q	
	3.5×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.8×10^{-3}		Wang et al. (2017)	Q	80, 239
	2.9×10^{-3}		Wang et al. (2017)	Q	80, 240
	8.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-3}		Hilal et al. (2008)	Q	
3.8×10^{-4}	1800	Kühne et al. (2005)	Q		
5.8×10^{-4}		Suzuki et al. (1992)	Q	232	
5.0×10^{-4}		Nirmalakhandan and Speece (1988)	Q		
5.0×10^{-4}		Irmann (1965)	Q		
3.9×10^{-4}	1800	Kühne et al. (2005)	?		
3.9×10^{-4}		Yaws (1999)	?	21	
4.1×10^{-4}	1800	Yaws et al. (1999)	?	21	
4.1×10^{-4}	1800	Dean and Lange (1999)	?	322, 23	
3.9×10^{-4}		Yaws and Yang (1992)	?	21	
4.1×10^{-4}		Abraham et al. (1990)	?		



Table A2.4: Aliphatic alkynes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propyne CH_3CCH [74-99-7] MWWATHDPGQKSAR-UHFFFAOYSA-N	7.5×10^{-4}	2400	Plyasunov and Shock (2000)	L	
	9.0×10^{-4}		Mackay and Shiu (1981)	L	
	9.2×10^{-4}		McAuliffe (1966)	M	
	7.7×10^{-4}	2500	Simpson and Lovell (1962)	M	
	6.2×10^{-4}	2000	Inga and McKetta (1961)	M	
	9.0×10^{-4}		Duchowicz et al. (2020)	V	186
	9.0×10^{-4}		HSDB (2015)	V	
	9.0×10^{-4}		Hine and Mookerjee (1975)	V	
	6.6×10^{-4}		Irmann (1965)	V	
	9.2×10^{-4}		Yaws (2003)	X	237
	7.6×10^{-4}		Hayer et al. (2022)	Q	20
	3.2×10^{-3}		Duchowicz et al. (2020)	Q	
	1.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	9.8×10^{-4}		Gharagheizi et al. (2010)	Q	246
	6.0×10^{-4}		Hilal et al. (2008)	Q	
	4.0×10^{-4}		Modarresi et al. (2007)	Q	67
		2100	Kühne et al. (2005)	Q	
			Yaffe et al. (2003)	Q	248, 249
			Suzuki et al. (1992)	Q	232
		Nirmalakhandan and Speece (1988)	Q		
		Irmann (1965)	Q		
	2400	Kühne et al. (2005)	?		
		Yaws (1999)	?	21	
		Yaws and Yang (1992)	?	21	
		Abraham et al. (1990)	?		
		Wilhelm et al. (1977)	W	86	
1-butyne $\text{C}_2\text{H}_5\text{CCH}$ (ethylacetylene) [107-00-6] KDKYADYSIPSCCQ-UHFFFAOYSA-N	5.6×10^{-3}		Burkholder et al. (2019)	L	
	5.6×10^{-4}		Brockbank (2013)	L	
	6.2×10^{-4}	1900	Plyasunov and Shock (2000)	L	
	5.2×10^{-4}		Mackay and Shiu (1981)	L	
	7.5×10^{-4}	1900	Wilhelm et al. (1977)	L	
	5.4×10^{-4}		McAuliffe (1966)	M	
	7.2×10^{-4}	1900	Simpson and Lovell (1962)	M	
	5.2×10^{-4}		Mackay et al. (2006a)	V	
	2.9×10^{-4}		Hwang et al. (1992)	V	
	5.3×10^{-4}		Hine and Mookerjee (1975)	V	
	5.4×10^{-4}		Yaws (2003)	X	237
	8.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Gharagheizi et al. (2010)	Q	246
	3.6×10^{-4}		Hilal et al. (2008)	Q	
	2.1×10^{-4}		Modarresi et al. (2007)	Q	67
		2500	Kühne et al. (2005)	Q	
			English and Carroll (2001)	Q	230, 231
		Suzuki et al. (1992)	Q	232	
		Nirmalakhandan and Speece (1988)	Q		
		Irmann (1965)	Q		
	1900	Kühne et al. (2005)	?		



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Table A2.4: Aliphatic alkynes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.4×10^{-4}		Yaws (1999)	?	21
	5.4×10^{-4}		Yaws and Yang (1992)	?	21
	5.3×10^{-4}		Abraham et al. (1990)	?	
2-butyne C_4H_6 (dimethylacetylene) [503-17-3] XNMQEEKYCVKGBD-UHFFFAOYSA-N	4.6×10^{-4}		Yaws (2003)	X	237
	1.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-3}		Hilal et al. (2008)	Q	
	4.7×10^{-4}		Yaws (1999)	?	21
1-pentyne C_5H_8 [627-19-0] IBXNCJKFFQIKKY-UHFFFAOYSA-N	3.9×10^{-4}		Brockbank (2013)	L	
	3.2×10^{-4}		Plyasunov and Shock (2000)	L	
	4.0×10^{-4}		Mackay and Shiu (1981)	L	
	4.0×10^{-4}		Duchowicz et al. (2020)	V	186
	4.0×10^{-4}		Mackay et al. (2006a)	V	
	4.0×10^{-4}		Mackay et al. (1993)	V	
	2.5×10^{-4}		Amoore and Buttery (1978)	V	
	3.9×10^{-4}		Hine and Mookerjee (1975)	V	
	4.0×10^{-4}		Yaws (2003)	X	237
	3.2×10^{-3}		Duchowicz et al. (2020)	Q	
	6.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Gharagheizi et al. (2010)	Q	246
	2.4×10^{-4}		Hilal et al. (2008)	Q	
	1.5×10^{-4}		Modarresi et al. (2007)	Q	67
	1.3×10^{-5}		Modarresi et al. (2005)	Q	247
	4.6×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	7.5×10^{-5}		Yao et al. (2002)	Q	229
	2.3×10^{-4}		English and Carroll (2001)	Q	230, 260
	6.1×10^{-5}		Russell et al. (1992)	Q	279
	1.6×10^{-4}		Suzuki et al. (1992)	Q	232
	2.9×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	4.0×10^{-4}		Yaws (1999)	?	21
	2.0×10^{-4}		Yaws and Yang (1992)	?	21
	3.9×10^{-4}		Abraham et al. (1990)	?	
2-pentyne C_5H_8 [627-21-4] NKTDTMONXHODTI-UHFFFAOYSA-N	5.6×10^{-4}		Yaws (2003)	X	237
	6.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	7.0×10^{-4}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-3}		Hilal et al. (2008)	Q	
	1.1×10^{-5}		Modarresi et al. (2005)	Q	247
	7.9×10^{-5}		Yao et al. (2002)	Q	229
	4.0×10^{-4}		Yaws (1999)	?	21
3-methyl-1-butyne C_5H_8 [598-23-2] USCSRAJGJYMJFZ-UHFFFAOYSA-N	5.3×10^{-4}		Yaws (2003)	X	237
	4.4×10^{-5}		Gharagheizi et al. (2012)	Q	
	6.3×10^{-4}		Gharagheizi et al. (2010)	Q	246
	3.7×10^{-4}		Yaws (1999)	?	21



Table A2.4: Aliphatic alkynes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-hexyne C_4H_9CCH [693-02-7] CGHIBGNXEGJPQZ-UHFFFAOYSA-N	2.6×10^{-4}		Brockbank (2013)	L	
	3.0×10^{-4}		Plyasunov and Shock (2000)	L	
	2.5×10^{-4}		Duchowicz et al. (2020)	V	186
	2.5×10^{-4}		Duchowicz et al. (2020)	V	186
	2.4×10^{-4}		Mackay et al. (2006a)	V	
	2.4×10^{-4}		Mackay et al. (1993)	V	
	2.5×10^{-4}		Hine and Mookerjee (1975)	V	
	2.5×10^{-4}		Yaws (2003)	X	237
	3.2×10^{-3}		Duchowicz et al. (2020)	Q	
	3.2×10^{-3}		Duchowicz et al. (2020)	Q	
	4.8×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-4}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-4}		Hilal et al. (2008)	Q	
	1.5×10^{-4}		Modarresi et al. (2007)	Q	67
	1.1×10^{-5}		Modarresi et al. (2005)	Q	247
	2.4×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	2.7×10^{-5}		Yao et al. (2002)	Q	229
	1.8×10^{-4}		English and Carroll (2001)	Q	230, 274
	1.2×10^{-4}		Suzuki et al. (1992)	Q	232
	2.3×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	2.5×10^{-4}		Yaws (1999)	?	21
	4.6×10^{-4}		Yaws and Yang (1992)	?	21
	2.5×10^{-4}		Abraham et al. (1990)	?	
2-hexyne C_6H_{10} [764-35-2] MELUCTCJOARQQG-UHFFFAOYSA-N	3.5×10^{-4}		Yaws (2003)	X	237
	4.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.8×10^{-4}		Gharagheizi et al. (2010)	Q	246
	5.8×10^{-4}		Hilal et al. (2008)	Q	
	1.0×10^{-5}		Modarresi et al. (2005)	Q	247
	3.1×10^{-5}		Yao et al. (2002)	Q	229
	2.5×10^{-4}		Yaws (1999)	?	21
3-hexyne C_6H_{10} [928-49-4] DQQNMIPXXNPGCV-UHFFFAOYSA-N	5.5×10^{-4}		Plyasunov and Shock (2000)	L	
	5.6×10^{-4}		Yaws (2003)	X	237
	4.1×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.8×10^{-4}		Gharagheizi et al. (2010)	Q	246
	6.0×10^{-4}		Hilal et al. (2008)	Q	
	1.0×10^{-5}		Modarresi et al. (2005)	Q	247
	3.2×10^{-5}		Yao et al. (2002)	Q	229, 267
	2.6×10^{-4}		Yaws (1999)	?	21
3-methyl-1-pentyne C_6H_{10} [922-59-8] PLHJCHCSFNKCC-UHFFFAOYSA-N	4.6×10^{-4}		Yaws (2003)	X	237
	3.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Gharagheizi et al. (2010)	Q	246



Table A2.4: Aliphatic alkynes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-3-hexyne C_7H_{12} [36566-80-0] POBOUPFSQKXZFFZ-UHFFFAOYSA-N	2.2×10^{-4} 2.6×10^{-4} 2.6×10^{-5} 2.5×10^{-4}		Plyasunov and Shock (2000) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	L X Q Q	 237 246
3-methyl-1-hexyne C_7H_{12} [40276-93-5] OPZULQHRFNFFZ-UHFFFAOYSA-N	3.1×10^{-4} 2.7×10^{-5} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	 237 246
4-methyl-1-hexyne C_7H_{12} [52713-81-2] YFZSGTDENCTWGW-UHFFFAOYSA-N	2.9×10^{-4} 3.3×10^{-5} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	 237 246
4-methyl-2-hexyne C_7H_{12} [20198-49-6] ABEXZFRJQJSEBW-UHFFFAOYSA-N	2.5×10^{-4} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2010)	X Q	 237 246
5-methyl-1-hexyne C_7H_{12} [2203-80-7] HKANEMUCJGPMMS-UHFFFAOYSA-N	2.8×10^{-4} 3.4×10^{-5} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	 237 246
5-methyl-2-hexyne C_7H_{12} [53566-37-3] SVGHRUSRQTQES-UHFFFAOYSA-N	2.4×10^{-4} 3.2×10^{-5} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	 237 246
3,3-dimethyl-1-pentyne C_7H_{12} [918-82-1] KQIIKSQUHGGYCU-UHFFFAOYSA-N	3.6×10^{-4} 1.8×10^{-5} 3.0×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	 237 246
3,4-dimethyl-1-pentyne C_7H_{12} [61064-08-2] JDQKSTIAVKXRSK-UHFFFAOYSA-N	3.3×10^{-4} 2.4×10^{-5} 3.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	 237 246
4,4-dimethyl-1-pentyne C_7H_{12} [13361-63-2] KHBYPKPSFBHWBJQ-UHFFFAOYSA-N	3.3×10^{-4} 2.2×10^{-5} 3.0×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	 237 246
4,4-dimethyl-2-pentyne C_7H_{12} [999-78-0] FOALCTWKQSWRST-UHFFFAOYSA-N	3.0×10^{-4} 1.9×10^{-5} 2.7×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	 237 246



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Table A2.4: Aliphatic alkynes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-1-pentyne C_7H_{12} [21020-26-8] WGWGXWSBPXLXTA-UHFFFAOYSA-N	3.2×10^{-4} 2.7×10^{-5} 2.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-octyne $C_6H_{13}CCH$ [629-05-0] UMIPWJGWASORKV-UHFFFAOYSA-N	1.2×10^{-4} 1.2×10^{-4} 1.2×10^{-4} 1.3×10^{-4} 1.3×10^{-4} 1.2×10^{-4} 1.3×10^{-4} 3.1×10^{-3} 3.1×10^{-5} 1.1×10^{-4} 6.4×10^{-5} 1.0×10^{-4} 1.2×10^{-4} 1.0×10^{-4} 7.2×10^{-5} 1.5×10^{-4} 1.2×10^{-4} 1.2×10^{-4}		Brockbank (2013) Plyasunov and Shock (2000) Duchowicz et al. (2020) Mackay et al. (2006a) Mackay et al. (1993) Hine and Mookerjee (1975) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Suzuki et al. (1992) Nirmalakhandan and Speece (1988) Yaws and Yang (1992) Abraham et al. (1990)	L L V V V V X Q Q Q Q Q Q Q Q Q Q Q ?	186 237 246 67 248, 249 230, 231 232 21 ?
2-octyne C_8H_{14} [2809-67-8] QCQALVMFTWRCFI-UHFFFAOYSA-N	1.3×10^{-4} 3.2×10^{-5} 1.3×10^{-4} 2.2×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008)	X Q Q Q	237 246
3-octyne C_8H_{14} [15232-76-5] UDEISTCPVNLKRJ-UHFFFAOYSA-N	1.5×10^{-4} 2.8×10^{-5} 1.3×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-3-hexyne C_8H_{14} [4911-60-8] XYBFBXTUWDPXLK-UHFFFAOYSA-N	1.4×10^{-4}		Plyasunov and Shock (2000)	L	
1-nonyne $C_7H_{15}CCH$ [3452-09-3] OSSQSXOTMIGBCF-UHFFFAOYSA-N	8.5×10^{-5} 9.7×10^{-5} 6.9×10^{-5} 6.9×10^{-5} 6.9×10^{-5} 7.2×10^{-5} 3.1×10^{-3} 2.6×10^{-5} 7.8×10^{-5} 4.4×10^{-5} 8.2×10^{-5}		Brockbank (2013) Plyasunov and Shock (2000) Duchowicz et al. (2020) Meylan and Howard (1991) Hine and Mookerjee (1975) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	L L V V V X Q Q Q Q Q	186 237 246 67



Table A2.4: Aliphatic alkynes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.9×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	7.9×10^{-5}		English and Carroll (2001)	Q	230, 231
	5.6×10^{-5}		Suzuki et al. (1992)	Q	232
	1.1×10^{-4}		Meylan and Howard (1991)	Q	
	1.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	6.9×10^{-5}		Yaws and Yang (1992)	?	21
	6.9×10^{-5}		Abraham et al. (1990)	?	
2-nonyne C_9H_{16} [19447-29-1] LXKRETAGISZJAD-UHFFFAOYSA-N	7.3×10^{-5}		Yaws (2003)	X	237
	2.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	8.3×10^{-5}		Gharagheizi et al. (2010)	Q	246
3-nonyne C_9H_{16} [20184-89-8] SRRDSRCWRHKEKU-UHFFFAOYSA-N	7.8×10^{-5}		Yaws (2003)	X	237
	2.2×10^{-5}		Gharagheizi et al. (2012)	Q	
	8.3×10^{-5}		Gharagheizi et al. (2010)	Q	246
2,2,5-trimethyl-3-hexyne C_9H_{16} [17530-23-3] DKFPMSNUJIRAMR-UHFFFAOYSA-N	5.5×10^{-5}		Plyasunov and Shock (2000)	L	
2,2,5,5-tetramethyl-3-hexyne $C_{10}H_{18}$ [17530-24-4] FXVDWKZNFZMSOU-UHFFFAOYSA-N	3.4×10^{-5}		Plyasunov and Shock (2000)	L	
1-decyne $C_{10}H_{18}$ [764-93-2] ILLHQJIJCRNRCJ-UHFFFAOYSA-N	6.6×10^{-5}		Yaws (2003)	X	237
	3.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	6.1×10^{-5}		Gharagheizi et al. (2010)	Q	246
2-decyne $C_{10}H_{18}$ [2384-70-5] RWDDSTHSVISBEA-UHFFFAOYSA-N	5.2×10^{-5}		Yaws (2003)	X	237
	2.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	5.9×10^{-5}		Gharagheizi et al. (2010)	Q	246
3-decyne $C_{10}H_{18}$ [2384-85-2] JUWXVJKQNKRLD-UHFFFAOYSA-N	5.5×10^{-5}		Yaws (2003)	X	237
	2.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	5.9×10^{-5}		Gharagheizi et al. (2010)	Q	246
1-undecyne $C_{11}H_{20}$ [2243-98-3] YVSFLVNWJIEJRV-UHFFFAOYSA-N	5.9×10^{-5}		Yaws (2003)	X	237
	5.3×10^{-5}		Gharagheizi et al. (2010)	Q	246



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Table A2.4: Aliphatic alkynes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-undecyne $C_{11}H_{20}$ [60212-29-5] XZSXEDPHMIFYOS-UHFFFAOYSA-N	4.5×10^{-5} 3.3×10^{-5} 4.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-undecyne $C_{11}H_{20}$ [60212-30-8] DPWJNCPQLQVKQ-UHFFFAOYSA-N	4.6×10^{-5} 2.7×10^{-5} 4.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-dodecyne $C_{12}H_{22}$ [765-03-7] ZVDBUOGYYNMQI-UHFFFAOYSA-N	5.8×10^{-5} 3.8×10^{-5} 5.4×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-dodecyne $C_{12}H_{22}$ [629-49-2] NDIJGAGRSOPRNJ-UHFFFAOYSA-N	4.9×10^{-5} 3.6×10^{-5} 4.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-dodecyne $C_{12}H_{22}$ [6790-27-8] ZFAGQZXKTQFQLE-UHFFFAOYSA-N	4.5×10^{-5} 3.0×10^{-5} 4.7×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-tridecyne $C_{13}H_{24}$ [26186-02-7] GZEDKDBFUBPZNG-UHFFFAOYSA-N	7.4×10^{-5} 4.2×10^{-5} 6.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-tridecyne $C_{13}H_{24}$ [28467-75-6] ZGKKGWBQPYIOBH-UHFFFAOYSA-N	6.7×10^{-5} 3.9×10^{-5} 5.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-tridecyne $C_{13}H_{24}$ [60186-78-9] HDLJOUCNTFYRPD-UHFFFAOYSA-N	5.8×10^{-5} 3.2×10^{-5} 5.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-tetradecyne $C_{14}H_{26}$ [765-10-6] DZEFNRWGWQDGR-UHFFFAOYSA-N	7.4×10^{-5} 4.4×10^{-5} 9.9×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-tetradecyne $C_{14}H_{26}$ [60212-32-0] DWWWJIDVLGUCDE-UHFFFAOYSA-N	8.6×10^{-5} 3.3×10^{-5} 8.0×10^{-5}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.4: Aliphatic alkynes (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-pentadecyne $C_{15}H_{28}$ [765-13-9] DONJGKADZJEXRJ-UHFFFAOYSA-N	2.2×10^{-4} 4.5×10^{-5} 1.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-pentadecyne $C_{15}H_{28}$ [52112-25-1] VWWAVTXUUYIIIEE-UHFFFAOYSA-N	2.3×10^{-4} 4.4×10^{-5} 1.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-pentadecyne $C_{15}H_{28}$ [61886-61-1] RUHQUVXUGQUNY-UHFFFAOYSA-N	1.5×10^{-4} 3.4×10^{-5} 1.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-hexadecyne $C_{16}H_{30}$ [629-74-3] UCIDYSLOTJMRAM-UHFFFAOYSA-N	8.3×10^{-4} 5.0×10^{-4}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
3-hexadecyne $C_{16}H_{30}$ [61886-62-2] HRFPRVYNMNOAQO-UHFFFAOYSA-N	3.3×10^{-4} 3.3×10^{-5} 3.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-buten-1-yne CH_2CHCCH (vinylacetylene) [689-97-4] WFYPCNXBQZGB-UHFFFAOYSA-N	4.1×10^{-4} 3.7×10^{-4} 3.8×10^{-4} 3.4×10^{-4} 3.4×10^{-4} 1.1×10^{-2} 1.1×10^{-3}	1700 1700 1800	Plyasunov and Shock (2000) Wilhelm et al. (1977) Simpson and Lovell (1962) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Kühne et al. (2005) Kühne et al. (2005) Yaws (1999)	L L M V V Q Q ? ?	323 186
butadiyne C_4H_2 (biacetylene) [460-12-8] LLCSWKVOHICRDD-UHFFFAOYSA-N	2.0×10^{-3} 2.7×10^{-1} 8.6×10^{-3} 1.9×10^{-3} 1.9×10^{-3}		Irmann (1965) Hayer et al. (2022) Hilal et al. (2008) Yaws (1999) Yaws and Yang (1992)	C Q Q ? ?	20 21 21
1,6-heptadiyne C_7H_8 [2396-63-6] RSPZSDWVQWRAEF-UHFFFAOYSA-N	4.6×10^{-3}		Plyasunov and Shock (2000)	L	
1,8-nonadiyne C_9H_{12} [2396-65-8] DMOVPHYFYSASTC-UHFFFAOYSA-N	3.0×10^{-3}		Plyasunov and Shock (2000)	L	



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Table A2.4: Aliphatic alkynes (...continued)

Substance	H_s^{cp}	$\frac{d \ln H_s^{cp}}{d(1/T)}$	Reference	Type	Note
Formula	(at T^\ominus)				
(Trivial Name)					
[CAS Registry Number]	$\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	[K]			
InChIKey					



A2.5 Mononuclear aromatics

Table A2.5: Mononuclear aromatics

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
benzene	1.8×10^{-3}	3800	Schwardt et al. (2021)	L	1
C_6H_6	1.8×10^{-3}	3700	Brockbank (2013)	L	1
[71-43-2]	1.7×10^{-3}	4200	Staudinger and Roberts (2001)	L	
UHOVQNZJYSORNB-UHFFFAOYSA-N	1.8×10^{-3}	3800	Plyasunov and Shock (2000)	L	
	1.6×10^{-3}	4100	Staudinger and Roberts (1996)	L	
	1.8×10^{-3}		Mackay and Shiu (1981)	L	
	1.7×10^{-3}		Kim and Kim (2014)	M	
	1.8×10^{-3}	3800	Hiatt (2013)	M	
	2.7×10^{-3}	1400	Zhang et al. (2013)	M	324
	3.5×10^{-3}		Zhang et al. (2013)	M	325
	1.4×10^{-3}	2400	Lau et al. (2010)	M	11
	1.7×10^{-3}	4200	Sieg et al. (2009)	M	326
	1.8×10^{-3}		Li et al. (2008)	M	
	2.5×10^{-3}		Lodge and Danso (2007)	M	
	1.4×10^{-3}	2200	Lei et al. (2004)	M	327
			Cheng et al. (2003)	M	328
	1.8×10^{-3}		Karl et al. (2003)	M	87
	1.8×10^{-3}	4200	Bakierowska and Trzeszczyński (2003)	M	
	1.7×10^{-3}	3800	Görgényi et al. (2002)	M	329
	1.9×10^{-3}	3200	Bierwagen and Keller (2001)	M	
	2.1×10^{-3}		Kochetkov et al. (2001)	M	297, 330
	1.7×10^{-3}		Kochetkov et al. (2001)	M	297, 331
	1.8×10^{-3}		Miller and Stuart (2000)	M	72
	3.7×10^{-3}		Altschuh et al. (1999)	M	
	1.7×10^{-3}		Ryu and Park (1999)	M	
	1.8×10^{-3}		Dohnal and Hovorka (1999)	M	
	1.8×10^{-3}		Allen et al. (1998)	M	
	2.2×10^{-3}		Peng and Wan (1998)	M	
	1.4×10^{-3}	3300	Peng and Wan (1998)	M	70
	2.2×10^{-3}		de Wolf and Lieder (1998)	M	87
	1.6×10^{-3}		Welke et al. (1998)	M	
	1.9×10^{-3}	3200	Peng and Wan (1997)	M	
	1.8×10^{-3}	2700	Kondoh and Nakajima (1997)	M	
	1.4×10^{-3}	3300	Park et al. (1997)	M	
	1.8×10^{-3}	4200	Alaee et al. (1996)	M	
	1.6×10^{-3}	4300	Turner et al. (1996)	M	
	2.1×10^{-3}	3900	Dewulf et al. (1995)	M	
	2.0×10^{-3}		Nielsen et al. (1994)	M	
	1.7×10^{-3}	4100	Khalfaoui and Newsham (1994b)	M	332
	1.8×10^{-3}	3400	Robbins et al. (1993)	M	333
	1.7×10^{-3}		Hoff et al. (1993)	M	
	1.8×10^{-3}	2300	Ettre et al. (1993)	M	11
	1.5×10^{-3}		Hansen et al. (1993)	M	334
	1.7×10^{-3}	4000	Perlinger et al. (1993)	M	



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Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.7×10^{-3}		Li and Carr (1993)	M	
	1.8×10^{-3}		Li et al. (1993)	M	
	1.5×10^{-3}		Zhang and Pawliszyn (1993)	M	
	1.7×10^{-3}	4300	Cooling et al. (1992)	M	335
	1.8×10^{-3}		Anderson (1992)	M	72
	1.9×10^{-3}		Yu (1992)	M	12
	1.6×10^{-3}	4300	Bissonette et al. (1990)	M	
	2.0×10^{-3}		Guitart et al. (1989)	M	14
	1.8×10^{-3}	3200	Ashworth et al. (1988)	M	278
	1.7×10^{-3}		Keeley et al. (1988)	M	
	2.0×10^{-3}		Hellmann (1987)	M	87
	1.3×10^{-3}		Yurteri et al. (1987)	M	12
	1.8×10^{-3}	3600	Tsonopoulos and Wilson (1983)	M	1
	1.7×10^{-3}	3900	Sanemasa et al. (1982)	M	
	1.8×10^{-3}	4000	Leighton and Calo (1981)	M	
	1.7×10^{-3}	3500	Sanemasa et al. (1981)	M	
	1.2×10^{-3}	5300	Ervin et al. (1980)	M	
	1.8×10^{-3}		Warner et al. (1980)	M	
	1.8×10^{-3}		Mackay et al. (1979)	M	
	1.1×10^{-3}		Sato and Nakajima (1979a)	M	14
	1.6×10^{-3}	3800	Tsibul'skii et al. (1979)	M	
	1.8×10^{-3}	4200	Green and Frank (1979)	M	
	1.8×10^{-3}		Vitenberg et al. (1975)	M	
	1.2×10^{-3}		Vitenberg et al. (1974)	M	12
	1.7×10^{-3}	4400	Brown and Wasik (1974)	M	
	2.1×10^{-3}	4500	Hartkopf and Karger (1973)	M	
	1.6×10^{-3}	4500	Wasik and Tsang (1970)	M	
	1.5×10^{-3}		Saylor et al. (1938)	M	38
	3.5×10^{-4}		Abraham and Acree (2007)	V	
	1.8×10^{-3}		Mackay et al. (2006a)	V	
	1.8×10^{-3}		Kochetkov et al. (2001)	V	
	1.8×10^{-3}		Shiu and Ma (2000)	V	
	1.8×10^{-3}		Shiu and Mackay (1997)	V	
	1.8×10^{-3}		Park et al. (1997)	V	
	1.8×10^{-3}		Mackay et al. (1992a)	V	
	1.8×10^{-3}		Hwang et al. (1992)	V	
	1.8×10^{-3}		Eastcott et al. (1988)	V	
	1.8×10^{-3}	3800	Abraham (1984)	V	
	1.8×10^{-3}	3600	Ben-Naim and Wilf (1980)	V	1
	1.8×10^{-3}		Warner et al. (1980)	V	
	1.8×10^{-3}		Hine and Mookerjee (1975)	V	
	1.8×10^{-3}	4100	Mackay and Leinonen (1975)	V	
	1.7×10^{-3}	3800	Wauchope and Haque (1972)	V	
	1.7×10^{-3}	3800	Wauchope and Haque (1972)	V	
	2.0×10^{-3}		McAuliffe (1966)	V	24
	1.8×10^{-3}	3800	Andon et al. (1954)	V	336
	1.8×10^{-3}		Bohon and Claussen (1951)	V	



Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8×10^{-3}	3800	Plyasunov et al. (2001)	T	
	1.8×10^{-3}		Mackay et al. (1979)	T	
		3800	Gill et al. (1976)	T	
	2.7×10^{-3}		Pierotti (1965)	T	
	1.8×10^{-3}		Yaws (2003)	X	258
	1.8×10^{-3}		Yaws (2003)	X	237
	1.8×10^{-3}	2200	Goldstein (1982)	X	298
	1.8×10^{-3}		Sieg et al. (2008)	C	
	1.8×10^{-3}		Schüürmann (2000)	C	21
	1.8×10^{-3}		Smith et al. (1993)	C	12
	1.8×10^{-3}		Ryan et al. (1988)	C	
	1.8×10^{-3}		Shen (1982)	C	
	1.8×10^{-3}		Dupeux et al. (2022)	Q	259
	1.4×10^{-3}		Hayer et al. (2022)	Q	20
	7.2×10^{-4}		Keshavarz et al. (2022)	Q	
	6.0×10^{-3}		Duchowicz et al. (2020)	Q	299
	6.5×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.3×10^{-3}		Wang et al. (2017)	Q	80, 239
	3.2×10^{-3}		Wang et al. (2017)	Q	80, 240
	1.8×10^{-3}		Li et al. (2014)	Q	241
	4.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-3}		Hilal et al. (2008)	Q	
	2.2×10^{-3}		Modarresi et al. (2007)	Q	67
		4000	Kühne et al. (2005)	Q	
	1.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	7.4×10^{-4}		Yao et al. (2002)	Q	229
	2.2×10^{-3}		English and Carroll (2001)	Q	230, 231
	7.7×10^{-5}		Katritzky et al. (1998)	Q	
	2.1×10^{-3}		Suzuki et al. (1992)	Q	232
	2.2×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.8×10^{-3}		Arbuckle (1983)	Q	
	1.8×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		3700	Kühne et al. (2005)	?	
	1.8×10^{-3}		Yaws (1999)	?	21
	1.1×10^{-3}		Abraham and Weathersby (1994)	?	21
	1.8×10^{-3}		Yaws and Yang (1992)	?	21
	1.8×10^{-3}		Abraham et al. (1990)	?	
	2.2×10^{-3}		Mackay and Yeun (1983)	?	
benzene-d6	1.8×10^{-3}	4000	Hiatt (2013)	M	
C ₆ D ₆	1.6×10^{-3}	4500	Wasik and Tsang (1970)	M	
[1076-43-3]		3800	Gill et al. (1976)	T	

UHOVQNZJYSORNB-MZWXYZOWSA-N



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Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methybenzene	1.6×10^{-3}	4100	Schwardt et al. (2021)	L	1
$C_6H_5CH_3$	1.9×10^{-3}	4000	Brockbank (2013)	L	1, 337
(toluene)	1.5×10^{-3}	4300	Staudinger and Roberts (2001)	L	
[108-88-3]	1.6×10^{-3}	4400	Plyasunov and Shock (2000)	L	
YXFVABEGXRONW-UHFFFAOYSA-N	1.5×10^{-3}	4000	Staudinger and Roberts (1996)	L	
	1.5×10^{-3}		Mackay and Shiu (1981)	L	
	1.5×10^{-3}	4600	Kutsuna and Kaneyasu (2021)	M	
	1.5×10^{-3}		Kim and Kim (2014)	M	
	2.1×10^{-3}	4400	Hiatt (2013)	M	
	2.8×10^{-3}		Zhang et al. (2013)	M	325
	1.7×10^{-3}	4200	Lee et al. (2013)	M	
	1.5×10^{-3}		Kish et al. (2013)	M	
	1.3×10^{-3}	2700	Lau et al. (2010)	M	11
	1.5×10^{-3}	4300	Sieg et al. (2009)	M	326
	1.4×10^{-3}		Helburn et al. (2008)	M	
	1.5×10^{-3}		Li et al. (2008)	M	
	1.3×10^{-3}	2100	Falabella and Teja (2008)	M	11, 338
	1.4×10^{-3}		Lodge and Danso (2007)	M	
	1.5×10^{-3}	3900	Lin and Chou (2006)	M	
			Cheng et al. (2004)	M	328
	1.4×10^{-3}	2200	Lei et al. (2004)	M	327
			Cheng et al. (2003)	M	328
	1.4×10^{-3}		Karl et al. (2003)	M	87
	2.1×10^{-3}		Bobadilla et al. (2003)	M	
	1.7×10^{-3}	4300	Bakierowska and Trzeszczyński (2003)	M	
	2.0×10^{-3}		Destailats and Charles (2002)	M	
	1.5×10^{-3}	4200	Görgényi et al. (2002)	M	339
	1.7×10^{-3}	3600	Bierwagen and Keller (2001)	M	
	1.0×10^{-3}		Ayuttaya et al. (2001)	M	340
	1.7×10^{-4}		Ayuttaya et al. (2001)	M	341
	7.8×10^{-4}		Ayuttaya et al. (2001)	M	342
	2.3×10^{-3}		Ayuttaya et al. (2001)	M	343
	1.5×10^{-3}		David et al. (2000)	M	72
	1.6×10^{-3}		Miller and Stuart (2000)	M	72
	1.9×10^{-3}	4000	Vane and Giroux (2000)	M	
	8.5×10^{-4}		McIntosh and Heffron (2000)	M	14
	1.5×10^{-3}	4700	Dewulf et al. (1999)	M	
	1.7×10^{-3}		Altschuh et al. (1999)	M	
	1.5×10^{-3}		Ryu and Park (1999)	M	
	1.6×10^{-3}		Dohnal and Hovorka (1999)	M	
	1.5×10^{-3}		Allen et al. (1998)	M	
	2.1×10^{-3}		Peng and Wan (1998)	M	
	1.2×10^{-3}	3600	Peng and Wan (1998)	M	70
	2.0×10^{-3}		de Wolf and Lieder (1998)	M	87
	1.4×10^{-3}		Welke et al. (1998)	M	
	1.7×10^{-3}	3700	Peng and Wan (1997)	M	



Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.7×10^{-3}	2800	Kondoh and Nakajima (1997)	M	
	1.3×10^{-3}	3900	Park et al. (1997)	M	
	1.4×10^{-3}	4100	Turner et al. (1996)	M	
	1.5×10^{-3}		Ramachandran et al. (1996)	M	
	1.8×10^{-3}	4400	Dewulf et al. (1995)	M	
	1.6×10^{-3}		Nielsen et al. (1994)	M	
	1.5×10^{-3}	4400	Robbins et al. (1993)	M	344
	1.3×10^{-3}		Hoff et al. (1993)	M	
	1.5×10^{-3}	2500	Ettre et al. (1993)	M	11
	1.4×10^{-3}		Hansen et al. (1993)	M	334
	1.5×10^{-3}	4500	Perlinger et al. (1993)	M	
	1.6×10^{-3}		Li and Carr (1993)	M	
	1.6×10^{-3}		Li et al. (1993)	M	
	1.5×10^{-3}		Zhang and Pawliszyn (1993)	M	
	1.6×10^{-3}	2500	Kolb et al. (1992)	M	277
	1.5×10^{-3}		Anderson (1992)	M	72
	3.7×10^{-3}		Yu (1992)	M	12
	1.4×10^{-3}	5000	Bissonette et al. (1990)	M	
	1.5×10^{-3}	6500	Lamarche and Droste (1989)	M	345
	1.5×10^{-3}	3000	Ashworth et al. (1988)	M	278
	1.6×10^{-3}		Keeley et al. (1988)	M	
	1.7×10^{-3}		Yurteri et al. (1987)	M	12
	1.2×10^{-3}	5400	Schoene and Steinhanses (1985)	M	
	1.5×10^{-3}		Garbarini and Lion (1985)	M	
	1.5×10^{-3}	4200	Sanemasa et al. (1982)	M	
	1.5×10^{-3}	3800	Leighton and Calo (1981)	M	
	1.6×10^{-3}	4100	Sanemasa et al. (1981)	M	
	1.5×10^{-3}	4900	Ervin et al. (1980)	M	
	1.7×10^{-3}		Warner et al. (1980)	M	
	1.5×10^{-3}		Mackay et al. (1979)	M	
	8.6×10^{-4}		Sato and Nakajima (1979a)	M	14
	1.5×10^{-3}	4700	Tsibul'skii et al. (1979)	M	
	1.9×10^{-3}		Vitenberg et al. (1975)	M	
	1.6×10^{-3}	5000	Brown and Wasik (1974)	M	
	2.0×10^{-3}	4900	Hartkopf and Karger (1973)	M	
	1.7×10^{-3}	5900	Wasik and Tsang (1970)	M	
	1.6×10^{-3}		Martins et al. (2017)	V	315
	1.5×10^{-3}		Mackay et al. (2006a)	V	
	1.9×10^{-3}	4300	Fogg and Sangster (2003)	V	346
	1.5×10^{-3}		Shiu and Ma (2000)	V	
	1.5×10^{-3}		Park et al. (1997)	V	
	1.5×10^{-3}		Mackay et al. (1992a)	V	
	1.3×10^{-3}		Hwang et al. (1992)	V	
	1.7×10^{-3}		Eastcott et al. (1988)	V	
	1.5×10^{-3}	4400	Abraham (1984)	V	
	1.9×10^{-3}	4200	Ben-Naim and Wilf (1980)	V	1
	1.5×10^{-3}		Warner et al. (1980)	V	



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Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-3}		Hine and Mookerjee (1975)	V	
	1.5×10^{-3}		Mackay and Leinonen (1975)	V	
	1.8×10^{-3}	4400	Wauchope and Haque (1972)	V	
	1.7×10^{-3}		McAuliffe (1966)	V	24
	1.8×10^{-3}	4300	Andon et al. (1954)	V	336
	1.8×10^{-3}		Bohon and Claussen (1951)	V	
	1.6×10^{-3}	4400	Plyasunov et al. (2001)	T	
	1.5×10^{-3}		Mackay et al. (1979)	T	
		4400	Gill et al. (1976)	T	
	1.6×10^{-3}		Yaws (2003)	X	258
	1.5×10^{-3}		Yaws (2003)	X	237
	1.5×10^{-3}	1900	Goldstein (1982)	X	298
	1.5×10^{-3}		McAuliffe (1971)	X	347
	1.5×10^{-3}		Sieg et al. (2008)	C	
	1.5×10^{-3}		Schüürmann (2000)	C	21
	1.7×10^{-3}		Smith et al. (1993)	C	12
	1.4×10^{-3}		Ryan et al. (1988)	C	
	1.7×10^{-3}		Shen (1982)	C	
	1.5×10^{-3}		Dupeux et al. (2022)	Q	259
	1.2×10^{-3}		Hayer et al. (2022)	Q	20
	9.7×10^{-4}		Keshavarz et al. (2022)	Q	
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	299
	3.8×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.1×10^{-3}		Wang et al. (2017)	Q	80, 239
	3.0×10^{-3}		Wang et al. (2017)	Q	80, 240
	1.5×10^{-3}		Li et al. (2014)	Q	241
	2.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-3}		Hilal et al. (2008)	Q	
	1.2×10^{-3}		Modarresi et al. (2007)	Q	67
		4300	Kühne et al. (2005)	Q	
	1.6×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	7.2×10^{-4}		Yao et al. (2002)	Q	229
	1.6×10^{-3}		English and Carroll (2001)	Q	230, 231
	2.7×10^{-4}		Katritzky et al. (1998)	Q	
	1.5×10^{-3}		Suzuki et al. (1992)	Q	232
	1.6×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.2×10^{-3}		Arbuckle (1983)	Q	
	1.5×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4200	Kühne et al. (2005)	?	
	1.6×10^{-3}		Yaws (1999)	?	21
	9.0×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.5×10^{-3}		Yaws and Yang (1992)	?	21
	1.5×10^{-3}		Abraham et al. (1990)	?	



Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.9×10^{-3}		Mackay and Yeun (1983)	?	
methylbenzene-d8 $C_6D_5CD_3$ (toluene-d8) [2037-26-5] YXFVVABEGXRONW-JGUCLWPXSA-N	2.0×10^{-3}	4300	Hiatt (2013)	M	
1,2-dimethylbenzene $C_6H_4(CH_3)_2$ (<i>o</i> -xylene) [95-47-6] CTQNGGLPUBDAKN-UHFFFAOYSA-N	2.0×10^{-3}	4600	Schwardt et al. (2021)	L	1
	2.0×10^{-3}	4700	Brockbank (2013)	L	1
	2.4×10^{-3}	4200	Fogg and Sangster (2003)	L	
	2.0×10^{-3}	4300	Staudinger and Roberts (2001)	L	
	2.0×10^{-3}	4400	Plyasunov and Shock (2000)	L	
	1.9×10^{-3}	4000	Staudinger and Roberts (1996)	L	
	2.0×10^{-3}		Mackay and Shiu (1981)	L	
	1.9×10^{-3}		Kim and Kim (2014)	M	
	3.2×10^{-3}	4500	Hiatt (2013)	M	
	2.7×10^{-3}	8500	Zhang et al. (2013)	M	324
	2.2×10^{-3}		Zhang et al. (2013)	M	325
	2.0×10^{-3}	4300	Sieg et al. (2009)	M	326
	2.3×10^{-3}		Li et al. (2008)	M	
	1.7×10^{-3}	2500	Falabella and Teja (2008)	M	11, 338
	9.6×10^{-4}		McIntosh and Heffron (2000)	M	14
	2.1×10^{-3}		Dohnal and Hovorka (1999)	M	
	2.2×10^{-3}		Welke et al. (1998)	M	
	1.9×10^{-3}	3400	Kondoh and Nakajima (1997)	M	
	1.4×10^{-3}		Turner et al. (1996)	M	
	2.4×10^{-3}	4500	Dewulf et al. (1995)	M	
	2.0×10^{-3}	5800	Robbins et al. (1993)	M	348
	1.9×10^{-3}		Li and Carr (1993)	M	
	2.1×10^{-3}		Li et al. (1993)	M	
	2.7×10^{-3}		Zhang and Pawliszyn (1993)	M	
	1.4×10^{-3}	3000	Kolb et al. (1992)	M	277
	1.7×10^{-3}		Anderson (1992)	M	72
	2.1×10^{-3}	5600	Bissonette et al. (1990)	M	
	1.9×10^{-3}	3200	Ashworth et al. (1988)	M	278
	2.3×10^{-3}		Yurteri et al. (1987)	M	12
	1.9×10^{-3}	4500	Sanemasa et al. (1982)	M	
	1.0×10^{-3}		Sato and Nakajima (1979a)	M	14
	2.9×10^{-3}	5400	Wasik and Tsang (1970)	M	
	1.8×10^{-3}		Mackay et al. (2006a)	V	
	1.8×10^{-3}		Shiu and Ma (2000)	V	
	1.8×10^{-3}		Mackay et al. (1992a)	V	
	2.3×10^{-3}		Eastcott et al. (1988)	V	
	1.8×10^{-3}		Hine and Mookerjee (1975)	V	
	1.9×10^{-3}		Mackay and Leinonen (1975)	V	
	1.9×10^{-3}		McAuliffe (1966)	V	24
	2.3×10^{-3}		Yaws (2003)	X	237



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Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.9×10^{-3}		Sieg et al. (2008)	C	
	1.3×10^{-3}		Keshavarz et al. (2022)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.3×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.6×10^{-3}		Wang et al. (2017)	Q	80, 239
	3.2×10^{-3}		Wang et al. (2017)	Q	80, 240
	1.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.0×10^{-3}		Hilal et al. (2008)	Q	
	1.1×10^{-3}		Modarresi et al. (2007)	Q	67
		4100	Kühne et al. (2005)	Q	
	1.9×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.7×10^{-3}		English and Carroll (2001)	Q	230, 274
	3.8×10^{-4}		Katritzky et al. (1998)	Q	
	1.0×10^{-3}		Suzuki et al. (1992)	Q	232
	1.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.9×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4100	Kühne et al. (2005)	?	
	2.4×10^{-3}		Yaws (1999)	?	21
	1.1×10^{-3}		Abraham and Weathersby (1994)	?	21
	2.3×10^{-3}		Yaws and Yang (1992)	?	21
	1.9×10^{-3}		Abraham et al. (1990)	?	
1,2-dimethylbenzene-d10 $C_6D_4(CD_3)_2$ (<i>o</i> -xylene-d10) [56004-61-6] CTQNGGLPUBDAKN-ZGYUURES-A-N	3.0×10^{-3}	4700	Hiatt (2013)	M	
1,3-dimethylbenzene $C_6H_4(CH_3)_2$ (<i>m</i> -xylene) [108-38-3] IVSZLXZYQVIEFR-UHFFFAOYSA-N	1.4×10^{-3}	4100	Schwardt et al. (2021)	L	1
	1.5×10^{-3}	4300	Brockbank (2013)	L	1
	1.4×10^{-3}	4200	Staudinger and Roberts (2001)	L	
	1.4×10^{-3}	4600	Plyasunov and Shock (2000)	L	
	1.3×10^{-3}	4200	Staudinger and Roberts (1996)	L	
	1.4×10^{-3}		Mackay and Shiu (1981)	L	
	1.3×10^{-3}		Kim and Kim (2014)	M	
	1.4×10^{-3}		Li et al. (2008)	M	
	1.3×10^{-3}		Karl et al. (2003)	M	87
	6.6×10^{-4}		McIntosh and Heffron (2000)	M	14
	1.5×10^{-3}		Dohnal and Hovorka (1999)	M	
	1.5×10^{-3}	2900	Kondoh and Nakajima (1997)	M	
	1.6×10^{-3}	4300	Dewulf et al. (1995)	M	
	1.3×10^{-3}		Li and Carr (1993)	M	
	1.5×10^{-3}		Li et al. (1993)	M	
	1.4×10^{-3}	6000	Bissonette et al. (1990)	M	



Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-3}	3300	Ashworth et al. (1988)	M	278
	1.4×10^{-3}	4700	Sanemasa et al. (1982)	M	
	6.4×10^{-4}		Sato and Nakajima (1979a)	M	14
	1.8×10^{-3}	4500	Tsibul'skii et al. (1979)	M	
	1.4×10^{-3}		Mackay et al. (2006a)	V	
	1.7×10^{-3}	4300	Fogg and Sangster (2003)	V	
	1.4×10^{-3}		Shiu and Ma (2000)	V	
	1.4×10^{-3}		Mackay et al. (1992a)	V	
	1.4×10^{-3}		Eastcott et al. (1988)	V	
	1.6×10^{-3}		Hine and Mookerjee (1975)	V	
	1.6×10^{-3}	4800	Wauchope and Haque (1972)	V	
	1.7×10^{-3}	5000	Andon et al. (1954)	V	336
	1.7×10^{-3}		Bohon and Claussen (1951)	V	
	1.5×10^{-3}		Yaws (2003)	X	237
	1.4×10^{-3}		Sieg et al. (2008)	C	
	1.3×10^{-3}		Keshavarz et al. (2022)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	2.3×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.2×10^{-3}		Wang et al. (2017)	Q	80, 239
	2.8×10^{-3}		Wang et al. (2017)	Q	80, 240
	1.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-3}		Hilal et al. (2008)	Q	
	7.5×10^{-4}		Modarresi et al. (2007)	Q	67
		4700	Kühne et al. (2005)	Q	
	1.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	4.4×10^{-4}		Yao et al. (2002)	Q	229
	1.7×10^{-3}		English and Carroll (2001)	Q	230, 231
	3.8×10^{-4}		Katritzky et al. (1998)	Q	
	1.4×10^{-3}		Russell et al. (1992)	Q	279
	1.0×10^{-3}		Suzuki et al. (1992)	Q	232
	1.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.4×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4900	Kühne et al. (2005)	?	
	1.5×10^{-3}		Yaws (1999)	?	21
	6.7×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.5×10^{-3}		Yaws and Yang (1992)	?	21
	1.3×10^{-3}		Abraham et al. (1990)	?	



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Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4-dimethylbenzene	1.5×10^{-3}	5000	Schwardt et al. (2021)	L	1
$\text{C}_6\text{H}_4(\text{CH}_3)_2$	1.4×10^{-3}	5000	Brockbank (2013)	L	1
(<i>p</i> -xylene)	1.9×10^{-3}	4200	Fogg and Sangster (2003)	L	
[106-42-3]	1.3×10^{-3}	4000	Staudinger and Roberts (2001)	L	
URLKBWYHVLVBVO-UHFFFAOYSA-N	1.4×10^{-3}	4600	Plyasunov and Shock (2000)	L	
	1.3×10^{-3}	3800	Staudinger and Roberts (1996)	L	
	1.4×10^{-3}		Mackay and Shiu (1981)	L	
	1.0×10^{-3}	2600	Schwardt et al. (2021)	M	349, 11
	1.3×10^{-3}		Kim and Kim (2014)	M	
	1.4×10^{-3}		Li et al. (2008)	M	
	1.6×10^{-3}	4800	Lin and Chou (2006)	M	
	2.0×10^{-3}		Bobadilla et al. (2003)	M	
	6.7×10^{-4}		McIntosh and Heffron (2000)	M	14
	1.4×10^{-3}		Ryu and Park (1999)	M	
	1.5×10^{-3}		Dohnal and Hovorka (1999)	M	
	1.5×10^{-3}	2900	Kondoh and Nakajima (1997)	M	
	9.8×10^{-4}	3200	Park et al. (1997)	M	
	1.7×10^{-3}	4800	Dewulf et al. (1995)	M	
	1.2×10^{-3}	3100	Hansen et al. (1993)	M	281
	1.3×10^{-3}		Li and Carr (1993)	M	
	1.4×10^{-3}		Li et al. (1993)	M	
	1.7×10^{-3}		Zhang and Pawliszyn (1993)	M	
	1.2×10^{-3}	5300	Bissonette et al. (1990)	M	
	1.3×10^{-3}	3500	Ashworth et al. (1988)	M	278
	1.3×10^{-3}	4800	Sanemasa et al. (1982)	M	
	6.1×10^{-4}		Sato and Nakajima (1979a)	M	14
	2.3×10^{-3}	5400	Wasik and Tsang (1970)	M	
	1.2×10^{-3}		Martins et al. (2017)	V	315
	1.8×10^{-4}		Abraham and Acree (2007)	V	
	1.7×10^{-3}		Mackay et al. (2006a)	V	
	1.4×10^{-3}		Shiu and Ma (2000)	V	
	1.5×10^{-3}		Park et al. (1997)	V	
	1.7×10^{-3}		Mackay et al. (1992a)	V	
	1.5×10^{-3}		Hwang et al. (1992)	V	
	1.8×10^{-3}		Eastcott et al. (1988)	V	
	1.6×10^{-3}		Hine and Mookerjee (1975)	V	
	1.6×10^{-3}	4800	Wauchope and Haque (1972)	V	
	1.6×10^{-3}	4900	Andon et al. (1954)	V	336
	1.6×10^{-3}		Bohon and Claussen (1951)	V	
	1.4×10^{-3}		Foster et al. (1994)	X	350
	1.6×10^{-3}		Yaws (2003)	X	237
	1.4×10^{-3}		Sieg et al. (2008)	C	
	1.3×10^{-3}		Schüürmann (2000)	C	21
	1.3×10^{-3}		Keshavarz et al. (2022)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	184
	2.3×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.4×10^{-3}		Wang et al. (2017)	Q	80, 239



Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.6×10^{-3}		Wang et al. (2017)	Q	80, 240
	9.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-3}		Hilal et al. (2008)	Q	
	1.1×10^{-3}		Modarresi et al. (2007)	Q	67
		4700	Kühne et al. (2005)	Q	
	1.5×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	8.1×10^{-4}		Yao et al. (2002)	Q	229
	1.7×10^{-3}		English and Carroll (2001)	Q	230, 231
	3.9×10^{-4}		Katritzky et al. (1998)	Q	
	1.0×10^{-3}		Suzuki et al. (1992)	Q	232
	1.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.4×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4500	Kühne et al. (2005)	?	
	1.6×10^{-3}		Yaws (1999)	?	21
	6.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.6×10^{-3}		Yaws and Yang (1992)	?	21
	1.4×10^{-3}		Abraham et al. (1990)	?	
1,2,3-trimethylbenzene	2.4×10^{-3}	4600	Brockbank (2013)	L	1
$C_6H_3(CH_3)_3$	2.7×10^{-3}	4800	Fogg and Sangster (2003)	L	
[526-73-8]	2.6×10^{-3}	4500	Plyasunov and Shock (2000)	L	
FYGHUNMUUKGBRK-UHFFFAOYSA-N	3.1×10^{-3}		Mackay and Shiu (1981)	L	
	1.1×10^{-3}		Järnberg and Johanson (1995)	M	14
	2.4×10^{-3}	4500	Sanemasa et al. (1982)	M	
	2.9×10^{-3}		Mackay et al. (2006a)	V	
	2.9×10^{-3}		Shiu and Ma (2000)	V	
	3.1×10^{-3}		Abraham et al. (1994a)	V	
	2.9×10^{-3}		Mackay et al. (1992a)	V	
	2.7×10^{-3}		Eastcott et al. (1988)	V	
	1.3×10^{-3}		Yaws (2003)	X	237
	1.8×10^{-3}		Keshavarz et al. (2022)	Q	
	7.9×10^{-4}		Duchowicz et al. (2020)	Q	299
	1.4×10^{-3}		Wang et al. (2017)	Q	80, 238
	2.2×10^{-3}		Wang et al. (2017)	Q	80, 239
	3.5×10^{-3}		Wang et al. (2017)	Q	80, 240
	8.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.1×10^{-3}		Hilal et al. (2008)	Q	
	8.2×10^{-4}		Modarresi et al. (2007)	Q	67
		3900	Kühne et al. (2005)	Q	
	3.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249



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Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-3}		English and Carroll (2001)	Q	230, 274
	4.6×10^{-4}		Katritzky et al. (1998)	Q	
	8.2×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	2.3×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4400	Kühne et al. (2005)	?	
	1.3×10^{-3}		Yaws (1999)	?	21
	2.7×10^{-3}		Yaws and Yang (1992)	?	21
	2.1×10^{-3}		Abraham et al. (1990)	?	
1,2,4-trimethylbenzene $C_6H_3(CH_3)_3$ [95-63-6] GWHJZXIDMPWGX-UHFFFAOYSA-N	1.6×10^{-3}	4700	Brockbank (2013)	L	1
	1.7×10^{-3}	3100	Fogg and Sangster (2003)	L	
	1.6×10^{-3}	4800	Plyasunov and Shock (2000)	L	
	1.7×10^{-3}		Mackay and Shiu (1981)	L	
	3.2×10^{-3}	5200	Hiatt (2013)	M	
	1.7×10^{-3}		Li et al. (2008)	M	
	2.3×10^{-3}	3600	Kondoh and Nakajima (1997)	M	
	6.2×10^{-4}		Järnberg and Johanson (1995)	M	14
	1.5×10^{-3}	4300	Hansen et al. (1993)	M	281
	2.1×10^{-3}		Yurteri et al. (1987)	M	12
	1.6×10^{-3}	4800	Sanemasa et al. (1982)	M	
	1.8×10^{-3}		Mackay et al. (2006a)	V	
	1.8×10^{-3}		Shiu and Ma (2000)	V	
	1.7×10^{-3}		Abraham et al. (1994a)	V	
	1.8×10^{-3}		Mackay et al. (1992a)	V	
	1.6×10^{-3}		Eastcott et al. (1988)	V	
	1.7×10^{-3}		Hine and Mookerjee (1975)	V	
	1.4×10^{-3}		Yaws (2003)	X	237
	1.8×10^{-3}		Keshavarz et al. (2022)	Q	
	7.9×10^{-4}		Duchowicz et al. (2020)	Q	299
	1.4×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.9×10^{-3}		Wang et al. (2017)	Q	80, 239
	2.8×10^{-3}		Wang et al. (2017)	Q	80, 240
	6.3×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.1×10^{-3}		Hilal et al. (2008)	Q	
	7.5×10^{-4}		Modarresi et al. (2007)	Q	67
		4500	Kühne et al. (2005)	Q	
	1.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	2.0×10^{-3}		English and Carroll (2001)	Q	230, 231
	4.7×10^{-4}		Katritzky et al. (1998)	Q	
	7.3×10^{-4}		Suzuki et al. (1992)	Q	232
	8.0×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	8.2×10^{-4}		Arbuckle (1983)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4700	Kühne et al. (2005)	?	



Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-3}		Yaws (1999)	?	21
	1.7×10^{-3}		Yaws and Yang (1992)	?	21
	1.6×10^{-3}		Abraham et al. (1990)	?	
1,3,5-trimethylbenzene $\text{C}_6\text{H}_3(\text{CH}_3)_3$ (mesitylene) [108-67-8] AUHZEEZYGFFBQ-UHFFFAOYSA-N	1.2×10^{-3}	4400	Brockbank (2013)	L	1
	1.3×10^{-3}	4900	Plyasunov and Shock (2000)	L	
	1.7×10^{-3}		Mackay and Shiu (1981)	L	
	2.3×10^{-3}	5100	Hiatt (2013)	M	
	2.0×10^{-3}		Karl et al. (2003)	M	87
	1.5×10^{-3}	3000	Kondoh and Nakajima (1997)	M	
	4.8×10^{-4}		Järnberg and Johanson (1995)	M	14
	1.3×10^{-3}		Li and Carr (1993)	M	
	1.4×10^{-3}		Li et al. (1993)	M	
	1.4×10^{-3}	3600	Ashworth et al. (1988)	M	278
	1.1×10^{-3}	4700	Sanemasa et al. (1982)	M	
	1.1×10^{-3}	4600	Sanemasa et al. (1981)	M	
	1.4×10^{-4}		Abraham and Acree (2007)	V	
	1.3×10^{-3}		Mackay et al. (2006a)	V	
	1.3×10^{-3}		Shiu and Ma (2000)	V	
	1.8×10^{-3}		Abraham et al. (1994a)	V	
	1.3×10^{-3}		Mackay et al. (1992a)	V	
	1.2×10^{-3}		Eastcott et al. (1988)	V	
	1.2×10^{-3}		Yaws (2003)	X	237
	9.1×10^{-4}		Hayer et al. (2022)	Q	20
	1.8×10^{-3}		Keshavarz et al. (2022)	Q	
	7.9×10^{-4}		Duchowicz et al. (2020)	Q	299
	1.4×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.1×10^{-3}		Wang et al. (2017)	Q	80, 239
	2.5×10^{-3}		Wang et al. (2017)	Q	80, 240
	5.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-3}		Hilal et al. (2008)	Q	
	9.0×10^{-4}		Modarresi et al. (2007)	Q	67
		5000	Kühne et al. (2005)	Q	
	1.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	4.6×10^{-4}		Katritzky et al. (1998)	Q	
	8.0×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	1.1×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4400	Kühne et al. (2005)	?	
	1.2×10^{-3}		Yaws (1999)	?	21
	1.2×10^{-3}		Yaws and Yang (1992)	?	21
	1.3×10^{-3}		Abraham et al. (1990)	?	
1,2,3,4-tetramethylbenzene $\text{C}_{10}\text{H}_{14}$ [488-23-3] UOHMMEJUHCKEE-UHFFFAOYSA-N	2.9×10^{-3}	5900	Brockbank (2013)	L	1



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Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,5-tetramethylbenzene $C_{10}H_{14}$ [527-53-7] BFIMMTCNYPIMRN-UHFFFAOYSA-N	1.2×10^{-3}		Zhang et al. (2010)	Q	287, 288
	2.2×10^{-3}		Zhang et al. (2010)	Q	287, 289
	2.2×10^{-3}		Zhang et al. (2010)	Q	287, 290
	4.1×10^{-4}		Zhang et al. (2010)	Q	287, 291
	1.2×10^{-3}		Yaws (1999)	?	21
1,2,4,5-tetramethylbenzene $C_{10}H_{14}$ [95-93-2] SQNZJJAZBFDUTD-UHFFFAOYSA-N	1.4×10^{-3}		Brockbank (2013)	L	
	1.3×10^{-3}		Plyasunov and Shock (2000)	L	
	3.9×10^{-4}		Mackay and Shiu (1981)	L	
	3.9×10^{-4}		Mackay et al. (2006a)	V	
	3.9×10^{-4}		Mackay et al. (1992a)	V	
	3.9×10^{-4}		Eastcott et al. (1988)	V	
	3.5×10^{-4}		Yaws (2003)	X	237
	1.4×10^{-3}		Abraham et al. (2019)	Q	
	3.7×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-3}		Zhang et al. (2010)	Q	287, 288
	2.5×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.9×10^{-3}		Zhang et al. (2010)	Q	287, 290
	4.1×10^{-4}		Zhang et al. (2010)	Q	287, 291
	3.7×10^{-4}		Gharagheizi et al. (2010)	Q	246
2.9×10^{-3}		Hilal et al. (2008)	Q		
8.2×10^{-4}		Modarresi et al. (2007)	Q	67	
3.9×10^{-4}		Yaffe et al. (2003)	Q	248, 249	
3.9×10^{-4}		Yaws and Yang (1992)	?	21	
ethylbenzene $C_6H_5C_2H_5$ [100-41-4] YNQLUTRBYVCPMQ-UHFFFAOYSA-N	1.4×10^{-3}	4500	Schwardt et al. (2021)	L	1, 351
	1.3×10^{-3}	5000	Brockbank (2013)	L	1
	1.4×10^{-3}	4800	Fogg and Sangster (2003)	L	
	1.3×10^{-3}	5100	Staudinger and Roberts (2001)	L	
	1.3×10^{-3}	4800	Plyasunov and Shock (2000)	L	
	1.2×10^{-3}	5100	Staudinger and Roberts (1996)	L	
	1.3×10^{-3}		Mackay and Shiu (1981)	L	
	1.3×10^{-3}	4400	Schwardt et al. (2021)	M	352
	2.0×10^{-3}	4100	Hiatt (2013)	M	
	1.9×10^{-3}	4200	Zhang et al. (2013)	M	324
	1.4×10^{-3}		Zhang et al. (2013)	M	325
	1.3×10^{-3}	5100	Sieg et al. (2009)	M	326
	1.4×10^{-3}		Li et al. (2008)	M	
	1.2×10^{-3}	2700	Falabella and Teja (2008)	M	11, 338
	1.1×10^{-3}		Lodge and Danso (2007)	M	
			Cheng et al. (2003)	M	328
	1.6×10^{-3}		Miller and Stuart (2000)	M	72
	1.1×10^{-3}		Ryu and Park (1999)	M	353
	1.3×10^{-3}		Allen et al. (1998)	M	
1.4×10^{-3}	2800	Kondoh and Nakajima (1997)	M		
1.1×10^{-3}		Turner et al. (1996)	M		
1.5×10^{-3}	4900	Dewulf et al. (1995)	M		
1.3×10^{-3}	5000	Robbins et al. (1993)	M	354	



Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-3}	5300	Perlinger et al. (1993)	M	
	1.3×10^{-3}		Li and Carr (1993)	M	
	1.3×10^{-3}		Li et al. (1993)	M	
	2.5×10^{-3}		Zhang and Pawliszyn (1993)	M	
	1.1×10^{-3}	5500	Bissonette et al. (1990)	M	
	1.2×10^{-3}	5000	Ashworth et al. (1988)	M	278
	1.3×10^{-3}	4400	Heidman et al. (1985)	M	1
	1.3×10^{-3}	4600	Sanemasa et al. (1982)	M	
	1.4×10^{-3}	4500	Sanemasa et al. (1981)	M	
	1.4×10^{-3}	5500	Ervin et al. (1980)	M	
	1.5×10^{-3}		Warner et al. (1980)	M	
	1.2×10^{-3}		Mackay et al. (1979)	M	
	6.6×10^{-4}		Sato and Nakajima (1979a)	M	14
	1.3×10^{-3}	5600	Brown and Wasik (1974)	M	
	1.6×10^{-3}	6400	Hartkopf and Karger (1973)	M	
	1.6×10^{-4}		Abraham and Acree (2007)	V	
	1.1×10^{-3}		Mackay et al. (2006a)	V	
	1.2×10^{-3}		Shiu and Ma (2000)	V	
	1.2×10^{-3}		Lide and Frederikse (1995)	V	
	1.1×10^{-3}		Mackay et al. (1992a)	V	
	1.2×10^{-3}		Hwang et al. (1992)	V	
	1.0×10^{-3}		Eastcott et al. (1988)	V	
	1.2×10^{-3}	4800	Abraham (1984)	V	
	1.6×10^{-3}	4900	Ben-Naim and Wilf (1980)	V	1
	1.5×10^{-3}		Warner et al. (1980)	V	
	1.1×10^{-3}		Hine and Mookerjee (1975)	V	
	1.5×10^{-3}	4800	Wauchope and Haque (1972)	V	
	1.3×10^{-3}		McAuliffe (1966)	V	24
	1.5×10^{-3}	4900	Andon et al. (1954)	V	336
	1.5×10^{-3}		Bohon and Claussen (1951)	V	
	1.4×10^{-3}	4900	Owens et al. (1986)	T	
	1.1×10^{-3}		Mackay et al. (1979)	T	
		4800	Gill et al. (1976)	T	
	1.2×10^{-3}		Yaws (2003)	X	237
	1.6×10^{-3}	1700	Goldstein (1982)	X	298
	1.3×10^{-3}		Sieg et al. (2008)	C	
	1.6×10^{-3}		Ryan et al. (1988)	C	
	1.5×10^{-3}		Shen (1982)	C	
	9.7×10^{-4}		Hayer et al. (2022)	Q	20
	1.3×10^{-3}		Keshavarz et al. (2022)	Q	
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	
	3.1×10^{-3}		Wang et al. (2017)	Q	80, 238
	9.3×10^{-4}		Wang et al. (2017)	Q	80, 239
	2.8×10^{-3}		Wang et al. (2017)	Q	80, 240
	1.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	244



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Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-3}		Hilal et al. (2008)	Q	
	9.6×10^{-4}		Modarresi et al. (2007)	Q	67
		4700	Kühne et al. (2005)	Q	
	1.2×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	5.8×10^{-4}		Yao et al. (2002)	Q	229
	1.4×10^{-3}		English and Carroll (2001)	Q	230, 260
	4.1×10^{-4}		Katritzky et al. (1998)	Q	
	1.6×10^{-3}		Russell et al. (1992)	Q	279
	1.1×10^{-3}		Suzuki et al. (1992)	Q	232
	1.3×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.3×10^{-3}		Arbuckle (1983)	Q	
	1.3×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		5000	Kühne et al. (2005)	?	
	1.2×10^{-3}		Yaws (1999)	?	21
	6.9×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.1×10^{-3}		Hoff et al. (1993)	?	21
	1.2×10^{-3}		Yaws and Yang (1992)	?	21
	1.2×10^{-3}		Abraham et al. (1990)	?	
ethylbenzene-d10 $C_6D_5C_2D_5$ [25837-05-2] YNQLUTRBYVCPMQ-CFTAVCBPSA-N	2.0×10^{-3}	4200	Hiatt (2013)	M	
1,2-diethylbenzene $C_{10}H_{14}$ (<i>o</i> -diethylbenzene) [135-01-3] KVVNYFPKFSJIPBJ-UHFFFAOYSA-N	3.8×10^{-3}		Duchowicz et al. (2020)	V	186
	3.8×10^{-3}		HSDB (2015)	V	
	1.3×10^{-3}		Yaws (2003)	X	237
	1.2×10^{-3}		Hilal et al. (2008)	C	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	5.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-3}		Hilal et al. (2008)	Q	
	1.2×10^{-3}		Modarresi et al. (2007)	Q	67
		4800	Kühne et al. (2005)	Q	
	3.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	5.6×10^{-4}		Katritzky et al. (1998)	Q	
		5100	Kühne et al. (2005)	?	
	1.3×10^{-3}		Yaws (1999)	?	21



Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-diethylbenzene $C_{10}H_{14}$ (<i>m</i> -diethylbenzene) [141-93-5] AFZZYIJWUTJFO-UHFFFAOYSA-N	1.2×10^{-3}		Duchowicz et al. (2020)	V	186
	1.1×10^{-3}		HSDB (2015)	V	
	1.3×10^{-3}		Yaws (2003)	X	237
	3.8×10^{-3}		Hilal et al. (2008)	C	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	4.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
	9.7×10^{-4}		Hilal et al. (2008)	Q	
	4.7×10^{-4}		Modarresi et al. (2007)	Q	67
	5.6×10^{-4}	5300	Kühne et al. (2005)	Q	
		Katritzky et al. (1998)	Q		
	5300	Kühne et al. (2005)	?		
	1.3×10^{-3}		Yaws (1999)	?	21
1,4-diethylbenzene $C_{10}H_{14}$ (<i>p</i> -diethylbenzene) [105-05-5] DSNHSQKRULAAEI-UHFFFAOYSA-N	1.3×10^{-3}		Duchowicz et al. (2020)	V	186
	1.4×10^{-3}		HSDB (2015)	V	
	1.2×10^{-3}		Yaws (2003)	X	237
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	5.0×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-3}		Hilal et al. (2008)	Q	
	7.6×10^{-4}		Modarresi et al. (2007)	Q	67
		5300	Kühne et al. (2005)	Q	
	1.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	5.7×10^{-4}		Katritzky et al. (1998)	Q	
	7.9×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	5900	Kühne et al. (2005)	?		
	1.2×10^{-3}		Yaws (1999)	?	21
			Brockbank (2013)	W	355
propylbenzene $C_6H_5C_3H_7$ [103-65-1] ODLMAHJVESYWTB-UHFFFAOYSA-N	9.0×10^{-4}	3800	Schwardt et al. (2021)	L	1
	9.1×10^{-4}	4700	Brockbank (2013)	L	1
	9.1×10^{-4}	5300	Plyasunov and Shock (2000)	L	
	1.4×10^{-3}		Mackay and Shiu (1981)	L	
	1.9×10^{-3}	4500	Hiatt (2013)	M	
	1.5×10^{-3}		Karl et al. (2003)	M	87
	1.1×10^{-3}	2600	Kondoh and Nakajima (1997)	M	
	8.6×10^{-4}	5400	Perlinger et al. (1993)	M	
	9.3×10^{-4}		Li and Carr (1993)	M	
	9.1×10^{-4}		Li et al. (1993)	M	
	9.0×10^{-4}	3700	Ashworth et al. (1988)	M	278
	9.5×10^{-4}	4700	Sanemasa et al. (1982)	M	
	5.0×10^{-4}		Sato and Nakajima (1979a)	M	14
	9.6×10^{-4}		Mackay et al. (2006a)	V	
	9.6×10^{-4}		Shiu and Ma (2000)	V	
	9.6×10^{-4}		Mackay et al. (1992a)	V	
9.7×10^{-4}		Eastcott et al. (1988)	V		
9.7×10^{-4}	5300	Abraham (1984)	V		



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Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-3}	5500	Ben-Naim and Wilf (1980)	V	1
	9.9×10^{-4}		Hine and Mookerjee (1975)	V	
	9.6×10^{-4}	5100	Owens et al. (1986)	T	
		5300	Gill et al. (1976)	T	
	7.4×10^{-4}		Yaws (2003)	X	237
	1.8×10^{-3}		Keshavarz et al. (2022)	Q	
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	
	2.5×10^{-3}		Wang et al. (2017)	Q	80, 238
	6.6×10^{-4}		Wang et al. (2017)	Q	80, 239
	2.6×10^{-3}		Wang et al. (2017)	Q	80, 240
	9.9×10^{-4}		Li et al. (2014)	Q	241
	1.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	8.6×10^{-4}		Gharagheizi et al. (2010)	Q	246
	9.9×10^{-4}		Hilal et al. (2008)	Q	
	8.6×10^{-4}		Modarresi et al. (2007)	Q	67
		5000	Kühne et al. (2005)	Q	
	1.0×10^{-3}		Yaffe et al. (2003)	Q	248, 272
	1.1×10^{-3}		English and Carroll (2001)	Q	230, 231
	5.1×10^{-4}		Katritzky et al. (1998)	Q	
	1.3×10^{-3}		Russell et al. (1992)	Q	279
	8.8×10^{-4}		Suzuki et al. (1992)	Q	232
	1.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	9.4×10^{-4}		Duchowicz et al. (2020)	?	185, 21
		4700	Kühne et al. (2005)	?	
	1.7×10^{-3}		Yaws (1999)	?	21
	5.2×10^{-4}		Abraham and Weathersby (1994)	?	21
	9.6×10^{-4}		Yaws and Yang (1992)	?	21
	9.7×10^{-4}		Abraham et al. (1990)	?	
(2-propyl)-benzene $C_6H_5C_3H_7$	9.0×10^{-4}	4800	Brockbank (2013)	L	1
(isopropylbenzene; cumene) [98-82-8]	1.2×10^{-3}	3200	Staudinger and Roberts (2001)	L	
	8.4×10^{-4}	4800	Plyasunov and Shock (2000)	L	
	7.7×10^{-3}		Mackay and Shiu (1981)	L	
RWGFKTVRMDUZSP-UHFFFAOYSA-N	1.4×10^{-3}	4900	Hiatt (2013)	M	
	1.0×10^{-3}	2500	Kondoh and Nakajima (1997)	M	
	8.7×10^{-4}	3300	Hansen et al. (1993)	M	281
	9.1×10^{-4}		Li and Carr (1993)	M	
	8.9×10^{-4}		Li et al. (1993)	M	
	1.6×10^{-3}	3200	Ashworth et al. (1988)	M	278
	8.9×10^{-4}	4700	Sanemasa et al. (1982)	M	
	5.6×10^{-4}		Sato and Nakajima (1979a)	M	14
	6.8×10^{-4}		Mackay et al. (2006a)	V	
	6.8×10^{-4}		Shiu and Ma (2000)	V	
	6.8×10^{-4}		Mackay et al. (1992a)	V	
	6.8×10^{-4}		Hwang et al. (1992)	V	



Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.6×10^{-4}		Eastcott et al. (1988)	V	
	6.7×10^{-4}		Hine and Mookerjee (1975)	V	
	6.8×10^{-4}		Mackay and Leinonen (1975)	V	
	1.1×10^{-3}	5000	Wauchope and Haque (1972)	V	
	1.1×10^{-3}		McAuliffe (1966)	V	24
	6.8×10^{-4}		Yaws (2003)	X	237
	1.8×10^{-3}		Keshavarz et al. (2022)	Q	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	299
	2.9×10^{-3}		Wang et al. (2017)	Q	80, 238
	5.3×10^{-4}		Wang et al. (2017)	Q	80, 239
	2.8×10^{-3}		Wang et al. (2017)	Q	80, 240
	9.4×10^{-4}		Savary et al. (2014)	Q	
	8.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	8.8×10^{-4}		Gharagheizi et al. (2010)	Q	246
	8.6×10^{-4}		Hilal et al. (2008)	Q	
	7.7×10^{-4}		Modarresi et al. (2007)	Q	67
		5000	Kühne et al. (2005)	Q	
			Yaffe et al. (2003)	Q	356
	3.6×10^{-4}		Yao et al. (2002)	Q	229
	1.2×10^{-3}		English and Carroll (2001)	Q	230, 231
	4.7×10^{-4}		Katritzky et al. (1998)	Q	
	9.2×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	8.0×10^{-4}		Suzuki et al. (1992)	Q	232
	9.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	8.6×10^{-4}		Duchowicz et al. (2020)	?	185, 21
		4400	Kühne et al. (2005)	?	
	6.9×10^{-4}		Yaws (1999)	?	21
	5.8×10^{-4}		Abraham and Weathersby (1994)	?	21
	6.8×10^{-4}		Hoff et al. (1993)	?	21
	6.8×10^{-4}		Yaws and Yang (1992)	?	21
	8.8×10^{-4}		Abraham et al. (1990)	?	
			Fogg and Sangster (2003)	W	357
1-ethyl-2-methylbenzene	1.8×10^{-3}		Plyasunov and Shock (2000)	L	
$C_6H_4CH_3C_2H_5$	2.3×10^{-3}		Mackay and Shiu (1981)	L	
(<i>o</i> -ethyltoluene)	1.8×10^{-3}		Duchowicz et al. (2020)	V	186
[611-14-3]	1.9×10^{-3}		Mackay et al. (2006a)	V	
HYFLWBNQFMXCPA-UHFFFAOYSA-N	1.9×10^{-3}		Mackay et al. (1992a)	V	
	1.9×10^{-3}		Eastcott et al. (1988)	V	
	2.2×10^{-3}		Yaws (2003)	X	237
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.8×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.2×10^{-3}		Wang et al. (2017)	Q	80, 239
	3.0×10^{-3}		Wang et al. (2017)	Q	80, 240
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243



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Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.8×10^{-3}		Hilal et al. (2008)	Q	
	8.9×10^{-4}		Modarresi et al. (2007)	Q	67
		4500	Kühne et al. (2005)	Q	
	2.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	5.1×10^{-4}		Katritzky et al. (1998)	Q	
	9.5×10^{-4}		Nirmalakhandan et al. (1997)	Q	
		3200	Kühne et al. (2005)	?	
	2.2×10^{-3}		Yaws (1999)	?	21
	2.3×10^{-3}		Yaws and Yang (1992)	?	21
1-ethyl-3-methylbenzene $C_6H_4CH_3C_2H_5$ (<i>m</i> -ethyltoluene) [620-14-4] ZLCSFXPPANWQY-UHFFFAOYSA-N	1.7×10^{-3}		Yaws (2003)	X	237
	1.8×10^{-3}		Wang et al. (2017)	Q	80, 238
	9.8×10^{-4}		Wang et al. (2017)	Q	80, 239
	2.6×10^{-3}		Wang et al. (2017)	Q	80, 240
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-3}		Hilal et al. (2008)	Q	
	1.7×10^{-3}		Yaws (1999)	?	21
1-ethyl-4-methylbenzene $C_6H_4CH_3C_2H_5$ (<i>p</i> -ethyltoluene) [622-96-8] JRLPEMVDPPYPJ-UHFFFAOYSA-N	2.0×10^{-3}		Mackay and Shiu (1981)	L	
	2.0×10^{-3}		Duchowicz et al. (2020)	V	186
	1.6×10^{-3}		Duchowicz et al. (2020)	V	186
	2.0×10^{-3}		Mackay et al. (2006a)	V	
	2.0×10^{-3}		Mackay et al. (1992a)	V	
	2.0×10^{-3}		Eastcott et al. (1988)	V	
	2.0×10^{-3}		Yaws (2003)	X	237
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.8×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.1×10^{-3}		Wang et al. (2017)	Q	80, 239
	2.5×10^{-3}		Wang et al. (2017)	Q	80, 240
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-3}		Hilal et al. (2008)	Q	
	7.1×10^{-4}		Modarresi et al. (2007)	Q	67
	2.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.7×10^{-3}		English and Carroll (2001)	Q	230, 260
	5.1×10^{-4}		Katritzky et al. (1998)	Q	
	9.5×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	2.0×10^{-3}		Yaws (1999)	?	21
	2.0×10^{-3}		Yaws and Yang (1992)	?	21



Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
butylbenzene $C_6H_5C_4H_9$ [104-51-8] OCKPCBLVKNKHBMX-UHFFFAOYSA-N	7.1×10^{-4}	5100	Brockbank (2013)	L	1	
	7.1×10^{-4}	5500	Plyasunov and Shock (2000)	L		
	7.7×10^{-4}		Mackay and Shiu (1981)	L		
	2.0×10^{-3}	4500	Hiatt (2013)	M		
	7.4×10^{-4}		Ryu and Park (1999)	M		
	9.1×10^{-4}	2700	Kondoh and Nakajima (1997)	M		
	6.2×10^{-4}	6000	Perlinger et al. (1993)	M		
	7.1×10^{-4}		Li and Carr (1993)	M		
	6.7×10^{-4}		Li et al. (1993)	M		
	6.2×10^{-4}		Duchowicz et al. (2020)	V	186	
	6.2×10^{-4}		HSDB (2015)	V		
	9.9×10^{-5}		Abraham and Acree (2007)	V		
	7.5×10^{-4}		Mackay et al. (2006a)	V		
	7.5×10^{-4}		Shiu and Ma (2000)	V		
	7.5×10^{-4}		Mackay et al. (1992a)	V		
	7.6×10^{-4}		Meylan and Howard (1991)	V		
	7.5×10^{-4}		Eastcott et al. (1988)	V		
	7.4×10^{-4}		Abraham (1984)	V		
	1.7×10^{-3}	6500	Ben-Naim and Wilf (1980)	V	1	
	7.9×10^{-4}		Hine and Mookerjee (1975)	V		
	7.2×10^{-4}	5300	Owens et al. (1986)	T		
	7.5×10^{-4}		Yaws (2003)	X	237	
	3.1×10^{-3}		Duchowicz et al. (2020)	Q		
	7.6×10^{-4}		Gharagheizi et al. (2012)	Q		
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	244	
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245	
	7.1×10^{-4}		Gharagheizi et al. (2010)	Q	246	
	7.7×10^{-4}		Hilal et al. (2008)	Q		
	4.9×10^{-4}		Modarresi et al. (2007)	Q	67	
			5300	Kühne et al. (2005)	Q	
		7.2×10^{-4}		Yaffe et al. (2003)	Q	248, 272
		6.4×10^{-4}		Yao et al. (2002)	Q	229
7.9×10^{-4}			English and Carroll (2001)	Q	230, 231	
5.7×10^{-4}			Katritzky et al. (1998)	Q		
6.9×10^{-4}			Russell et al. (1992)	Q	358	
6.9×10^{-4}			Suzuki et al. (1992)	Q	232	
7.1×10^{-4}			Meylan and Howard (1991)	Q		
8.4×10^{-4}			Nirmalakhandan and Speece (1988)	Q		
			4900	Kühne et al. (2005)	?	
	7.6×10^{-4}		Yaws (1999)	?	21	
	7.5×10^{-4}		Yaws and Yang (1992)	?	21	
			7.5×10^{-4}	?		
			Abraham et al. (1990)	?		



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Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(1-methylpropyl)-benzene $C_6H_5C_4H_9$ (<i>sec</i> -butylbenzene) [135-98-8] ZJMWRROPUADPEA-UHFFFAOYSA-N	5.3×10^{-4}		Plyasunov and Shock (2000)	L	
	7.1×10^{-4}		Mackay and Shiu (1981)	L	
	1.3×10^{-3}	4600	Hiatt (2013)	M	
	7.5×10^{-4}	2300	Kondoh and Nakajima (1997)	M	
	5.6×10^{-4}		Duchowicz et al. (2020)	V	186
	5.5×10^{-4}		HSDB (2015)	V	
	5.3×10^{-4}		Mackay et al. (2006a)	V	
	5.3×10^{-4}		Mackay et al. (1992a)	V	
	5.4×10^{-4}		Eastcott et al. (1988)	V	
	8.6×10^{-4}		Hine and Mookerjee (1975)	V	
	5.9×10^{-4}		Yaws (2003)	X	237
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	5.9×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	6.9×10^{-4}		Gharagheizi et al. (2010)	Q	246
8.6×10^{-4}		Hilal et al. (2008)	Q		
6.9×10^{-4}		Modarresi et al. (2007)	Q	67	
7.2×10^{-4}		Yaffe et al. (2003)	Q	248, 249	
9.0×10^{-4}		English and Carroll (2001)	Q	230, 231	
9.9×10^{-5}		Nirmalakhandan et al. (1997)	Q		
6.1×10^{-4}		Suzuki et al. (1992)	Q	232	
7.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q		
1.3×10^{-3}		Yaws (1999)	?	21	
(2-methylpropyl)-benzene $C_6H_5C_4H_9$ (isobutylbenzene) [538-93-2] KXUHSQYYJYAXGX-UHFFFAOYSA-N	2.9×10^{-4}		Plyasunov and Shock (2000)	L	
	3.0×10^{-4}		Mackay and Shiu (1981)	L	
	2.9×10^{-4}		Duchowicz et al. (2020)	V	186
	3.0×10^{-4}		Mackay et al. (2006a)	V	
	3.0×10^{-4}		Mackay et al. (1992a)	V	
	3.0×10^{-4}		Eastcott et al. (1988)	V	
	5.5×10^{-4}		Yaws (2003)	X	237
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	6.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.9×10^{-4}		Gharagheizi et al. (2010)	Q	246
	7.0×10^{-4}		Hilal et al. (2008)	Q	
	5.2×10^{-4}		Modarresi et al. (2007)	Q	67
	3.1×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	4.3×10^{-4}		Yao et al. (2002)	Q	229
	7.7×10^{-4}		English and Carroll (2001)	Q	230, 231
	5.4×10^{-4}		Katritzky et al. (1998)	Q	
	7.0×10^{-4}		Nirmalakhandan et al. (1997)	Q	
1.3×10^{-3}		Yaws (1999)	?	21	



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Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl- <i>o</i> -xylene $C_{10}H_{14}$ [933-98-2] QUBBAXISAHIDNM-UHFFFAOYSA-N	1.2×10^{-3} 4.7×10^{-4} 1.1×10^{-3} 1.2×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	237 246 21
4-ethyl- <i>o</i> -xylene $C_{10}H_{14}$ [934-80-5] SBUYFICWQNHBCM-UHFFFAOYSA-N	1.3×10^{-3} 4.2×10^{-4} 1.1×10^{-3} 4.5×10^{-4} 1.3×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X Q Q Q ?	237 246 229 21
4-ethyl- <i>m</i> -xylene $C_{10}H_{14}$ [874-41-9] MEMBJMDZWKVOTB-UHFFFAOYSA-N	1.1×10^{-3} 4.0×10^{-4} 1.1×10^{-3} 3.0×10^{-4} 1.1×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	X Q Q Q ?	237 246 229 21
5-ethyl- <i>m</i> -xylene $C_{10}H_{14}$ (1-ethyl-3,5-dimethylbenzene) [934-74-7] LMAUJLKNZLEMGN-UHFFFAOYSA-N	1.3×10^{-3} 1.1×10^{-3} 9.3×10^{-4} 2.2×10^{-3} 3.3×10^{-4} 1.1×10^{-3} 1.3×10^{-3}		Yaws (2003) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q Q Q Q ?	237 80, 238 80, 239 80, 240 246 21
1-methyl-2-(1-methylethyl)- benzene $C_{10}H_{14}$ (<i>o</i> -cymene) [527-84-4] WWRCMKNKATXZARA-UHFFFAOYSA-N	1.6×10^{-3} 8.7×10^{-4} 9.0×10^{-4} 1.2×10^{-3} 1.2×10^{-3} 1.3×10^{-3} 6.1×10^{-4} 4.6×10^{-4} 6.2×10^{-4} 9.9×10^{-4} 7.8×10^{-4} 1.2×10^{-3} 1.2×10^{-3} 6.6×10^{-4} 5.3×10^{-4} 1.2×10^{-3}		Plyasunov and Shock (2000) Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998) Yaws (1999)	L V V X X Q Q Q Q Q Q Q Q Q Q Q Q ?	 186 258 237 259 271, 243 244 245 246 67 21



Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-3-(1-methylethyl)-benzene $C_{10}H_{14}$ (<i>m</i> -cymene) [535-77-3] XCYJPXQACVEIOS-UHFFFAOYSA-N	1.4×10^{-3}		Plyasunov and Shock (2000)	L	
	1.4×10^{-3}		Duchowicz et al. (2020)	V	186
	1.4×10^{-3}		HSDB (2015)	V	
	9.0×10^{-4}		Copolovici and Niinemets (2005)	V	
	1.2×10^{-3}		Yaws (2003)	X	258
	1.2×10^{-3}		Yaws (2003)	X	237
	8.2×10^{-4}		Dupeux et al. (2022)	Q	259
	6.1×10^{-4}		Duchowicz et al. (2020)	Q	
	4.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-3}		Gharagheizi et al. (2010)	Q	246
	8.6×10^{-4}		Hilal et al. (2008)	Q	
	4.5×10^{-4}		Modarresi et al. (2007)	Q	67
	1.2×10^{-3}		Yaws (1999)	?	21
1-methyl-4-(1-methylethyl)-benzene $C_{10}H_{14}$ (<i>p</i> -cymene; <i>p</i> -isopropyltoluene) [99-87-6] HFPZCAJZSCWRBC-UHFFFAOYSA-N	9.6×10^{-4}		Plyasunov and Shock (2000)	L	
	1.3×10^{-3}		Mackay and Shiu (1981)	L	
	1.8×10^{-3}	4900	Hiatt (2013)	M	
	1.0×10^{-3}	2600	Kondoh and Nakajima (1997)	M	
	9.0×10^{-4}		Duchowicz et al. (2020)	V	186
	8.0×10^{-4}		Duchowicz et al. (2020)	V	186
	1.1×10^{-3}		Martins et al. (2017)	V	315
	9.0×10^{-4}		HSDB (2015)	V	
	1.2×10^{-3}		Mackay et al. (2006a)	V	
	1.1×10^{-3}		Copolovici and Niinemets (2005)	V	
	9.1×10^{-4}		Niinemets and Reichstein (2002)	V	
	1.3×10^{-3}		Abraham et al. (1994a)	V	
	1.2×10^{-3}		Mackay et al. (1992a)	V	
	1.2×10^{-3}		Eastcott et al. (1988)	V	
	1.3×10^{-3}		Yaws (2003)	X	258
	1.3×10^{-3}		Yaws (2003)	X	237
	7.6×10^{-4}		Dupeux et al. (2022)	Q	259
	6.1×10^{-4}		Duchowicz et al. (2020)	Q	
	6.1×10^{-4}		Duchowicz et al. (2020)	Q	
	4.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-3}		Gharagheizi et al. (2010)	Q	246
	8.8×10^{-4}		Hilal et al. (2008)	Q	
	5.4×10^{-4}		Modarresi et al. (2007)	Q	67
	5.5×10^{-4}		Modarresi et al. (2007)	Q	67
		5300	Kühne et al. (2005)	Q	
	8.0×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	1.4×10^{-3}		English and Carroll (2001)	Q	230, 274
	5.4×10^{-4}		Katritzky et al. (1998)	Q	
	6.5×10^{-4}		Nirmalakhandan et al. (1997)	Q	



Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-dimethyl-3-propylbenzene $C_{11}H_{16}$ [17059-44-8] IRUSTUOJENXLMN-UHFFFAOYSA-N	8.7×10^{-4} 2.9×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,2-dimethyl-4-propylbenzene $C_{11}H_{16}$ [3982-66-9] FZJVYOOQGFZCSY-UHFFFAOYSA-N	8.8×10^{-4} 2.8×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,3-dimethyl-2-propylbenzene $C_{11}H_{16}$ [17059-45-9] POVRSTNZQPBWAS-UHFFFAOYSA-N	8.9×10^{-4} 2.7×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,3-dimethyl-4-propylbenzene $C_{11}H_{16}$ [61827-85-8] HPAXKQMKDWCLGU-UHFFFAOYSA-N	9.0×10^{-4} 2.6×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,3-dimethyl-5-propylbenzene $C_{11}H_{16}$ [3982-64-7] NBICXWXPZRNMPP-UHFFFAOYSA-N	9.3×10^{-4} 2.3×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,4-dimethyl-2-propylbenzene $C_{11}H_{16}$ [3042-50-0] PWEDYOIWLPSZSRP-UHFFFAOYSA-N	9.2×10^{-4} 2.4×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,2-dimethyl-3-isopropylbenzene $C_{11}H_{16}$ [22539-65-7] GDEQPEBFOYWSA-UHFFFAOYSA-N	8.4×10^{-4} 2.4×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,2-dimethyl-4-isopropylbenzene $C_{11}H_{16}$ [4132-77-8] MGMSKQZIAGFMRU-UHFFFAOYSA-N	8.5×10^{-4} 2.3×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,3-dimethyl-2-isopropylbenzene $C_{11}H_{16}$ [14411-75-7] IVCIQLTVLDOHKA-UHFFFAOYSA-N	8.7×10^{-4} 2.1×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,3-dimethyl-4-isopropylbenzene $C_{11}H_{16}$ [4706-89-2] AADQFNAACHHRLT-UHFFFAOYSA-N	8.7×10^{-4} 2.1×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-dimethyl-5-isopropylbenzene $C_{11}H_{16}$ [4706-90-5] RMKJTYPCFNTGQ-UHFFFAOYSA-N	9.2×10^{-4} 1.9×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,4-dimethyl-2-isopropylbenzene $C_{11}H_{16}$ [4132-72-3] CLSBTDGUHSQYTO-UHFFFAOYSA-N	9.0×10^{-4} 1.9×10^{-4} 9.4×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-ethyl-2-propylbenzene $C_{11}H_{16}$ [16021-20-8] DMUVQFCRCMDZPW-UHFFFAOYSA-N	9.4×10^{-4} 3.5×10^{-4} 6.2×10^{-4} 6.2×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010)	X Q Q Q Q	237 242, 243 244 245 246
1-ethyl-3-propylbenzene $C_{11}H_{16}$ [20024-91-3] QCYGXOCMWHXSXU-UHFFFAOYSA-N	9.6×10^{-4} 3.3×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-ethyl-4-propylbenzene $C_{11}H_{16}$ [20024-90-2] ADQDTIAWIXUACV-UHFFFAOYSA-N	9.2×10^{-4} 3.7×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-ethyl-2-isopropylbenzene $C_{11}H_{16}$ [18970-44-0] ZAJYARZMPOEGLK-UHFFFAOYSA-N	9.8×10^{-4} 2.5×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-ethyl-3-isopropylbenzene $C_{11}H_{16}$ [4920-99-4] GSLSBTNLESMZTN-UHFFFAOYSA-N	9.6×10^{-4} 2.6×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-ethyl-4-isopropylbenzene $C_{11}H_{16}$ [4218-48-8] GUUDUUDWUWUTPD-UHFFFAOYSA-N	9.1×10^{-4} 3.0×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-2,3-diethylbenzene $C_{11}H_{16}$ [13632-93-4] LRJOXARIJKBUFE-UHFFFAOYSA-N	9.0×10^{-4} 2.6×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-2,4-diethylbenzene $C_{11}H_{16}$ [1758-85-6] PZMJNJDRDKPVLB-UHFFFAOYSA-N	9.1×10^{-4} 2.5×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-2,5-diethylbenzene $C_{11}H_{16}$ [13632-94-5] ZEHGGUIGEDITMM-UHFFFAOYSA-N	9.0×10^{-4} 2.6×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-2,6-diethylbenzene $C_{11}H_{16}$ [13632-95-6] XZZNTLNFQVAKFD-UHFFFAOYSA-N	8.8×10^{-4} 2.8×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-3,5-diethylbenzene $C_{11}H_{16}$ [2050-24-0] HILAULICMJUOLK-UHFFFAOYSA-N	9.5×10^{-4} 8.7×10^{-4} 5.8×10^{-4} 2.0×10^{-3} 2.2×10^{-4} 7.9×10^{-4}		Yaws (2003) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q Q Q	237 80, 238 80, 239 80, 240 246
1-methyl-2-butylbenzene $C_{11}H_{16}$ [1595-11-5] NUJILYKLNKQOOX-UHFFFAOYSA-N	9.0×10^{-4} 4.1×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-3-butylbenzene $C_{11}H_{16}$ [1595-04-6] OAPCPUDMDJIBOQ-UHFFFAOYSA-N	9.2×10^{-4} 3.7×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-4-butylbenzene $C_{11}H_{16}$ [1595-05-7] SBBKUBSYOVDBBC-UHFFFAOYSA-N	9.1×10^{-4} 4.0×10^{-4} 8.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-2-isobutylbenzene $C_{11}H_{16}$ [36301-29-8] XNMPJDZAHSMAMN-UHFFFAOYSA-N	9.1×10^{-4} 2.9×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-3-isobutylbenzene $C_{11}H_{16}$ [5160-99-6] SDHYGAUOCHFYSR-UHFFFAOYSA-N	9.3×10^{-4} 2.8×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-4-isobutylbenzene $C_{11}H_{16}$ [5161-04-6] VCGBZLLPCGFQM-UHFFFAOYSA-N	9.1×10^{-4} 2.9×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-2-sec-butylbenzene $C_{11}H_{16}$ [1595-06-8] AMBAWAHKHZAAAY-UHFFFAOYSA-N	9.1×10^{-4} 2.9×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-3- <i>sec</i> -butylbenzene $C_{11}H_{16}$ [1772-10-7] RMNILBOMCXQZFC-UHFFFAOYSA-N	9.3×10^{-4} 2.8×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-4- <i>sec</i> -butylbenzene $C_{11}H_{16}$ [1595-16-0] LWCFXYMSEGOQWNB-UHFFFAOYSA-N	9.0×10^{-4} 3.0×10^{-4} 9.1×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-2- <i>tert</i> -butyl benzene $C_{11}H_{16}$ [1074-92-6] AXHVNJGQQJFMHT-UHFFFAOYSA-N	7.2×10^{-4} 3.4×10^{-4} 8.2×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-3- <i>tert</i> -butylbenzene $C_{11}H_{16}$ [1075-38-3] JTIAYWZZOZUTK-UHFFFAOYSA-N	8.2×10^{-4} 2.5×10^{-4} 8.2×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-methyl-3,4-diethylbenzene $C_{11}H_{16}$ [13732-80-4] MJQJAQGFUBIGIK-UHFFFAOYSA-N	9.2×10^{-4} 2.4×10^{-4} 7.9×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-phenyl-2,2-dimethylpropane $C_{11}H_{16}$ [1007-26-7] CJGXJKVMUHXVHL-UHFFFAOYSA-N	3.8×10^{-4} 3.4×10^{-4} 4.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-phenyl-2-methylbutane $C_{11}H_{16}$ [3968-85-2] IFDLFCDWOFLKEB-UHFFFAOYSA-N	4.0×10^{-4} 4.5×10^{-4} 5.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-phenyl-3-methylbutane $C_{11}H_{16}$ [2049-94-7] XNXIYYFOYIUJW-UHFFFAOYSA-N	3.9×10^{-4} 4.8×10^{-4} 5.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-phenyl-3-methylbutane $C_{11}H_{16}$ [4481-30-5] NQRMTOKLHZNAQH-UHFFFAOYSA-N	4.1×10^{-4} 3.6×10^{-4} 5.3×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-phenylpentane $C_{11}H_{16}$ [2719-52-0] LTHAIAJHDPJXLG-UHFFFAOYSA-N	4.3×10^{-4} 3.7×10^{-4} 5.5×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3-triethylbenzene $C_{12}H_{18}$ [42205-08-3] VIDOPANCAUPXNH-UHFFFAOYSA-N	3.5×10^{-4} 1.4×10^{-4} 6.0×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,2,4-triethylbenzene $C_{12}H_{18}$ [877-44-1] WNLWIOJSURYFIB-UHFFFAOYSA-N	7.2×10^{-4} 1.4×10^{-4} 6.0×10^{-4} 7.2×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	237 246 21
1,3,5-triethylbenzene $C_{12}H_{18}$ [102-25-0] WJYMPXJVHNDZHD-UHFFFAOYSA-N	1.0×10^{-3} 3.4×10^{-4} 1.4×10^{-4} 6.0×10^{-4}		Plyasunov and Shock (2000) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	L X Q Q	237 246
4- <i>tert</i> -butyl- <i>o</i> -xylene $C_{12}H_{18}$ [7397-06-0] QRPPSTNABSMSCS-UHFFFAOYSA-N	5.8×10^{-4} 7.2×10^{-4} 9.0×10^{-4} 2.7×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1-(1,1-dimethylethyl)-3,5-dimethylbenzene $C_{12}H_{18}$ [98-19-1] FZSPYHREEHYLCB-UHFFFAOYSA-N	5.8×10^{-4} 4.5×10^{-4} 7.7×10^{-4} 2.7×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
<i>o</i> -diisopropylbenzene $C_{12}H_{18}$ [25321-09-9] OKIRBHVJGXSIS-UHFFFAOYSA-N	4.8×10^{-4}		HSDB (2015)	Q	99
<i>m</i> -diisopropylbenzene $C_{12}H_{18}$ [99-62-7] UNEATYXSUBPPKP-UHFFFAOYSA-N	9.5×10^{-4} 7.2×10^{-4} 9.6×10^{-4}		Yaws (2003) Gharagheizi et al. (2010) Yaws (1999)	X Q ?	237 246 21
<i>p</i> -diisopropylbenzene $C_{12}H_{18}$ [100-18-5] SPPWGCYCYAMHDT-UHFFFAOYSA-N	1.0×10^{-3} 1.8×10^{-4} 7.2×10^{-4} 1.0×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	237 246 21
4-phenylcyclohexene $C_{12}H_{14}$ [4994-16-5] XWCWNUSFQVJNDI-UHFFFAOYSA-N	7.9×10^{-3}		Ebert et al. (2023)	?	318



Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
heptylbenzene $C_6H_5C_7H_{15}$ [1078-71-3] LBNXAWYDQUGHGX-UHFFFAOYSA-N	2.7×10^{-4} 6.5×10^{-4} 2.2×10^{-2} 6.5×10^{-4} 3.1×10^{-3} 1.0×10^{-3} 5.0×10^{-4} 3.9×10^{-4} 3.5×10^{-4} 1.5×10^{-3}	11000	Brockbank (2013) Duchowicz et al. (2020) Ben-Naim and Wilf (1980) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	L V V X Q Q Q Q Q ?	186 1 237 246 229 21
5- <i>tert</i> -butyl-1,2,3-trimethylbenzene $C_{13}H_{20}$ [98-23-7] ZQVJKYPEIPEIP-UHFFFAOYSA-N	5.3×10^{-4} 9.2×10^{-4} 9.0×10^{-4} 1.5×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
octylbenzene $C_6H_5C_8H_{17}$ [2189-60-8] CDKDKXSLNROY-UHFFFAOYSA-N	1.8×10^{-4} 2.3×10^{-4} 5.4×10^{-2} 8.7×10^{-4} 3.1×10^{-3} 1.7×10^{-3} 4.9×10^{-4} 3.2×10^{-4} 2.0×10^{-3}	12000	Brockbank (2013) Duchowicz et al. (2020) Ben-Naim and Wilf (1980) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999)	L V V X Q Q Q Q ?	186 1 237 246 21
nonylbenzene $C_{15}H_{24}$ [1081-77-2] LIXVMPBOGDSCR-UHFFFAOYSA-N	1.4×10^{-4} 1.8×10^{-3} 3.3×10^{-3}		Brockbank (2013) Gharagheizi et al. (2012) Yaws (1999)	L Q ?	21
3,5-di- <i>tert</i> -butyltoluene $C_{15}H_{24}$ [15181-11-0] WIXDSJRJFDWTNY-UHFFFAOYSA-N	3.7×10^{-3}	9100	Hiatt (2013)	M	
1,3,5-tris(1-methylethyl)benzene $C_{15}H_{24}$ [717-74-8] VUMCUSHVMYIRMB-UHFFFAOYSA-N	2.5×10^{-4} 1.8×10^{-4} 5.2×10^{-4} 2.6×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
ethyl(phenylethyl)-benzene $C_{16}H_{18}$ [64800-83-5] BDEIYMXBPHSOSG-UHFFFAOYSA-N	1.1×10^{-2} 1.2×10^{-2} 6.4×10^{-2} 1.8×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4-(1-phenylethyl)- <i>m</i> -xylene $C_{16}H_{18}$ [6165-52-2] JOUBGGHXBLOLFY-UHFFFAOYSA-N	1.3×10^{-2} 1.6×10^{-2} 5.2×10^{-2} 1.5×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
decylbenzene $C_{16}H_{26}$ (1-phenyldecane) [104-72-3] UZILCZKGXMQEQR-UHFFFAOYSA-N	7.6×10^{-5} 8.6×10^{-5} 6.5×10^{-5} 1.3×10^{-4} 8.6×10^{-5} 3.1×10^{-3} 1.3×10^{-4} 1.4×10^{-4} 3.4×10^{-4} 2.8×10^{-4} 7.9×10^{-3}		Brockbank (2013) Plyasunov and Shock (2000) Duchowicz et al. (2020) HSDB (2015) Sherblom et al. (1992) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Yaws (1999)	L L V V V Q Q Q Q Q ?	 186 287, 288 287, 289 287, 290 287, 291 21
2-phenyldecane $C_{16}H_{26}$ [4537-13-7] DDTJIUCOLHYDL-UHFFFAOYSA-N	1.0×10^{-4}		Sherblom et al. (1992)	V	
3-phenyldecane $C_{16}H_{26}$ [4621-36-7] PYVIFMPVFLOTLN-UHFFFAOYSA-N	1.1×10^{-4}		Sherblom et al. (1992)	V	
4-phenyldecane $C_{16}H_{26}$ [4537-12-6] QTDBKYLPIZTFN-UHFFFAOYSA-N	9.2×10^{-5}		Sherblom et al. (1992)	V	
5-phenyldecane $C_{16}H_{26}$ [4537-11-5] CDOBABYRHNZQG-UHFFFAOYSA-N	8.4×10^{-5}		Sherblom et al. (1992)	V	
undecylbenzene $C_{17}H_{28}$ (1-phenylundecane) [6742-54-7] XBEADGFTLHRJRB-UHFFFAOYSA-N	9.9×10^{-5}		HSDB (2015)	Q	99
2-phenylundecane $C_{17}H_{28}$ [4536-88-3] YHJBCRBYDBNEIK-UHFFFAOYSA-N	8.2×10^{-5}		Sherblom et al. (1992)	V	
3-phenylundecane $C_{17}H_{28}$ [4536-87-2] NVHBFHMWJMQTG-UHFFFAOYSA-N	9.0×10^{-5}		Sherblom et al. (1992)	V	



Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-phenylundecane $C_{17}H_{28}$ [4536-86-1] NSQAXMRLBNXEHK-UHFFFAOYSA-N	5.9×10^{-5}		Sherblom et al. (1992)	V	
5-phenylundecane $C_{17}H_{28}$ [4537-15-9] RRPCXIBGXYGQNC-UHFFFAOYSA-N	6.1×10^{-5}		Sherblom et al. (1992)	V	
6-phenylundecane $C_{17}H_{28}$ [4537-14-8] WCABIRIFXVXGQH-UHFFFAOYSA-N	6.4×10^{-5}		Sherblom et al. (1992)	V	
dodecylbenzene $C_{18}H_{30}$ (1-phenyldodecane) [123-01-3] KWKXNDCHNDYVRT-UHFFFAOYSA-N	7.6×10^{-5}		HSDB (2015)	Q	99
2-phenyldodecane $C_{18}H_{30}$ [2719-61-1] VRPRIAVYSREHAN-UHFFFAOYSA-N	1.1×10^{-4}		Sherblom et al. (1992)	V	
3-phenyldodecane $C_{18}H_{30}$ [2400-00-2] PGVOXXHNGYYHBB-UHFFFAOYSA-N	1.3×10^{-4}		Sherblom et al. (1992)	V	
4-phenyldodecane $C_{18}H_{30}$ [2719-64-4] RHDHXBLZBVAPTL-UHFFFAOYSA-N	8.3×10^{-5}		Sherblom et al. (1992)	V	
5-phenyldodecane $C_{18}H_{30}$ [2719-63-3] NPAWGLOPXKCTCV-UHFFFAOYSA-N	7.8×10^{-5}		Sherblom et al. (1992)	V	
6-phenyldodecane $C_{18}H_{30}$ [2719-62-2] ZYHJQFMITFCBKH-UHFFFAOYSA-N	6.0×10^{-5}		Sherblom et al. (1992)	V	
tridecylbenzene $C_{19}H_{32}$ (1-phenyltridecane) [123-02-4] MCVUKOYZUCWLQQ-UHFFFAOYSA-N	1.1×10^{-4} 5.5×10^{-5}		Sherblom et al. (1992) HSDB (2015)	V Q	99



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Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-phenyltridecane $C_{19}H_{32}$ [4534-53-6] FCXPVFLEDIQLLO-UHFFFAOYSA-N	2.7×10^{-4}		Sherblom et al. (1992)	V	
3-phenyltridecane $C_{19}H_{32}$ [4534-52-5] VZZMNLVGDGMQQV-UHFFFAOYSA-N	2.1×10^{-4}		Sherblom et al. (1992)	V	
4-phenyltridecane $C_{19}H_{32}$ [4534-51-4] RZGVZPAWCMDCK-UHFFFAOYSA-N	2.0×10^{-4}		Sherblom et al. (1992)	V	
5-phenyltridecane $C_{19}H_{32}$ [4534-50-3] MZTIRLOLMGVVEK-UHFFFAOYSA-N	1.5×10^{-4}		Sherblom et al. (1992)	V	
6-phenyltridecane $C_{19}H_{32}$ [4534-49-0] OTSYYFFDVLHIKX-UHFFFAOYSA-N	1.5×10^{-4}		Sherblom et al. (1992)	V	
tetradecylbenzene $C_{20}H_{34}$ (1-phenyltetradecane) [1459-10-5] JZALLXAUNPOCEU-UHFFFAOYSA-N	4.2×10^{-5}		HSDB (2015)	Q	99
2-phenyltetradecane $C_{20}H_{34}$ [4534-59-2] GDFUGKICRHMOT-UHFFFAOYSA-N	6.7×10^{-4}		Sherblom et al. (1992)	V	
3-phenyltetradecane $C_{20}H_{34}$ [4534-58-1] ILOABSZOHZMWLD-UHFFFAOYSA-N	6.2×10^{-4}		Sherblom et al. (1992)	V	
4-phenyltetradecane $C_{20}H_{34}$ [4534-57-0] YXLRHYCRTUAPMC-UHFFFAOYSA-N	4.0×10^{-4}		Sherblom et al. (1992)	V	
5-phenyltetradecane $C_{20}H_{34}$ [4534-56-9] RAWFVRXBPRHWLJ-UHFFFAOYSA-N	5.0×10^{-4}		Sherblom et al. (1992)	V	



Table A2.5: Mononuclear aromatics (. . . continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
6-phenyltetradecane $C_{20}H_{34}$ [4534-55-8] MTDIFFBFSKQPIA-UHFFFAOYSA-N	3.6×10^{-4}		Sherblom et al. (1992)	V	
pentadecylbenzene $C_{21}H_{36}$ [2131-18-2] JIRNEODMTPGRGV-UHFFFAOYSA-N	1.2×10^{-5}		HSDB (2015)	Q	99
ethenylbenzene C_8H_8 (styrene) [100-42-5] PPBRXRYQALVLMV-UHFFFAOYSA-N	3.6×10^{-3}	3700	Brockbank (2013)	L	1
	2.9×10^{-3}	4200	Plyasunov and Shock (2000)	L	
	2.7×10^{-3}		Kim and Kim (2014)	M	
	4.4×10^{-3}	4600	Hiatt (2013)	M	
	3.4×10^{-3}		Dohnal and Hovorka (1999)	M	
	2.5×10^{-3}		Welke et al. (1998)	M	
	3.8×10^{-3}	4100	Kondoh and Nakajima (1997)	M	
	2.9×10^{-3}	4800	Bissonette et al. (1990)	M	
	1.8×10^{-3}		Sato and Nakajima (1979a)	M	14
	3.6×10^{-3}		Lide and Frederikse (1995)	V	
	3.3×10^{-3}		Abraham et al. (1994a)	V	
	3.3×10^{-3}		Mackay et al. (1993)	V	
	3.8×10^{-3}		Yaws (2003)	X	258
	3.8×10^{-3}		Yaws (2003)	X	237
	3.8×10^{-3}	4200	Goldstein (1982)	X	298
	3.8×10^{-3}	3800	Fogg and Sangster (2003)	C	
	3.3×10^{-3}		Dupeux et al. (2022)	Q	259
	1.3×10^{-3}		Keshavarz et al. (2022)	Q	
	1.1×10^{-2}		Duchowicz et al. (2020)	Q	299
	8.7×10^{-3}		Wang et al. (2017)	Q	80, 238
	2.6×10^{-3}		Wang et al. (2017)	Q	80, 239
	7.6×10^{-3}		Wang et al. (2017)	Q	80, 240
	1.6×10^{-2}		Gharagheizi et al. (2012)	Q	
4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243	
2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	244	
3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245	
2.6×10^{-3}		Gharagheizi et al. (2010)	Q	246	
3.2×10^{-3}		Hilal et al. (2008)	Q		
4.4×10^{-3}		Modarresi et al. (2007)	Q	67	
	4800	Kühne et al. (2005)	Q		
3.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249	
3.3×10^{-3}		English and Carroll (2001)	Q	230, 231	
1.2×10^{-4}		Katritzky et al. (1998)	Q		
3.7×10^{-3}		Nirmalakhandan et al. (1997)	Q		
3.6×10^{-3}		Duchowicz et al. (2020)	?	185, 21	
	3700	Kühne et al. (2005)	?		
3.8×10^{-3}		Yaws (1999)	?	21	
1.9×10^{-3}		Abraham and Weathersby (1994)	?	21	



Rolf Sander: Compilation of Henry's law constants

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Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.7×10^{-3}		Yaws and Yang (1992) Shiu and Ma (2000)	? W	21 360
(<i>E</i>)-1-propenylbenzene C_9H_{10} [873-66-5] QROGIFZRVHSFLM-QHHAFSJGSA-N	2.9×10^{-3}		Hilal et al. (2008)	Q	
1-propenylbenzene C_9H_{10} [637-50-3] QROGIFZRVHSFLM-UHFFFAOYSA-N	3.7×10^{-3}		HSDB (2015)	Q	99
2-propenylbenzene C_9H_{10} (allylbenzene) [300-57-2] HJWLRCRVIBGQPNF-UHFFFAOYSA-N	1.4×10^{-3} 2.2×10^{-3} 1.5×10^{-3} 2.9×10^{-3} 1.4×10^{-3}		Sato and Nakajima (1979a) Hilal et al. (2008) Yaffe et al. (2003) Nirmalakhandan et al. (1997) Abraham and Weathersby (1994)	M Q Q Q ?	14 248, 249 21
1-ethenyl-3-methylbenzene C_9H_{10} (<i>m</i> -methylstyrene) [100-80-1] JZHGRUMIRATHIU-UHFFFAOYSA-N	3.0×10^{-3} 7.0×10^{-3} 3.8×10^{-3} 3.1×10^{-3} 1.6×10^{-3} 3.0×10^{-3} 2.6×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999) Yaws and Yang (1992)	X Q Q Q Q ? ?	237 246 67 21 21
1-ethenyl-4-methylbenzene C_9H_{10} (<i>p</i> -methylstyrene) [622-97-9] JLBJTVDPNSHKSJ-UHFFFAOYSA-N	3.1×10^{-3} 3.1×10^{-3} 3.1×10^{-3} 5.5×10^{-3} 7.6×10^{-3} 3.1×10^{-3} 2.5×10^{-3} 3.1×10^{-3} 3.8×10^{-3} 3.4×10^{-3} 2.8×10^{-3} 1.5×10^{-3} 3.1×10^{-3} 3.5×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992)	V V X Q Q Q Q Q Q Q Q Q ? ?	186 237 242, 243 244 245 246 67 229 21 21
(1-methylethenyl)-benzene C_9H_{10} (α -methyl styrene) [98-83-9] XYLMUPLGERFSHI-UHFFFAOYSA-N	3.9×10^{-3} 3.8×10^{-3} 3.3×10^{-3} 3.6×10^{-3} 2.4×10^{-3} 3.9×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Abraham et al. (1994a) Duchowicz et al. (2020) Hilal et al. (2008) English and Carroll (2001)	V V V Q Q Q	186 230, 231



Table A2.5: Mononuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phenylacetylene C_8H_6 [536-74-3] UEXCJVNBTXOEH-UHFFFAOYSA-N	1.6×10^{-2}		Duchowicz et al. (2020)	V	186
	5.7×10^{-3}		Yaws (2003)	X	237
	2.2×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.9×10^{-3}		Hilal et al. (2008)	Q	
α -methylstyrene dimer $C_{18}H_{20}$ [6144-04-3] ATSCZMXECPPEA-BUHFOSPRSA-N	6.5×10^{-3}		Modarresi et al. (2007)	Q	67
	1.5×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.1×10^{-2}		HSDB (2015)	Q	99
	5.7×10^{-3}		Zhang et al. (2010)	Q	287, 288
	7.2×10^{-3}		Zhang et al. (2010)	Q	287, 289
	2.4×10^{-1}		Zhang et al. (2010)	Q	287, 290
	9.0×10^{-2}		Zhang et al. (2010)	Q	287, 291



Rolf Sander: Compilation of Henry’s law constants

A2.6 Terpenes and terpenoids

Table A2.6: Terpenes and terpenoids

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-4-(1-methylethyl)- cyclohexane $C_{10}H_{20}$ (<i>p</i> -menthane) [99-82-1] CFJYNSNXFLKNS-UHFFFAOYSA-N	5.6×10^{-6}		Duchowicz et al. (2020)	V	186
	5.6×10^{-6}		Copolovici and Niinemets (2005)	V	
	2.1×10^{-4}		Duchowicz et al. (2020)	Q	
α -pinene $C_{10}H_{16}$ [80-56-8] GRWFGVWFFZKLTU-UHFFFAOYSA-N	7.0×10^{-5}	4700	Plyasunov and Shock (2000)	L	
	2.9×10^{-4}	1800	Leng et al. (2013)	M	
	7.4×10^{-5}	4400	Copolovici and Niinemets (2005)	M	
	5.8×10^{-4}		Karl et al. (2003)	M	87
	1.4×10^{-2}		van Ruth et al. (2002)	M	14
	7.4×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 361
	2.1×10^{-3}		van Ruth et al. (2001)	M	14
	7.0×10^{-5}		Fichan et al. (1999)	M	
	4.7×10^{-5}		Falk et al. (1990)	M	14
	3.4×10^{-5}		Duchowicz et al. (2020)	V	186
	3.4×10^{-5}		HSDB (2015)	V	
	7.4×10^{-5}		Copolovici and Niinemets (2005)	V	
	7.4×10^{-5}		Niinemets and Reichstein (2002)	V	
	2.8×10^{-5}	10000	Li et al. (1998)	V	
	3.5×10^{-5}		Hilal et al. (2008)	C	
	2.2×10^{-4}		Dupeux et al. (2022)	Q	259
	3.0×10^{-4}		Duchowicz et al. (2020)	Q	
	7.6×10^{-4}		Wang et al. (2017)	Q	80, 238
	2.4×10^{-5}		Wang et al. (2017)	Q	80, 239
	5.6×10^{-4}		Wang et al. (2017)	Q	80, 240
	3.1×10^{-5}		Hilal et al. (2008)	Q	
β -pinene $C_{10}H_{16}$ [127-91-3] WTARULDDTDQWMU-UHFFFAOYSA-N	2.1×10^{-4}		Plyasunov and Shock (2000)	L	
	1.6×10^{-4}		Helburn et al. (2008)	M	
	1.5×10^{-4}	4500	Copolovici and Niinemets (2005)	M	
	4.9×10^{-4}		Karl et al. (2003)	M	87
	4.7×10^{-5}		Falk et al. (1990)	M	14
	1.5×10^{-4}		Copolovici and Niinemets (2005)	V	
	1.5×10^{-4}		Niinemets and Reichstein (2002)	V	
	4.3×10^{-4}		Dupeux et al. (2022)	Q	259
	4.5×10^{-4}		Wang et al. (2017)	Q	80, 238
	3.2×10^{-5}		Wang et al. (2017)	Q	80, 239
	1.1×10^{-3}		Wang et al. (2017)	Q	80, 240
	6.2×10^{-5}		HSDB (2015)	Q	99



Table A2.6: Terpenes and terpenoids (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-4-(1-methylethyl)-1,3-cyclohexadiene $C_{10}H_{16}$	5.1×10^{-4}		Plyasunov and Shock (2000)	L	
(α -terpinene) [99-86-5] YHQGMVUVUMAZJR-UHFFFAOYSA-N	3.8×10^{-4} 2.9×10^{-4} 4.5×10^{-4} 2.8×10^{-4} 5.1×10^{-4} 5.4×10^{-4}	4800	Schuhfried et al. (2015) Copolovici and Niinemets (2005) Karl et al. (2003) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Dupeux et al. (2022)	M M M V V Q	87 259
1-methyl-4-(1-methylethyl)-1,4-cyclohexadiene $C_{10}H_{16}$	5.7×10^{-4}	4300	Plyasunov and Shock (2000)	L	
(γ -terpinene) [99-85-4] YKFLAYDHMOASII-UHFFFAOYSA-N	4.5×10^{-4} 3.8×10^{-4} 4.4×10^{-4} 3.8×10^{-4} 2.8×10^{-4} 5.4×10^{-4} 6.2×10^{-4} 2.1×10^{-4} 3.4×10^{-4}	4800 8000	Schuhfried et al. (2015) Copolovici and Niinemets (2005) Duchowicz et al. (2020) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Li et al. (1998) Dupeux et al. (2022) Duchowicz et al. (2020) Katritzky et al. (1998)	M M V V V V Q Q Q	186 259
1-methyl-4-(1-methylethenyl)-cyclohexene $C_{10}H_{16}$	4.7×10^{-4}	4700	Plyasunov and Shock (2000)	L	
(limonene) [138-86-3] XMGQYMWVWDOXHJM-UHFFFAOYSA-N	4.8×10^{-4} 2.6×10^{-4} 7.0×10^{-4} 2.4×10^{-4} 7.0×10^{-4} 3.1×10^{-4} 3.1×10^{-4} 3.5×10^{-4} 6.4×10^{-4} 3.5×10^{-4} 1.7×10^{-4} 7.3×10^{-4} 6.4×10^{-4} 5.9×10^{-4} 1.1×10^{-4} 1.5×10^{-3} 1.1×10^{-4} 1.9×10^{-4}	4600 3000 10000	Leng et al. (2013) Copolovici and Niinemets (2007) Fichan et al. (1999) Welke et al. (1998) Falk et al. (1990) Duchowicz et al. (2020) HSDB (2015) Copolovici and Niinemets (2005) van Roon et al. (2005) Niinemets and Reichstein (2002) Li et al. (1998) Dupeux et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008) Modarresi et al. (2007)	M M M M M V V V V V V Q Q Q Q Q Q Q	14 186 259 80, 238 80, 239 80, 240 67



Rolf Sander: Compilation of Henry's law constants

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Table A2.6: Terpenes and terpenoids (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>R</i>)-1-methyl-4-(1-methylethenyl)-cyclohexene $C_{10}H_{16}$	3.8×10^{-4}		Schuhfried et al. (2015)	M	
(<i>R</i> -(+)-limonene; <i>D</i> -limonene) [5989-27-5] XMGQYMWWD0XHJM-SNVBAGLBSA-N	2.6×10^{-4} 3.5×10^{-4} 3.8×10^{-4} 3.9×10^{-4} 3.8×10^{-4} 3.8×10^{-4} 3.8×10^{-4} 7.3×10^{-4} 6.4×10^{-4} 1.2×10^{-4} 3.8×10^{-4} 1.9×10^{-4} 3.8×10^{-4}	4500	Helburn et al. (2008) Copolovici and Niinemets (2005) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006a) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2007) Yaws (1999)	M M V V V X X Q Q Q Q Q ?	186 258 237 259
(<i>S</i>)-1-methyl-4-(1-methylethenyl)-cyclohexene $C_{10}H_{16}$ (<i>S</i> -(-)-limonene) [5989-54-8] XMGQYMWWD0XHJM-JTQLQIEISA-N	3.7×10^{-4} 3.5×10^{-4}	4400	Schuhfried et al. (2015) Copolovici and Niinemets (2005)	M M	
3,7,7-trimethyl-bicyclo[4.1.0]hept-3-ene $C_{10}H_{16}$ (3-carene) [13466-78-9] BQOFWKZOCNGFEC-UHFFFAOYSA-N	1.6×10^{-4} 7.3×10^{-5} 7.3×10^{-5}		Falk et al. (1990) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002)	M V V	14
7-methyl-3-methylene-1,6-octadiene $C_{10}H_{16}$ (myrcene) [123-35-3] UAHWPYUMFXFJY-UHFFFAOYSA-N	4.0×10^{-4} 3.6×10^{-4} 8.7×10^{-4} 1.5×10^{-4} 1.1×10^{-4} 1.6×10^{-4} 7.2×10^{-4} 1.6×10^{-4} 1.3×10^{-4} 7.1×10^{-4} 1.6×10^{-4} 6.2×10^{-5} 2.0×10^{-5}	2800	Plyasunov and Shock (2000) Schuhfried et al. (2015) Fichan et al. (1999) Duchowicz et al. (2020) HSDB (2015) Copolovici and Niinemets (2005) van Roon et al. (2005) Niinemets and Reichstein (2002) Dupeux et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L M M V V V V V Q Q Q Q Q	186 259 271, 243 244 245



Table A2.6: Terpenes and terpenoids (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-4-(1-methylethylidene)- cyclohexene $C_{10}H_{16}$ (α -terpinolene) [586-62-9] MOYAFQVGZZPNRA-UHFFFAOYSA-N	7.9×10^{-4} 3.8×10^{-4} 7.0×10^{-4} 3.7×10^{-4} 3.8×10^{-4} 5.7×10^{-4}	5500 5300	Plyasunov and Shock (2000) Copolovici and Niinemets (2005) HSDB (2015) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Li et al. (1998)	L M V V V V	
α -phellandrene $C_{10}H_{16}$ [99-83-2] OGLDWXZKYODSOB-UHFFFAOYSA-N	1.8×10^{-4} 1.8×10^{-4} 1.8×10^{-4} 1.4×10^{-4} 5.3×10^{-4}	4500	Plyasunov and Shock (2000) Copolovici and Niinemets (2005) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Dupeux et al. (2022)	L M V V Q	259
(<i>R</i>)-(-)- α -phellandrene $C_{10}H_{16}$ [4221-98-1] OGLDWXZKYODSOB-SNVBAGLBSA-N	3.4×10^{-4}		Schuhfried et al. (2015)	M	
β -phellandrene $C_{10}H_{16}$ [555-10-2] LFJQCVDVYDGGFCH-UHFFFAOYSA-N	1.8×10^{-4} 1.8×10^{-4} 1.8×10^{-4} 6.1×10^{-4}	5100	Copolovici and Niinemets (2005) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Dupeux et al. (2022)	M V V Q	259
3,7-dimethyl-1,3,6-octatriene $C_{10}H_{16}$ (β -ocimene) [13877-91-3] IHPKGUQCSIINRJ-UHFFFAOYSA-N	4.0×10^{-4}		Copolovici and Niinemets (2005)	V	
(<i>Z</i>)-3,7-dimethyl-1,3,6-octatriene $C_{10}H_{16}$ (<i>cis</i> - β -ocimene) [3338-55-4] IHPKGUQCSIINRJ-NTMALXAHSA-N	4.0×10^{-4}		Niinemets and Reichstein (2002)	V	
(<i>E</i>)-3,7-dimethyl-1,3,6-octatriene $C_{10}H_{16}$ (<i>trans</i> - β -ocimene) [3779-61-1] IHPKGUQCSIINRJ-CSKARUKUSA-N	3.0×10^{-4}		Niinemets and Reichstein (2002)	V	
2,2-dimethyl-3-methylene- bicyclo[2.2.1]heptane $C_{10}H_{16}$ (camphene) [79-92-5] CRPUJAZIXJMDBK-UHFFFAOYSA-N	2.3×10^{-4} 1.0×10^{-4} 3.1×10^{-4} 6.3×10^{-4}		Plyasunov and Shock (2000) HSDB (2015) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002)	L V V V	



Rolf Sander: Compilation of Henry's law constants

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Table A2.6: Terpenes and terpenoids (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methylene-1-(1-methylethyl)- bicyclo[3.1.0]hexane $C_{10}H_{16}$ (sabinene) [3387-41-5] NDVASEGYNIMXJL-UHFFFAOYSA-N	1.5×10^{-4} 1.6×10^{-4} 1.6×10^{-4}		Plyasunov and Shock (2000) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002)	L V V	
tricyclo[3.3.1.1(3,7)]decane $C_{10}H_{16}$ (adamantane) [281-23-2] ORILYTVJVMKLC-UHFFFAOYSA-N	8.0×10^{-4} 1.1×10^{-4}	3400	van Roon et al. (2005) Hilal et al. (2008)	V Q	
β -caryophyllene $C_{15}H_{24}$ [87-44-5] NPNUFJAVOONJE-IOMPXFEGSA-N	3.7×10^{-4} 2.6×10^{-3} 6.5×10^{-4} 3.4×10^{-5} 1.0×10^{-2}	4500	Copolovici and Niinemets (2015) Dupeux et al. (2022) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q Q	259 80, 238 80, 239 80, 240
α -cedrene $C_{15}H_{24}$ [469-61-4] IRAQOCYXUMOFQW-KYEXWDHISA-N	2.8×10^{-4}	4900	Copolovici and Niinemets (2015)	M	
α -farnesene $C_{15}H_{24}$ [502-61-4] CXENHBSYCFKJS-VDQVFBMKA-N	3.4×10^{-4} 8.1×10^{-6}	4300	Copolovici and Niinemets (2015) Schuhfried et al. (2015)	M M	
α -humulene $C_{15}H_{24}$ [6753-98-6] FAMPSKZZVDUYOS-HRGUGZIWSA-N	2.9×10^{-4}	4700	Copolovici and Niinemets (2015)	M	
γ -gurjunene $C_{15}H_{24}$ [22567-17-5] DUYRYUZIBGFLDD-UHFFFAOYSA-N	3.3×10^{-4}	3700	Copolovici and Niinemets (2015)	M	
isosativene $C_{15}H_{24}$ [24959-83-9] CGZBLYYTRIVTD-UHFFFAOYSA-N	3.9×10^{-4}	3600	Copolovici and Niinemets (2015)	M	
α -longipinene $C_{15}H_{24}$ [5989-08-2] HICYDYJTCDBHMZ-UHFFFAOYSA-N	3.4×10^{-4}	4100	Copolovici and Niinemets (2015)	M	



Table A2.6: Terpenes and terpenoids (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
α -neoclovene $\text{C}_{15}\text{H}_{24}$ [4545-68-0] ZCJQJJWNFDNQGZ-UHFFFAOYSA-N	2.9×10^{-4}	3100	Copolovici and Niinemets (2015)	M	
β -neoclovene $\text{C}_{15}\text{H}_{24}$ [56684-96-9] BUDWHMNUSAQOBI-UHFFFAOYSA-N	2.9×10^{-4}	4600	Copolovici and Niinemets (2015)	M	
γ -neoclovene $\text{C}_{15}\text{H}_{24}$ ZYKFQRCKKGFKQR-UHFFFAOYSA-N	2.9×10^{-4}	3200	Copolovici and Niinemets (2015)	M	
valencene $\text{C}_{15}\text{H}_{24}$ [4630-07-3] QEBNYNLSCGVZOH-UHFFFAOYSA-N	3.2×10^{-4}	4500	Copolovici and Niinemets (2015)	M	



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	2.8×10^{-2}		Duchowicz et al. (2020)	Q	299
	4.5×10^{-2}		Schröder et al. (2010)	Q	363
	1.3×10^{-2}		Hilal et al. (2008)	Q	
	5.0×10^{-2}		Modarresi et al. (2007)	Q	67
		5100	Kühne et al. (2005)	Q	
	3.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.5×10^{-2}		English and Carroll (2001)	Q	230, 231
	4.4×10^{-4}		Katritzky et al. (1998)	Q	
	8.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.9×10^{-2}		Arbuckle (1983)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		6000	Kühne et al. (2005)	?	
	1.2×10^{-2}		Yaws and Yang (1992)	?	21
2-methyl-1,1'-biphenyl $C_{13}H_{12}$ [643-58-3] ALLIZEAXNXSFGD-UHFFFAOYSA-N	2.2×10^{-2} 1.0×10^{-2}		HSDB (2015) Hilal et al. (2008)	Q Q	99
3-methyl-1,1'-biphenyl $C_{13}H_{12}$ [643-93-6] NPDIDUXTRAITDE-UHFFFAOYSA-N	1.5×10^{-2}		Hilal et al. (2008)	Q	
4-methyl-1,1'-biphenyl $C_{13}H_{12}$ [644-08-6] ZZLCFHIKESPLTH-UHFFFAOYSA-N	1.6×10^{-2}		Hilal et al. (2008)	Q	
diphenylmethane $C_{13}H_{12}$ (1,1'-methylenebisbenzene) [101-81-5] CZZYITDELCSZES-UHFFFAOYSA-N	7.7×10^{-2} 7.6×10^{-2} 1.1 1.1 4.5×10^{-2} 4.7×10^{-2} 1.0 4.3×10^{-2} 2.1×10^{-2} 5.7×10^{-3} 2.2×10^{-2} 1.6×10^{-2} 2.1×10^{-2} 4.3×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006a) Mackay et al. (1993) Meylan and Howard (1991) Cabani et al. (1981) Mackay et al. (1992b) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991) Yaws (1999)	V V V V V V X X Q Q Q Q Q ?	186 364 237 246 246 67 67 21



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-diphenylethane $C_{14}H_{14}$ (dibenzyl) [103-29-7] QWUWMCYKGHVNAV-UHFFFAOYSA-N	5.9×10^{-2} 5.9×10^{-2} 5.9×10^{-2}		Mackay et al. (2006a) Mackay et al. (1993) Mackay et al. (1992b)	V V X	 364
3-isopropyl-1,1'-biphenyl $C_{15}H_{16}$ [20282-30-8] LIWRTHVZRZXVFX-UHFFFAOYSA-N	5.8×10^{-3}		Ebert et al. (2023)	?	365
4-isopropyl-1,1'-biphenyl $C_{15}H_{16}$ [7116-95-2] KWSHGRJUSUJPDQ-UHFFFAOYSA-N	4.2×10^{-3}		Ebert et al. (2023)	?	365
<i>o</i> -terphenyl $C_{18}H_{14}$ [84-15-1] OIAQMFOKAXHPNH-UHFFFAOYSA-N	1.6×10^{-1} 1.6×10^{-1} 1.3×10^{-1} 3.1×10^{-1} 8.2×10^{-2} 7.3×10^{-1} 4.0		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V V Q Q Q Q Q	186 287, 288 287, 289 287, 290 287, 291
<i>m</i> -terphenyl $C_{18}H_{14}$ [92-06-8] YJTKZCDBKVTBY-UHFFFAOYSA-N	2.8 2.8 1.3×10^{-1} 1.2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Schröder et al. (2010)	V V Q Q	186 363
<i>p</i> -terphenyl $C_{18}H_{14}$ [92-94-4] XJKSTNDFUHQDQJ-UHFFFAOYSA-N	6.0 2.0×10^{-2} 1.3×10^{-1} 2.9×10^{-1} 3.1×10^{-1} 2.4×10^{-1} 1.1 4.0 2.5×10^{-2}		Duchowicz et al. (2020) Mackay et al. (2006a) Yaws (2003) Duchowicz et al. (2020) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Gharagheizi et al. (2010)	V V X Q Q Q Q Q Q Q	186 292 237 99 287, 288 287, 289 287, 290 287, 291 246
indene C_9H_8 [95-13-6] YBYIRNPPLQARY-UHFFFAOYSA-N	6.2×10^{-3}		HSDB (2015)	Q	99
5-ethylidene-2-norbornene C_9H_{12} [16219-75-3] OJOWICOBXYCEKR-KRXBUXKQSA-N	7.6×10^{-5}		HSDB (2015)	Q	99



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
indane C_9H_{10} [496-11-7] PQNFLJBBNBOBRQ-UHFFFAOYSA-N	4.3×10^{-3}		Plyasunov and Shock (2000)	L	
	4.3×10^{-3}		Mackay et al. (2006a)	V	
	4.7×10^{-3}		Abraham et al. (1994a)	V	
	4.5×10^{-3}		Yaws (2003)	X	258
	4.5×10^{-3}		Yaws (2003)	X	237
	2.4×10^{-3}		Dupeux et al. (2022)	Q	259
	9.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	299
	4.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	5.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-3}		Modarresi et al. (2007)	Q	67
	4.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
7.2×10^{-3}		English and Carroll (2001)	Q	230, 231	
5.8×10^{-3}		Nirmalakhandan et al. (1997)	Q		
4.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
4.5×10^{-3}		Yaws (1999)	?	21	
azulene $C_{10}H_8$ [275-51-4] CUFNKYGDVFPHO-UHFFFAOYSA-N	1.5×10^{-1}	7800	Hiatt (2013)	M	
naphthalene $C_{10}H_8$ [91-20-3] UFWIBTONFRDIAS-UHFFFAOYSA-N	2.1×10^{-2}	4400	Schwardt et al. (2021)	L	1
	2.1×10^{-2}	5400	Brockbank (2013)	L	1
	2.1×10^{-2}		Ma et al. (2010b)	L	366
	2.2×10^{-2}		Ma et al. (2010b)	L	367
	2.2×10^{-2}	5300	Fogg and Sangster (2003)	L	
	2.3×10^{-2}		Mackay and Shiu (1981)	L	
	3.3×10^{-2}	6100	Hiatt (2013)	M	
	6.0×10^{-2}		Lee et al. (2012)	M	
	4.0×10^{-2}		Bobadilla et al. (2003)	M	
	2.4×10^{-2}		Destailats and Charles (2002)	M	
	1.3×10^{-2}	3600	Dewulf et al. (1999)	M	
	1.8×10^{-2}		Altschuh et al. (1999)	M	
	2.2×10^{-2}		De Maagd et al. (1998)	M	12
	2.2×10^{-2}		Shiu and Mackay (1997)	M	
	1.7×10^{-2}	5100	Kondoh and Nakajima (1997)	M	
	2.3×10^{-2}	5700	Alaee et al. (1996)	M	
	2.1×10^{-2}		Zhang and Pawliszyn (1993)	M	
	1.3×10^{-2}		Fendinger and Glotfelty (1990)	M	
	2.7×10^{-2}		Yurteri et al. (1987)	M	12
2.6×10^{-2}		Webster et al. (1985)	M		
2.0×10^{-2}		Mackay et al. (1979)	M		
1.8×10^{-2}		Southworth (1979)	M		
2.2×10^{-2}	5400	Schwarz and Wasik (1977)	M		
2.3×10^{-2}		Mackay et al. (2006a)	V		
2.3×10^{-2}		Shiu and Ma (2000)	V		



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.2×10^{-2}		De Maagd et al. (1998)	V	12
	2.3×10^{-2}		Shiu and Mackay (1997)	V	
	2.0×10^{-2}		Lide and Frederikse (1995)	V	
	2.3×10^{-2}		Abraham et al. (1994a)	V	
	9.0×10^{-3}		Hwang et al. (1992)	V	
	7.2×10^{-3}		Eastcott et al. (1988)	V	
	2.3×10^{-2}		Cabani et al. (1981)	V	
	2.4×10^{-2}		Hine and Mookerjee (1975)	V	
	8.4×10^{-3}		Mackay and Leinonen (1975)	V	
	2.5×10^{-2}	5100	Wauchope and Haque (1972)	V	
	2.3×10^{-2}	5600	Wauchope and Haque (1972)	V	
	1.9×10^{-2}		Bohon and Claussen (1951)	V	
	1.1×10^{-2}	2100	Paasivirta et al. (1999)	T	
	2.1×10^{-2}		Mackay et al. (1979)	T	
	7.1×10^{-3}		Yaws (2003)	X	258
	2.1×10^{-2}	3600	Goldstein (1982)	X	298
	2.7×10^{-2}		McCarty (1980)	X	368
	2.0×10^{-2}		Smith et al. (1993)	C	
	2.0×10^{-2}		Ryan et al. (1988)	C	
	1.8×10^{-2}		Dupeux et al. (2022)	Q	259
	1.3×10^{-1}		Keshavarz et al. (2022)	Q	
	2.4×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.8×10^{-2}		Parnis et al. (2015)	Q	369
	2.7×10^{-2}		Schröder et al. (2013)	Q	370
	1.5×10^{-2}		Schröder et al. (2010)	Q	363
	2.1×10^{-2}		Hilal et al. (2008)	Q	
	4.0×10^{-2}		Modarresi et al. (2007)	Q	67
		5200	Kühne et al. (2005)	Q	
	2.4×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.1×10^{-2}		English and Carroll (2001)	Q	230, 231
	3.3×10^{-4}		Katritzky et al. (1998)	Q	
	5.6×10^{-2}		Russell et al. (1992)	Q	279
	4.3×10^{-2}		Suzuki et al. (1992)	Q	232
	3.2×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	3.4×10^{-2}		Arbuckle (1983)	Q	
	2.2×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	3.6×10^{-2}		MacBean (2012a)	?	
		5400	Kühne et al. (2005)	?	
	8.0×10^{-3}		Yaws and Yang (1992)	?	21
	2.3×10^{-2}		Abraham et al. (1990)	?	
naphthalene-d8 $C_{10}D_8$ [1146-65-2] UFWIBTONFRDIAS-PGRXLJNUSA-N	3.5×10^{-2}	5300	Hiatt (2013)	M	



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methylnaphthalene $C_{10}H_7CH_3$ [90-12-0] QPUYECUOLPXSFR-UHFFFAOYSA-N	2.0×10^{-2}	5800	Brockbank (2013)	L	1
	2.2×10^{-2}	6100	Fogg and Sangster (2003)	L	
	2.2×10^{-2}		Mackay and Shiu (1981)	L	
	4.4×10^{-2}	5900	Hiatt (2013)	M	
	1.9×10^{-2}		Altschuh et al. (1999)	M	
	2.1×10^{-2}	6100	Bamford et al. (1999a)	M	
	4.1×10^{-2}		Shiu and Mackay (1997)	M	
	1.6×10^{-2}		Fendinger and Glotfelty (1990)	M	
	3.8×10^{-2}		Mackay and Shiu (1981)	M	
	2.8×10^{-2}	4900	Schwarz and Wasik (1977)	M	
	2.2×10^{-2}		Mackay et al. (2006a)	V	
	2.2×10^{-2}		Shiu and Ma (2000)	V	
	2.2×10^{-2}		Shiu and Mackay (1997)	V	
	2.5×10^{-2}		Abraham et al. (1994a)	V	
	2.5×10^{-2}		Eastcott et al. (1988)	V	
	2.2×10^{-2}		Cabani et al. (1981)	V	
	2.2×10^{-2}		Yaws (2003)	X	237
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	1.6×10^{-2}		Parnis et al. (2015)	Q	369
	2.3×10^{-2}		Schröder et al. (2013)	Q	370
	1.6×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.8×10^{-2}		Hilal et al. (2008)	Q	
3.0×10^{-2}		Modarresi et al. (2007)	Q	67	
3.8×10^{-2}	5500	Kühne et al. (2005)	Q		
1.5×10^{-2}		Yaffe et al. (2003)	Q	248, 249	
1.2×10^{-2}		English and Carroll (2001)	Q	230, 260	
1.2×10^{-3}		Katritzky et al. (1998)	Q		
2.3×10^{-2}		Nirmalakhandan and Speece (1988)	Q		
1.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
2.2×10^{-2}	5700	Kühne et al. (2005)	?		
2.2×10^{-2}		Yaws (1999)	?	21	
2.7×10^{-2}		Yaws and Yang (1992)	?	21	
1-methylnaphthalene-d10 $C_{10}D_7CD_3$ [38072-94-5] QPUYECUOLPXSFR-UZHFFJZSA-N	4.6×10^{-2}	5400	Hiatt (2013)	M	
2-methylnaphthalene $C_{10}H_7CH_3$ [91-57-6] QIMMUPPBVPKWKM-UHFFFAOYSA-N	2.0×10^{-2}	5100	Brockbank (2013)	L	1
	1.8×10^{-2}	5600	Fogg and Sangster (2003)	L	
	3.5×10^{-2}	5500	Hiatt (2013)	M	
	1.6×10^{-2}		Altschuh et al. (1999)	M	
	1.9×10^{-2}	5400	Bamford et al. (1999a)	M	
	2.2×10^{-2}		De Maagd et al. (1998)	M	12
	5.0×10^{-5}	1200	Hansen et al. (1993)	M	281
	3.1×10^{-2}		Fendinger and Glotfelty (1990)	M	
2.0×10^{-2}		Mackay et al. (2006a)	V		



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.6×10^{-2}		De Maagd et al. (1998)	V	12
	2.0×10^{-2}		Shiu and Mackay (1997)	V	
	2.4×10^{-2}		Meylan and Howard (1991)	V	
	2.0×10^{-2}		Eastcott et al. (1988)	V	
	2.4×10^{-2}		Mackay and Shiu (1981)	V	
	2.0×10^{-2}		Mackay et al. (1992b)	X	364
	2.3×10^{-2}		Yaws (2003)	X	237
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	1.6×10^{-2}		Parnis et al. (2015)	Q	369
	2.2×10^{-2}		Schröder et al. (2013)	Q	370
	1.6×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.6×10^{-2}		Hilal et al. (2008)	Q	
	2.4×10^{-2}		Modarresi et al. (2007)	Q	67
		5500	Kühne et al. (2005)	Q	
	2.4×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.2×10^{-3}		Katritzky et al. (1998)	Q	
	1.7×10^{-2}		Meylan and Howard (1991)	Q	
	1.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		5700	Kühne et al. (2005)	?	
	2.3×10^{-2}		Yaws (1999)	?	21
	2.0×10^{-2}		Yaws and Yang (1992)	?	21
			Shiu and Ma (2000)	W	360
1-ethylnaphthalene $C_{10}H_7C_2H_5$ [1127-76-0] ZMXIYERNXPIYFR-UHFFFAOYSA-N	2.0×10^{-2}	5900	Brockbank (2013)	L	1
	2.6×10^{-2}		Mackay and Shiu (1981)	L	
	1.4×10^{-2}		Altschuh et al. (1999)	M	
	2.2×10^{-2}	4800	Schwarz and Wasik (1977)	M	
	2.6×10^{-2}		Mackay et al. (2006a)	V	
	2.7×10^{-2}		Eastcott et al. (1988)	V	
	2.3×10^{-2}		Cabani et al. (1981)	V	
	2.6×10^{-2}		Mackay et al. (1992b)	X	364
	2.0×10^{-2}		Yaws (2003)	X	237
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.9×10^{-2}		Schröder et al. (2013)	Q	370
	1.6×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.8×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	67
	4.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	9.5×10^{-3}		English and Carroll (2001)	Q	230, 231
	2.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.4×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	2.0×10^{-2}		Yaws (1999)	?	21
	2.7×10^{-2}		Yaws and Yang (1992)	?	21



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-ethylnaphthalene $C_{10}H_7C_2H_5$ [939-27-5] RJTVVYSTUQWNI-UHFFFAOYSA-N	1.2×10^{-2}		Mackay and Shiu (1981)	L	
	1.8×10^{-2}		Altschuh et al. (1999)	M	
	1.3×10^{-2}		Mackay et al. (2006a)	V	
	1.6×10^{-2}		Eastcott et al. (1988)	V	
	1.3×10^{-2}		Mackay et al. (1992b)	X	364
	8.8×10^{-3}		Yaws (2003)	X	237
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	299
	1.9×10^{-2}		Schröder et al. (2013)	Q	370
	3.6×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	67
1.2×10^{-2}		Yaffe et al. (2003)	Q	248, 249	
1.8×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
1.6×10^{-2}		Yaws and Yang (1992)	?	21	
1,2,3,4-tetrahydronaphthalene $C_{10}H_{12}$ (tetralin) [119-64-2] CXWXQJXEFPUFDZ-UHFFFAOYSA-N	6.4×10^{-3}	5300	Plyasunov and Shock (2000)	L	
	5.1×10^{-3}	5400	Ashworth et al. (1988)	M	278
	7.3×10^{-3}		Duchowicz et al. (2020)	V	186
	2.1×10^{-3}		Mackay et al. (1993)	V	
	5.8×10^{-3}		Yaws (2003)	X	237, 297
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	5.8×10^{-3}		HSDB (2015)	Q	99
	3.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	4.3×10^{-3}		Modarresi et al. (2007)	Q	67
		4900	Kühne et al. (2005)	Q	
		5300	Kühne et al. (2005)	?	
7.2×10^{-3}		Yaws (1999)	?	21, 297	
1,2-dimethylnaphthalene $C_{12}H_{12}$ [573-98-8] QNLZIZAQLLYXTC-UHFFFAOYSA-N	4.8×10^{-2}		Yaws (2003)	X	258
	4.8×10^{-2}		Yaws (2003)	X	237
	2.6×10^{-2}		Dupeux et al. (2022)	Q	259
	4.2×10^{-2}		Schröder et al. (2013)	Q	370
	1.3×10^{-2}		Gharagheizi et al. (2010)	Q	246
1,3-dimethylnaphthalene $C_{12}H_{12}$ [575-41-7] QHJMFSMPSZREIF-UHFFFAOYSA-N	1.7×10^{-2}		Duchowicz et al. (2020)	V	186
	2.6×10^{-2}		Cabani et al. (1981)	V	
	6.1×10^{-3}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Schröder et al. (2013)	Q	370
	2.8×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-2}		Hilal et al. (2008)	Q	
	4.6×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	1.1×10^{-2}		English and Carroll (2001)	Q	230, 231
	1.9×10^{-1}		Nirmalakhandan et al. (1997)	Q	
1.4×10^{-2}		Yaws and Yang (1992)	?	21	



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4-dimethylnaphthalene $C_{12}H_{12}$ [571-58-4] APOSQNLNWAIUULLK-UHFFFAOYSA-N	2.6×10^{-2}		Duchowicz et al. (2020)	V	186
	3.2×10^{-2}		Mackay et al. (2006a)	V	
	4.7×10^{-2}		Cabani et al. (1981)	V	
	6.1×10^{-3}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Schröder et al. (2013)	Q	370
	2.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.4×10^{-2}		Hilal et al. (2008)	Q	
	3.7×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	1.9×10^{-1}		Nirmalakhandan et al. (1997)	Q	
1,5-dimethylnaphthalene $C_{12}H_{12}$ [571-61-9] SDDDBCEWUYXVGCQ-UHFFFAOYSA-N	2.8×10^{-2}		Shiu and Mackay (1997)	M	
	1.3×10^{-2}		Yaws (2003)	X	237
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	6.1×10^{-3}		Duchowicz et al. (2020)	Q	184
	1.4×10^{-2}		Parnis et al. (2015)	Q	369
	2.1×10^{-2}		Schröder et al. (2013)	Q	370
	2.7×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.3×10^{-2}		Hilal et al. (2008)	Q	
	2.4×10^{-2}		Modarresi et al. (2007)	Q	67
	2.9×10^{-2}		Yaffe et al. (2003)	Q	248, 249
1,6-dimethylnaphthalene $C_{12}H_{12}$ [575-43-9] CBMXCNPDQUJNHT-UHFFFAOYSA-N	1.1×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	2.8×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	1.6×10^{-2}		Yaws and Yang (1992)	?	21
	2.3×10^{-2}		HSDB (2015)	Q	99
1,7-dimethylnaphthalene $C_{12}H_{12}$ [575-37-1] SPUWFKLHHEKGV-UHFFFAOYSA-N	3.8×10^{-2}		Schröder et al. (2013)	Q	370
	3.9×10^{-2}		Ebert et al. (2023)	?	371
1,8-dimethylnaphthalene $C_{12}H_{12}$ [569-41-5] XAABPYINPXOLM-UHFFFAOYSA-N	2.6×10^{-2}		Schröder et al. (2013)	Q	370
2,3-dimethylnaphthalene $C_{12}H_{12}$ [581-40-8] WWGUMAYGTQSGA-UHFFFAOYSA-N	1.6×10^{-2}		Mackay et al. (2006a)	V	
	6.4×10^{-2}		Eastcott et al. (1988)	V	
	4.4×10^{-2}		Cabani et al. (1981)	V	
	1.3×10^{-2}		Yaws (2003)	X	237
	1.1×10^{-2}		Meylan and Howard (1991)	C	
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	6.1×10^{-3}		Duchowicz et al. (2020)	Q	299
2.5×10^{-2}		Schröder et al. (2013)	Q	370	



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.6×10^{-2}		Hilal et al. (2008)	Q	
	2.0×10^{-2}		Modarresi et al. (2007)	Q	67
	4.6×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.3×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.5×10^{-2}		Meylan and Howard (1991)	Q	
	1.1×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	1.7×10^{-2}		Yaws and Yang (1992)	?	21
2,6-dimethylnaphthalene $C_{12}H_{12}$ [581-42-0] YGYNBBAUIYTWBF-UHFFFAOYSA-N	7.8×10^{-3}		Mackay et al. (2006a)	V	
	6.2×10^{-2}		Eastcott et al. (1988)	V	
	3.4×10^{-2}		Cabani et al. (1981)	V	
	2.0×10^{-2}		Schröder et al. (2013)	Q	370
	2.8×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.2×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	67
	3.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.9×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	8.2×10^{-3}		Yaws and Yang (1992)	?	21
2,7-dimethylnaphthalene $C_{12}H_{12}$ [582-16-1] LRQYSMQNJLZKPS-UHFFFAOYSA-N	2.1×10^{-2}		Schröder et al. (2013)	Q	370
acenaphthene $C_{12}H_{10}$ [83-32-9] CWRYPZZKDGJXCA-UHFFFAOYSA-N	5.4×10^{-2}	6500	Schwardt et al. (2021)	L	1
	7.2×10^{-2}	5400	Brockbank (2013)	L	1
	7.2×10^{-2}		Ma et al. (2010b)	L	366
	7.0×10^{-2}		Ma et al. (2010b)	L	367
	5.5×10^{-2}	6500	Fogg and Sangster (2003)	L	
	4.2×10^{-2}		Mackay and Shiu (1981)	L	
	2.6×10^{-1}		Lee et al. (2012)	M	
	5.4×10^{-2}	6600	Bamford et al. (1999a)	M	
	6.2×10^{-2}		Shiu and Mackay (1997)	M	
	1.1×10^{-1}		Zhang and Pawliszyn (1993)	M	
	1.6×10^{-1}		Fendinger and Glotfelty (1990)	M	
	6.4×10^{-3}		Mackay and Shiu (1981)	M	
	4.1×10^{-2}		Warner et al. (1980)	M	
	6.8×10^{-2}		Mackay et al. (1979)	M	
	8.2×10^{-2}		Mackay et al. (2006a)	V	
	8.2×10^{-2}		Shiu and Ma (2000)	V	
	8.2×10^{-2}		Shiu and Mackay (1997)	V	
	1.2×10^{-2}		Hwang et al. (1992)	V	
	9.5×10^{-2}		Eastcott et al. (1988)	V	
	8.2×10^{-2}		Cabani et al. (1981)	V	
	1.2×10^{-1}		Hine and Mookerjee (1975)	V	
	1.2×10^{-1}	6000	Wauchope and Haque (1972)	V	
	3.4×10^{-2}	2900	Paasivirta et al. (1999)	T	



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.1×10^{-2}	2800	Goldstein (1982)	X	298
	5.2×10^{-2}		McCarty (1980)	X	368
	6.4×10^{-2}		HSDB (2015)	C	
	4.1×10^{-2}		Smith et al. (1993)	C	
	4.0×10^{-2}		Ryan et al. (1988)	C	
	4.1×10^{-2}		Shen (1982)	C	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	4.8×10^{-2}		Duchowicz et al. (2020)	Q	
	9.2×10^{-2}		Abraham et al. (2019)	Q	
	3.4×10^{-2}		Parnis et al. (2015)	Q	369
	9.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-2}		Schröder et al. (2010)	Q	363
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	4.4×10^{-2}		Modarresi et al. (2007)	Q	67
		5500	Kühne et al. (2005)	Q	
	6.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	9.9×10^{-2}		Suzuki et al. (1992)	Q	232
	1.1×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	7.9×10^{-2}		Arbuckle (1983)	Q	
5.4×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
	6600	Kühne et al. (2005)	?		
acenaphthylene $C_{12}H_8$ [208-96-8] HXGDTGSAIMULJN-UHFFFAOYSA-N	8.5×10^{-2}	6300	Brockbank (2013)	L	1
	8.2×10^{-2}		Ma et al. (2010b)	L	366
	1.0×10^{-1}		Ma et al. (2010b)	L	367
	9.1×10^{-2}	6700	Fogg and Sangster (2003)	L	
	7.9×10^{-2}	6600	Bamford et al. (1999a)	M	
	8.8×10^{-2}		Fendinger and Glotfelty (1990)	M	
	8.7×10^{-2}		Warner et al. (1980)	M	
	8.7×10^{-1}		HSDB (2015)	V	
	1.2×10^{-1}		Mackay et al. (2006a)	V	
	1.2×10^{-1}		Shiu and Mackay (1997)	V	
	1.2×10^{-1}	5000	Paasivirta et al. (1999)	T	
	8.7×10^{-2}		Smith et al. (1993)	C	
	8.4×10^{-2}		Ryan et al. (1988)	C	
	8.7×10^{-2}		Shen (1982)	C	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	5.7×10^{-2}		Duchowicz et al. (2020)	Q	184
	6.2×10^{-2}		Parnis et al. (2015)	Q	369
	1.1×10^{-1}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	67
		5600	Kühne et al. (2005)	Q	
8.6×10^{-2}	Yaffe et al. (2003)		Q	248, 249	
8.7×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
	6600	Kühne et al. (2005)	?		
		Shiu and Ma (2000)	W	360	



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4-trimethylnaphthalene $C_{13}H_{14}$ [2717-42-2] JCNGSJUYPCVGAM-UHFFFAOYSA-N	1.3×10^{-2}		Parnis et al. (2015)	Q	369
1,3,7-trimethylnaphthalene $C_{13}H_{14}$ [2131-38-6] HXDVFJWRDZVUZFT-UHFFFAOYSA-N	6.0×10^{-2}		Ebert et al. (2023)	?	371
1,3,8-trimethylnaphthalene $C_{13}H_{14}$ [17057-91-9] XYTKGJHHXQVFCCK-UHFFFAOYSA-N	6.7×10^{-2}		Ebert et al. (2023)	?	371
1,4,5-trimethylnaphthalene $C_{13}H_{14}$ [2131-41-1] FSAWRQYDMHSDRN-UHFFFAOYSA-N	1.8×10^{-2} 4.3×10^{-2} 2.3×10^{-2}		Mackay et al. (2006a) Eastcott et al. (1988) Schröder et al. (2013)	V V Q	370
1,4,6-trimethylnaphthalene $C_{13}H_{14}$ [2131-42-2] VGKRZAKNKJAKDN-UHFFFAOYSA-N	4.3×10^{-2}		Ebert et al. (2023)	?	371
2,3,6-trimethylnaphthalene $C_{13}H_{14}$ [829-26-5] UNBZRJCHIWTUHB-UHFFFAOYSA-N	2.8×10^{-2}		Ebert et al. (2023)	?	371
1-(1-methylethyl)naphthalene $C_{13}H_{14}$ (1-isopropylnaphthalene) [6158-45-8] PMPBFICDXLLSRM-UHFFFAOYSA-N	3.3×10^{-2}		Schröder et al. (2013)	Q	370
2-(1-methylethyl)naphthalene $C_{13}H_{14}$ (2-isopropylnaphthalene) [2027-17-0] TVVYQNHYYHAJTD-UHFFFAOYSA-N	1.2×10^{-2} 3.1×10^{-2}		HSDB (2015) Schröder et al. (2013)	Q Q	99 370
2-ethyl-6-methylnaphthalene $C_{13}H_{14}$ [7372-86-3] ZOYUJOHRFWIQTH-UHFFFAOYSA-N	1.2×10^{-2}		Parnis et al. (2015)	Q	369



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-benzindene	1.3×10^{-1}	6100	Brockbank (2013)	L	1
$C_{13}H_{10}$	1.1×10^{-1}		Ma et al. (2010b)	L	366
(fluorene)	1.1×10^{-1}		Ma et al. (2010b)	L	367
[86-73-7]	1.1×10^{-1}	6000	Fogg and Sangster (2003)	L	
NHNNNTQXNPWCJQ-UHFFFAOYSA-N	1.2×10^{-1}		Mackay and Shiu (1981)	L	
	3.2×10^{-1}		Lee et al. (2012)	M	
	1.0×10^{-1}	6200	Bamford et al. (1999a)	M	
	7.9×10^{-2}	7400	Bamford et al. (1999b)	M	
	1.5×10^{-1}		De Maagd et al. (1998)	M	12
	1.0×10^{-1}		Shiu and Mackay (1997)	M	
	1.6×10^{-1}		Fendinger and Glotfelty (1990)	M	
	9.9×10^{-2}		Mackay and Shiu (1981)	M	
	8.4×10^{-2}		Warner et al. (1980)	M	
	1.3×10^{-1}		Mackay et al. (2006a)	V	
	1.3×10^{-1}		Shiu and Ma (2000)	V	
	1.7×10^{-1}		De Maagd et al. (1998)	V	12
	1.3×10^{-1}		Shiu and Mackay (1997)	V	
	1.5×10^{-2}		Hwang et al. (1992)	V	
	1.1×10^{-1}		Eastcott et al. (1988)	V	
	1.3×10^{-1}		Cabani et al. (1981)	V	
	1.3×10^{-1}	6400	Wauchope and Haque (1972)	V	
	2.3×10^{-2}	3700	Paasivirta et al. (1999)	T	
	8.4×10^{-2}	3000	Goldstein (1982)	X	298
	4.7×10^{-2}		McCarty (1980)	X	368
	9.9×10^{-2}		HSDB (2015)	C	
	8.4×10^{-2}		Smith et al. (1993)	C	
	8.4×10^{-2}		Ryan et al. (1988)	C	
	8.4×10^{-2}		Shen (1982)	C	
	3.2×10^{-1}		Keshavarz et al. (2022)	Q	
	5.7×10^{-2}		Duchowicz et al. (2020)	Q	299
	1.1×10^{-1}		Abraham et al. (2019)	Q	
	1.0×10^{-1}		Parnis et al. (2015)	Q	369
	9.0×10^{-2}		Schröder et al. (2010)	Q	363
	9.2×10^{-2}		Hilal et al. (2008)	Q	
	4.1×10^{-2}		Modarresi et al. (2007)	Q	67
		5100	Kühne et al. (2005)	Q	
	1.2×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	5.4×10^{-2}		English and Carroll (2001)	Q	230, 274
	2.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		5400	Kühne et al. (2005)	?	
	1.2×10^{-1}		Abraham et al. (1990)	?	
1-methyl-9H-fluorene	1.5×10^{-1}		Duchowicz et al. (2020)	V	186
$C_{14}H_{12}$	2.9×10^{-2}		Duchowicz et al. (2020)	Q	
[1730-37-6]					
GKEUODMJRFDLJY-UHFFFAOYSA-N					



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8×10^{-1}		Southworth (1979)	M	
	3.1×10^{-1}		Mackay et al. (2006a)	V	
	3.1×10^{-1}		Shiu and Ma (2000)	V	
	3.8×10^{-1}		De Maagd et al. (1998)	V	12
	3.1×10^{-1}		Shiu and Mackay (1997)	V	
	3.2×10^{-2}		Hwang et al. (1992)	V	
	2.8×10^{-1}		Eastcott et al. (1988)	V	
	3.2×10^{-1}		Cabani et al. (1981)	V	
	2.0×10^{-1}		Southworth (1979)	V	
	3.9×10^{-1}		Hine and Mookerjee (1975)	V	
	2.8×10^{-1}	6500	Wauchope and Haque (1972)	V	
	9.3×10^{-2}	4900	Paasivirta et al. (1999)	T	
	9.0×10^{-2}		Yaws (2003)	X	258
	9.0×10^{-2}		Yaws (2003)	X	237
	9.3×10^{-2}	4700	Goldstein (1982)	X	298
	7.6×10^{-2}		McCarty (1980)	X	368
	2.5×10^{-1}		Smith et al. (1993)	C	294
	2.5×10^{-1}		Ryan et al. (1988)	C	
	2.5×10^{-1}		Dupeux et al. (2022)	Q	259
	4.3×10^{-1}		Keshavarz et al. (2022)	Q	
	9.2×10^{-2}		Duchowicz et al. (2020)	Q	184
	2.1×10^{-1}		Parnis et al. (2015)	Q	369
	7.2×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-1}		Schröder et al. (2010)	Q	363
	2.6×10^{-1}		Hilal et al. (2008)	Q	
	6.4×10^{-1}		Modarresi et al. (2007)	Q	67
		4800	Kühne et al. (2005)	Q	
	2.5×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	9.2×10^{-1}		Suzuki et al. (1992)	Q	232
	4.8×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	2.6×10^{-1}		Arbuckle (1983)	Q	
	2.3×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		5300	Kühne et al. (2005)	?	
	2.7×10^{-1}		Abraham et al. (1990)	?	
9,10-dihydrophenanthrene	1.2×10^{-1}	7500	Reza and Trejo (2004)	M	
$C_{14}H_{12}$	3.2×10^{-1}		Duchowicz et al. (2020)	V	186
[776-35-2]	5.8×10^{-2}		Duchowicz et al. (2020)	Q	
XXPBFNVKTVJZKF-UHFFFAOYSA-N	9.0×10^{-2}		Schröder et al. (2010)	Q	363
	4.1×10^{-2}		Hilal et al. (2008)	Q	
		5400	Kühne et al. (2005)	Q	
		7500	Kühne et al. (2005)	?	



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
anthracene	1.8×10^{-1}	4800	Schwardt et al. (2021)	L	1
$C_{14}H_{10}$	3.3×10^{-1}	6700	Brockbank (2013)	L	1
[120-12-7]	2.0×10^{-1}		Ma et al. (2010b)	L	366
MWPLVEDNUUSJAV-UHFFFAOYSA-N	2.0×10^{-1}		Ma et al. (2010b)	L	367
	1.7×10^{-1}	5700	Fogg and Sangster (2003)	L	
	1.7×10^{-1}		Mackay and Shiu (1981)	L	
	1.6×10^{-1}		Lee et al. (2012)	M	
	2.3×10^{-1}	5600	Reza and Trejo (2004)	M	
	1.8×10^{-1}	6000	Bamford et al. (1999a)	M	
	1.5×10^{-1}	6500	Bamford et al. (1999b)	M	
	1.3×10^{-1}		Shiu and Mackay (1997)	M	
	2.0×10^{-1}	3500	Alaee et al. (1996)	M	
	1.1×10^{-1}		Zhang and Pawliszyn (1993)	M	
	5.1×10^{-1}		Fendinger and Glotfelty (1990)	M	
	2.7×10^{-1}		Webster et al. (1985)	M	
	1.4×10^{-2}		Mackay and Shiu (1981)	M	
	1.5×10^{-1}		Southworth (1979)	M	
	2.5×10^{-1}		Mackay et al. (2006a)	V	
	2.5×10^{-1}		Shiu and Ma (2000)	V	
	2.5×10^{-1}		Shiu and Mackay (1997)	V	
	3.0×10^{-2}		Hwang et al. (1992)	V	
	6.1×10^{-1}		Eastcott et al. (1988)	V	
	5.1×10^{-1}		Cabani et al. (1981)	V	
	3.4×10^{-2}		Southworth (1979)	V	
	5.6×10^{-1}		Hine and Mookerjee (1975)	V	
	2.6×10^1	7000	Wauchope and Haque (1972)	V	
	4.6×10^{-3}	3100	Paasivirta et al. (1999)	T	
	3.5×10^{-1}	4000	Goldstein (1982)	X	298
	7.0×10^{-3}		McCarty (1980)	X	368
	1.1×10^{-1}		Smith et al. (1993)	C	
	3.7×10^{-2}		Ryan et al. (1988)	C	
	1.0×10^{-1}		Smith et al. (1981a)	C	
	4.3×10^{-1}		Keshavarz et al. (2022)	Q	
	9.2×10^{-2}		Duchowicz et al. (2020)	Q	
	1.9×10^{-1}		Parnis et al. (2015)	Q	369
	1.5×10^{-1}		Schröder et al. (2010)	Q	363
	3.3×10^{-1}		Hilal et al. (2008)	Q	
	4.5×10^{-1}		Modarresi et al. (2007)	Q	67
		6400	Kühne et al. (2005)	Q	
	1.7×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	7.0×10^{-1}		Russell et al. (1992)	Q	279
	9.0×10^{-1}		Suzuki et al. (1992)	Q	232
	9.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.8×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		5100	Kühne et al. (2005)	?	



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
9,10-dihydroanthracene $C_{14}H_{12}$ [613-31-0] WPDVAVTSOEEQEGMS-UHFFFAOYSA-N	1.5×10^{-1}		Schröder et al. (2010)	Q	363
2,3-dihydro-1,1,3,3,5-pentamethyl-1H-indene $C_{14}H_{20}$ [81-03-8] NNXHDILUOAXSPU-UHFFFAOYSA-N	7.5×10^{-4}		Zhang et al. (2010)	Q	287, 288
1-methylanthracene $C_{15}H_{12}$ [610-48-0] KZNSJFJHUQDYHE-UHFFFAOYSA-N	1.9×10^{-3}		Zhang et al. (2010)	Q	287, 289
	2.1×10^{-3}		Zhang et al. (2010)	Q	287, 290
	3.9×10^{-4}		Zhang et al. (2010)	Q	287, 291
2-methylanthracene $C_{15}H_{12}$ [613-12-7] GYMFBYVZOGMSQJ-UHFFFAOYSA-N	1.6×10^{-2} 4.7×10^{-2}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
9-methylanthracene $C_{15}H_{12}$ [779-02-2] CPGPAVAKSZHMBP-UHFFFAOYSA-N	2.5×10^{-1}		Duchowicz et al. (2020)	V	186
	6.1×10^{-1}		Mackay et al. (2006a)	V	
	9.4×10^{-3}		Eastcott et al. (1988)	V	
	4.7×10^{-2}		Duchowicz et al. (2020)	Q	
	1.9×10^{-1} 4.2×10^{-1}		Parnis et al. (2015) Hilal et al. (2008)	Q Q	369
9-methyl-phenanthrene $C_{15}H_{12}$ [883-20-5] DALBHIVZSZZWBS-UHFFFAOYSA-N	1.9×10^{-1}		Parnis et al. (2015)	Q	369
9-ethylfluorene $C_{15}H_{14}$ [2294-82-8] QBBCCEYJCKGWIK-UHFFFAOYSA-N	7.4×10^{-2}		Parnis et al. (2015)	Q	369
1,7-dimethylfluorene $C_{15}H_{14}$ [442-66-0] NHPVHXMCWRWSNW-UHFFFAOYSA-N	9.1×10^{-2}		Parnis et al. (2015)	Q	369
1-methylphenanthrene $C_{15}H_{12}$ [832-69-9] DOWJXOHBXRUOD-UHFFFAOYSA-N	2.0×10^{-1}	4600	Bamford et al. (1999a)	M	
	5.8×10^{-1}		Keshavarz et al. (2022)	Q	
	4.7×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.9×10^{-1}		Parnis et al. (2015)	Q	369
	3.3×10^{-1}		Hilal et al. (2008)	Q	
	3.8×10^{-1}		Modarresi et al. (2007)	Q	67
		5200	Kühne et al. (2005)	Q	
	2.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		4600	Kühne et al. (2005)	?	
1,3-diisopropylnaphthalene $C_{16}H_{20}$ [57122-16-4] JDBFIFNXALGSOF-UHFFFAOYSA-N	1.6×10^{-2}		Schröder et al. (2013)	Q	370
1,5-diisopropylnaphthalene $C_{16}H_{20}$ [27351-96-8] GFZWCYSEPXDDRI-UHFFFAOYSA-N	1.6×10^{-2}		Schröder et al. (2013)	Q	370
1,7-diisopropylnaphthalene $C_{16}H_{20}$ [94133-80-9] XNSUVOOWWSAQMZ-UHFFFAOYSA-N	7.8×10^{-3}		Ebert et al. (2023)	?	318
2,6-diisopropylnaphthalene $C_{16}H_{20}$ [24157-81-1] GWLLEXUIOFAFE-UHFFFAOYSA-N	1.3×10^{-2}		Schröder et al. (2013)	Q	370
2,7-diisopropylnaphthalene $C_{16}H_{20}$ [40458-98-8] YGDMAJYAQCDTNG-UHFFFAOYSA-N	1.3×10^{-2}		Schröder et al. (2013)	Q	370
2-ethylanthracene $C_{16}H_{14}$ [52251-71-5] ZXAGXLDDEMUNQSH-UHFFFAOYSA-N	1.9×10^{-1} 4.7×10^{-2}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
1,3-dimethylphenanthrene $C_{16}H_{14}$ [16664-45-2] UJUJQKOWULNFNG-UHFFFAOYSA-N	1.7×10^{-1}		Parnis et al. (2015)	Q	369
3,6-dimethylphenanthrene $C_{16}H_{14}$ [1576-67-6] OMIBPZBOAJFEJS-UHFFFAOYSA-N	1.8×10^{-1}		Parnis et al. (2015)	Q	369
2,3-dimethylanthracene $C_{16}H_{14}$ [613-06-9] OGVRJXPGSVLDRD-UHFFFAOYSA-N	2.1×10^{-1}		Parnis et al. (2015)	Q	369
9,10-dimethylanthracene $C_{16}H_{14}$ [781-43-1] JTGMTYWYUZDRBK-UHFFFAOYSA-N	1.8 3.4×10^{-1} 1.5×10^{-1}		Mackay et al. (2006a) HSDB (2015) Parnis et al. (2015)	V Q Q	99 369



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzo[<i>jk</i>]fluorene	5.8×10^{-1}	5900	Schwardt et al. (2021)	L	1
$C_{16}H_{10}$	7.0×10^{-1}	6900	Brockbank (2013)	L	1
(fluoranthene)	6.9×10^{-1}		Ma et al. (2010b)	L	366
[206-44-0]	7.5×10^{-1}		Ma et al. (2010b)	L	367
GVEPBHOBDDJJI-UHFFFAOYSA-N	5.4×10^{-1}	4800	Fogg and Sangster (2003)	L	
	4.5×10^{-3}		Mackay and Shiu (1981)	L	
	3.4×10^{-1}		Lee et al. (2012)	M	
	5.1×10^{-1}	4900	Bamford et al. (1999a)	M	
	9.1×10^{-1}		De Maagd et al. (1998)	M	12
	1.1	6900	ten Hulscher et al. (1992)	M	
	1.9	8700	Abou-Naccoul et al. (2014)	V	
	1.0		Mackay et al. (2006a)	V	
	1.0		Shiu and Ma (2000)	V	
	1.4		De Maagd et al. (1998)	V	12
	1.0		Shiu and Mackay (1997)	V	
	2.1		McLachlan et al. (1990)	V	373
	1.1		Eastcott et al. (1988)	V	
	4.0×10^{-1}	5400	Paasivirta et al. (1999)	T	
	1.5		Smith et al. (1993)	C	
	1.0		Ryan et al. (1988)	C	
	9.9×10^{-1}		Petrasek et al. (1983)	C	
	7.8×10^{-1}		Keshavarz et al. (2022)	Q	
	3.0×10^{-1}		Duchowicz et al. (2020)	Q	
	1.1		Abraham et al. (2019)	Q	
	5.8×10^{-1}		Parnis et al. (2015)	Q	369
	4.6×10^{-1}		Schröder et al. (2010)	Q	363
	4.4×10^{-1}		Hilal et al. (2008)	Q	
	2.2×10^{-1}		Modarresi et al. (2007)	Q	67
		5100	Kühne et al. (2005)	Q	
	1.1		Duchowicz et al. (2020)	?	185, 21
		5000	Kühne et al. (2005)	?	
1,2,3,4-tetrahydro-1,1,3,4,4,6-hexamethylnaphthalene	4.2×10^{-4}		Zhang et al. (2010)	Q	287, 288
$C_{16}H_{24}$	1.3×10^{-3}		Zhang et al. (2010)	Q	287, 289
[2084-69-7]	3.2×10^{-3}		Zhang et al. (2010)	Q	287, 290
JIVANURAWUCQIG-UHFFFAOYSA-N	2.7×10^{-4}		Zhang et al. (2010)	Q	287, 291
[2.2]paracyclophane	2.9×10^{-2}		Zhang et al. (2010)	Q	287, 288
$C_{16}H_{16}$	8.4×10^{-2}		Zhang et al. (2010)	Q	287, 289
[1633-22-3]	9.5×10^{-1}		Zhang et al. (2010)	Q	287, 290
OOLUVSIJOMLOCB-UHFFFAOYSA-N	4.3×10^{-2}		Zhang et al. (2010)	Q	287, 291



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzo[<i>a</i>]fluorene $C_{17}H_{12}$ [238-84-6] HKMTVMBEALTRRR-UHFFFAOYSA-N	3.7×10^{-1}	4400	Bamford et al. (1999a)	M	
	1.1		Keshavarz et al. (2022)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	Q	184
	4.6×10^{-1}		Modarresi et al. (2007)	Q	67
	3.7×10^{-1}	6300	Kühne et al. (2005)	Q	
		4400	Duchowicz et al. (2020)	?	185, 21
			Kühne et al. (2005)	?	
			Shiu and Ma (2000)	W	360
1-methylpyrene $C_{17}H_{12}$ [2381-21-7] KBSPJIWZDWBDM-UHFFFAOYSA-N	3.1		HSDB (2015)	Q	99
	4.5×10^{-1}		Parnis et al. (2015)	Q	369
2-methylpyrene $C_{17}H_{12}$ [3442-78-2] VIRFPLJXRDHVEI-UHFFFAOYSA-N	3.1		HSDB (2015)	Q	99
2-methylfluoranthene $C_{17}H_{12}$ [30997-39-8] VVRCMNWZFPXQZ-UHFFFAOYSA-N	5.4×10^{-1}		Parnis et al. (2015)	Q	369
9-n-propylphenanthrene $C_{17}H_{16}$ [17024-03-2] PIWHTUVAMGYSIC-UHFFFAOYSA-N	1.3×10^{-1}		Parnis et al. (2015)	Q	369
1,2,6-trimethylphenanthrene $C_{17}H_{16}$ [30436-55-6] MYWOJODOMFBVCB-UHFFFAOYSA-N	1.8×10^{-1}		Parnis et al. (2015)	Q	369
9-butyl-9H-fluorene $C_{17}H_{18}$ [3952-42-9] RBDADLSAYYPJAN-UHFFFAOYSA-N	5.1×10^{-2}		Parnis et al. (2015)	Q	369
11H-benzo[<i>b</i>]fluorene $C_{17}H_{12}$ [243-17-4] HAPOJKSPGLOOD-UHFFFAOYSA-N	2.5		Duchowicz et al. (2020)	V	186
	2.2×10^{-1}		Duchowicz et al. (2020)	Q	
2,7-dimethylpyrene $C_{18}H_{14}$ [15679-24-0] GSKHIRFMTJUBSM-UHFFFAOYSA-N	2.9		HSDB (2015)	Q	99
	3.9×10^{-1}		Parnis et al. (2015)	Q	369



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chrysene $C_{18}H_{12}$ [218-01-9] WDECIBYCCFPHNR-UHFFFAOYSA-N	1.5×10^1	12000	Brockbank (2013)	L	1
	2.3		Ma et al. (2010b)	L	366
	2.7		Ma et al. (2010b)	L	367
	2.1		Lee et al. (2012)	M	
	1.9	13000	Bamford et al. (1999a)	M	
	9.4		Zhang and Pawliszyn (1993)	M	
	1.0×10^1		HSDB (2015)	V	
	1.5×10^1		Mackay et al. (2006a)	V	
	1.5×10^1		Shiu and Ma (2000)	V	
	2.2		Eastcott et al. (1988)	V	
	2.0×10^{-1}	6400	Paasivirta et al. (1999)	T	
	9.4		Smith et al. (1993)	C	
	4.6×10^{-3}		Ryan et al. (1988)	C	
	6.6		Petrasek et al. (1983)	C	
	1.4		Keshavarz et al. (2022)	Q	
3.6×10^{-1}		Duchowicz et al. (2020)	Q	299	
2.4		Parnis et al. (2015)	Q	369	
2.0		Schröder et al. (2010)	Q	363	
3.6		Hilal et al. (2008)	Q		
5.0		Modarresi et al. (2007)	Q	67	
1.9		Duchowicz et al. (2020)	?	185, 21	
naphthacene $C_{18}H_{12}$ (2,3-benzanthracene) [92-24-0] IFLREYGFNSHWGE-UHFFFAOYSA-N	2.0×10^1		Duchowicz et al. (2020)	V	186
	3.6×10^2		Mackay et al. (2006a)	V	
	2.5×10^2		Mackay et al. (1992b)	X	364
	3.6×10^{-1}		Duchowicz et al. (2020)	Q	
triphenylene $C_{18}H_{12}$ (benzo[<i>l</i>]phenanthrene) [217-59-4] SLGBZMMZGDRARJ-UHFFFAOYSA-N	6.4×10^1		Duchowicz et al. (2020)	V	186
			Mackay et al. (2006a)	V	292
	1.0×10^2		Mackay et al. (1992b)	X	364
	3.6×10^{-1}		Duchowicz et al. (2020)	Q	
	8.6		Schröder et al. (2010)	Q	363
	2.9		Hilal et al. (2008)	Q	
benz[<i>a</i>]anthracene $C_{18}H_{12}$ [56-55-3] DXBHBZVCASKNBY-UHFFFAOYSA-N	4.7		Modarresi et al. (2007)	Q	67
	3.1		Ferreira (2001)	Q	12
	1.4		Ma et al. (2010b)	L	366
	1.6		Ma et al. (2010b)	L	367
	9.0×10^{-1}	7900	Fogg and Sangster (2003)	L	
	1.7		Lee et al. (2012)	M	
	8.2×10^{-1}	8300	Bamford et al. (1999a)	M	
	9.9		Zhang and Pawliszyn (1993)	M	
	1.2		Southworth (1979)	M	
	1.7		Mackay et al. (2006a)	V	
2.4		Eastcott et al. (1988)	V		
7.5×10^1		Smith and Bomberger (1980)	V	24	
4.0		Southworth (1979)	V		
1.5×10^{-1}	6100	Paasivirta et al. (1999)	T		



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.5		Smith et al. (1993)	C	79
	9.8		Ryan et al. (1988)	C	
	8.2×10^1		Petrasek et al. (1983)	C	
	1.4		Keshavarz et al. (2022)	Q	
	3.6×10^{-1}		Duchowicz et al. (2020)	Q	
	2.2		Parnis et al. (2015)	Q	369
	1.6		Schröder et al. (2010)	Q	363
	4.4		Hilal et al. (2008)	Q	
	5.0		Modarresi et al. (2007)	Q	67
		6100	Kühne et al. (2005)	Q	
	5.6		Ferreira (2001)	Q	12
	8.2×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		8300	Kühne et al. (2005)	?	
			Shiu and Ma (2000)	W	360
4,5-dimethylpyrene $C_{18}H_{14}$ [15679-25-1] MCZKPUHBCIHFBZ-UHFFFAOYSA-N	4.5×10^{-1}		Parnis et al. (2015)	Q	369
3-ethylfluoranthene $C_{18}H_{14}$ [20496-16-6] JXUOLJXLPIIRTP-UHFFFAOYSA-N	4.8×10^{-1}		Parnis et al. (2015)	Q	369
1,2,6,9-tetramethylphenanthrene $C_{18}H_{18}$ [204256-39-3] XFJWRZAPBOJONX-UHFFFAOYSA-N	1.6×10^{-1}		Parnis et al. (2015)	Q	369
1,9-dimethyl-5-ethylphenanthrene $C_{18}H_{18}$ MDZYWNWRMJIOPN-UHFFFAOYSA-N	1.0×10^{-1}		Parnis et al. (2015)	Q	369
1,9-dimethyl-7-ethylphenanthrene $C_{18}H_{18}$ NFFCDFHAMXFVEK-UHFFFAOYSA-N	1.4×10^{-1}		Parnis et al. (2015)	Q	369
1,2,3,4-tetrahydro-5-(1-phenylethyl)-naphthalene $C_{18}H_{20}$ [60466-61-7] TXOHWLOHKUPUKO-UHFFFAOYSA-N	1.6×10^{-2}		Zhang et al. (2010)	Q	287, 288
	1.0×10^{-1}		Zhang et al. (2010)	Q	287, 289
	2.0×10^{-1}		Zhang et al. (2010)	Q	287, 290
	2.9×10^{-2}		Zhang et al. (2010)	Q	287, 291
4-methylchrysene $C_{19}H_{14}$ [3351-30-2] BLVHWJCLSMYFMT-UHFFFAOYSA-N	1.9		Parnis et al. (2015)	Q	369



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-methylchrysene $C_{19}H_{14}$ [3697-24-3] GOHBXWHNJHENRX-UHFFFAOYSA-N	5.2		HSDB (2015)	Q	99
6-methylchrysene $C_{19}H_{14}$ [1705-85-7] ASVDRLYVNFOSCI-UHFFFAOYSA-N	2.2		Parnis et al. (2015)	Q	369
1-propylpyrene $C_{19}H_{16}$ [42211-33-6] HIOZPFGGCXEPAP-UHFFFAOYSA-N	3.2×10^{-1}		Parnis et al. (2015)	Q	369
7-methylbenz[a]anthracene $C_{19}H_{14}$ [2541-69-7] DIIFUCUPDHMNIV-UHFFFAOYSA-N	5.2		HSDB (2015)	Q	99
10-methylbenz[a]anthracene $C_{19}H_{14}$ [2381-15-9] WUMGYHICFXGLAB-UHFFFAOYSA-N	5.2		HSDB (2015)	Q	99
12-methylbenz[a]anthracene $C_{19}H_{14}$ [2422-79-9] ACYOLKMEHHTLAB-UHFFFAOYSA-N	5.2		HSDB (2015)	Q	99
6-ethylchrysene $C_{20}H_{16}$ [2732-58-3] ZJSYTTGSPQNXT-UHFFFAOYSA-N	1.8		Parnis et al. (2015)	Q	369
3,9-dimethylbenz[a]anthracene $C_{20}H_{16}$ [316-51-8] DBPDWIZRMPUWRH-UHFFFAOYSA-N	1.9		Parnis et al. (2015)	Q	369
1-butylpyrene $C_{20}H_{18}$ [35980-18-8] UFOTZLIYHMGVAV-UHFFFAOYSA-N	2.8×10^{-1}		Parnis et al. (2015)	Q	369
7,12-dimethyl-benz[a]anthracene $C_{20}H_{16}$ [57-97-6] ARSRBNBHOADGJU-UHFFFAOYSA-N	2.6 5.1×10^3 9.2×10^{-2} 4.9		Duchowicz et al. (2020) Mackay et al. (2006a) Duchowicz et al. (2020) HSDB (2015)	V V Q Q	186 99
	1.5		Parnis et al. (2015)	Q	369



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
9,10-dimethyl-benz[<i>a</i>]anthracene $C_{20}H_{16}$ [58429-99-5] GKVUDAZMZLMNJQ-UHFFFAOYSA-N			Mackay et al. (2006a)	V	292
benzo[<i>b</i>]fluoranthene $C_{20}H_{12}$ [205-99-2] FTOVXSOBNPWTSU-UHFFFAOYSA-N	1.5×10^1	5400	Brockbank (2013)	L	1
	1.5×10^1		Ma et al. (2010b)	L	366
	1.5×10^1		Ma et al. (2010b)	L	367
	1.5×10^1	5400	ten Hulscher et al. (1992)	M	
	1.4×10^1	7500	Paasivirta et al. (1999)	T	
	8.3×10^{-1}		Smith et al. (1993)	C	
	1.4		Keshavarz et al. (2022)	Q	
	1.2		Duchowicz et al. (2020)	Q	184
	6.0		Parnis et al. (2015)	Q	369
	5.6		Hilal et al. (2008)	Q	
	2.1		Modarresi et al. (2007)	Q	67
		4700	Kühne et al. (2005)	Q	
		2.0×10^{-2}	Yaffe et al. (2003)	Q	248, 249
	1.5×10^1	Duchowicz et al. (2020)	?	185, 21	
	5400	Kühne et al. (2005)	?		
benzo[<i>k</i>]fluoranthene $C_{20}H_{12}$ [207-08-9] HAXBIWFMXWRORI-UHFFFAOYSA-N	1.7×10^1		Ma et al. (2010b)	L	366
	1.8×10^1		Ma et al. (2010b)	L	367
	1.0×10^1		Lee et al. (2012)	M	
	1.7×10^1	5900	ten Hulscher et al. (1992)	M	
			Mackay et al. (2006a)	V	292
			De Maagd et al. (1998)	V	12
			Shiu and Mackay (1997)	V	
	1.5	6900	Paasivirta et al. (1999)	T	
	9.6×10^{-3}	1900	Goldstein (1982)	X	298
	2.5×10^{-1}		Smith et al. (1993)	C	
	2.6		Keshavarz et al. (2022)	Q	
	1.2		Duchowicz et al. (2020)	Q	299
	5.9		Parnis et al. (2015)	Q	369
	8.0		Hilal et al. (2008)	Q	
	2.4		Modarresi et al. (2007)	Q	67
		6300	Kühne et al. (2005)	Q	
		2.0×10^{-2}	Yaffe et al. (2003)	Q	248, 272
	1.7×10^1	Duchowicz et al. (2020)	?	185, 21	
	5800	Kühne et al. (2005)	?		
benzo[<i>a</i>]pyrene $C_{20}H_{12}$ (benz[<i>a</i>]pyrene) [50-32-8] FMMWHPNWAFZNXH-UHFFFAOYSA-N	4.5	8500	Brockbank (2013)	L	1
	2.0×10^1		Ma et al. (2010b)	L	366
	1.3×10^1		Ma et al. (2010b)	L	367
	6.2		Lee et al. (2012)	M	
	1.3×10^1		Altschuh et al. (1999)	M	
	2.2×10^1	4700	ten Hulscher et al. (1992)	M	
2.2×10^1		Mackay et al. (2006a)	V		
2.9×10^1		De Maagd et al. (1998)	V	12	



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^1		Shiu and Mackay (1997)	V	
	1.3×10^2		McLachlan et al. (1990)	V	373
	1.8×10^1		Eastcott et al. (1988)	V	
	7.5		Smith and Bomberger (1980)	V	24
	1.9×10^1		Southworth (1979)	V	
	8.2×10^{-1}	8200	Paasivirta et al. (1999)	T	
	1.6×10^{-3}	110	Goldstein (1982)	X	298
	2.0×10^1		Smith et al. (1993)	C	
	8.2×10^{-4}		Ryan et al. (1988)	C	
	2.6		Keshavarz et al. (2022)	Q	
	1.2		Duchowicz et al. (2020)	Q	299
	5.1		Parnis et al. (2015)	Q	369
	2.9		Hilal et al. (2008)	Q	
	1.5×10^1		Modarresi et al. (2007)	Q	67
		4900	Kühne et al. (2005)	Q	
	2.9×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.2×10^1		Duchowicz et al. (2020)	?	185, 21
		4700	Kühne et al. (2005)	?	
			Shiu and Ma (2000)	W	360
benzo[<i>e</i>]pyrene $C_{20}H_{12}$ [192-97-2] TXVHTIQJNYSSKO-UHFFFAOYSA-N	3.3×10^1		Duchowicz et al. (2020)	V	186
	3.3×10^1		HSDB (2015)	V	
	2.1×10^1		Mackay et al. (2006a)	V	
	2.7	8300	Paasivirta et al. (1999)	T	
	1.2		Duchowicz et al. (2020)	Q	
	1.5×10^1		Ferreira (2001)	Q	12
			Shiu and Ma (2000)	W	360
perylene $C_{20}H_{12}$ (dibenz[<i>de,kl</i>]anthracene) [198-55-0] CSHWQDPOILHKBI-UHFFFAOYSA-N	2.7		Duchowicz et al. (2020)	V	186
			Mackay et al. (2006a)	V	292
	2.3		Riederer (1990)	V	
	2.5×10^{-1}	6300	Paasivirta et al. (1999)	T	
	3.3×10^2		Mackay et al. (1992b)	X	364
	1.2		Duchowicz et al. (2020)	Q	
	5.7		Parnis et al. (2015)	Q	369
	2.3		Hilal et al. (2008)	Q	
	1.1×10^1		Ferreira (2001)	Q	12
1,2-benzfluoranthene $C_{20}H_{12}$ [203-33-8] OQDXASJSCOTNQS-UHFFFAOYSA-N	6.9		Hilal et al. (2008)	Q	
benzo[<i>j</i>]fluoranthene $C_{20}H_{12}$ [205-82-3] KHNYNFUTFKJLDD-UHFFFAOYSA-N	4.9×10^1		HSDB (2015)	Q	99



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3,6-trimethylchrysene $C_{21}H_{18}$ [1586755-28-3] UGLPREDFUVNEMJ-UHFFFAOYSA-N	1.8		Parnis et al. (2015)	Q	369
6-propylchrysene $C_{21}H_{18}$ [6910-41-4] PGBSMHMYMBHFF-UHFFFAOYSA-N	1.5		Parnis et al. (2015)	Q	369
20-methylcholanthrene $C_{21}H_{16}$ [56-49-5] PPQNXQZIWHRB-UHFFFAOYSA-N	1.9 1.9 3.7×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006a) Duchowicz et al. (2020)	V V V Q	186 292
6-butylchrysene $C_{22}H_{20}$ [6901-71-9] XJQKMLMKECCWEO-UHFFFAOYSA-N	1.3		Parnis et al. (2015)	Q	369
dibenz[<i>a,h</i>]anthracene $C_{22}H_{14}$ [53-70-3] LHRCREOYAASXPZ-UHFFFAOYSA-N	7.0×10^1 1.8×10^2 5.8×10^3 1.3×10^2 1.2 1.4×10^2 1.4 1.4×10^2 2.6×10^1 1.2×10^1 8.3×10^1	12000 7800	Duchowicz et al. (2020) Abou-Naccoul et al. (2014) Mackay et al. (2006a) Eastcott et al. (1988) Paasivirta et al. (1999) Smith et al. (1993) Duchowicz et al. (2020) HSDB (2015) Parnis et al. (2015) Hilal et al. (2008) Ferreira (2001)	V V V V T C Q Q Q Q Q	186 99 369 12
indeno[1,2,3- <i>cd</i>]pyrene $C_{22}H_{12}$ [193-39-5] SXQBHARYMNFBS-UHFFFAOYSA-N	2.9×10^1 2.0×10^1 2.8×10^1 2.5 1.4×10^2 4.7 3.7 1.3×10^1 5.0 9.4 2.8×10^1	3600 7400	Ma et al. (2010b) Ma et al. (2010b) ten Hulscher et al. (1992) Paasivirta et al. (1999) Smith et al. (1993) Keshavarz et al. (2022) Duchowicz et al. (2020) Parnis et al. (2015) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005)	L L M T C Q Q Q Q Q Q ? ?	366 367 184 369 67 185, 21



Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzo[ghi]perylene $C_{22}H_{12}$ [191-24-2] GYFAGKUZYNFMBN-UHFFFAOYSA-N	3.0×10^1		Ma et al. (2010b)	L	366
	2.4×10^1		Ma et al. (2010b)	L	367
	3.0×10^1	3200	ten Hulscher et al. (1992)	M	
	1.8×10^1		De Maagd et al. (1998)	V	12
	1.3×10^1		Shiu and Mackay (1997)	V	
	6.9×10^1		Eastcott et al. (1988)	V	
	4.0	9200	Paasivirta et al. (1999)	T	
	1.3×10^1		Mackay et al. (1992b)	X	364
	1.8×10^2		Smith et al. (1993)	C	
	4.7		Keshavarz et al. (2022)	Q	
	3.7		Duchowicz et al. (2020)	Q	
	1.1×10^1		Parnis et al. (2015)	Q	369
	2.6		Hilal et al. (2008)	Q	
6.1×10^1		Modarresi et al. (2007)	Q	67	
	3700	Kühne et al. (2005)	Q		
	3.7×10^{-2}	Yaffe et al. (2003)	Q	248, 249	
	3.0×10^1	Duchowicz et al. (2020)	?	185, 21	
	3300	Kühne et al. (2005)	?		
benzo[b]triphenylene $C_{22}H_{14}$ (dibenz[a,c]anthracene) [215-58-7] RAASUWZPTOJQAY-UHFFFAOYSA-N	1.9×10^1	8600	Abou-Naccoul et al. (2014)	V	
	4.4×10^3		Mackay et al. (2006a)	V	
	1.9×10^1		Hilal et al. (2008)	Q	
	1.4×10^2		Ferreira (2001)	Q	12
dibenz[a,j]anthracene $C_{22}H_{14}$ [224-41-9] KLIHYVJAYWCEDM-UHFFFAOYSA-N	8.6×10^1		Hilal et al. (2008)	Q	
	8.3×10^1		Ferreira (2001)	Q	12
	6.2		Hilal et al. (2008)	Q	
picene $C_{22}H_{14}$ [213-46-7] GBROPGWFBCKAG-UHFFFAOYSA-N	7.7×10^1		Ferreira (2001)	Q	12
	8.0		Hilal et al. (2008)	Q	
benzo[c]chrysene $C_{22}H_{14}$ [194-69-4] YZWGEMSQAMDWEM-UHFFFAOYSA-N	8.0×10^1		HSDB (2015)	Q	99
	8.0		HSDB (2015)	Q	
	8.0×10^1		HSDB (2015)	Q	99
benzo[g]chrysene $C_{22}H_{14}$ [196-78-1] JZOIZKBKSZMVRV-UHFFFAOYSA-N	8.0×10^1		HSDB (2015)	Q	99
	8.0		HSDB (2015)	Q	
	7.0×10^2		HSDB (2015)	Q	99
dibenzo[a,e]pyrene $C_{24}H_{14}$ [192-65-4] KGHMWBNEMFNFZ-UHFFFAOYSA-N			HSDB (2015)	Q	99



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Table A2.7: Polynuclear aromatics (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dibenzo[<i>a, h</i>]pyrene $C_{24}H_{14}$ [189-64-0] RXUSYFJGDZVFND-UHFFFAOYSA-N	7.0×10^2		HSDB (2015)	Q	99
dibenzo[<i>a, i</i>]pyrene $C_{24}H_{14}$ [189-55-9] TUGYIJVAYAHHMM-UHFFFAOYSA-N	7.0×10^2		HSDB (2015)	Q	99
coronene $C_{24}H_{12}$ [191-07-1] VPUGDVKSAQVFFS-UHFFFAOYSA-N			Mackay et al. (2006a)	V	292
dibenz[<i>a, e</i>]aceanthrylene $C_{24}H_{14}$ [5385-75-1] JHOWUOKQHJHGMU-UHFFFAOYSA-N	7.0×10^2		HSDB (2015)	Q	99
dibenzo[<i>b, k</i>]chrysene $C_{26}H_{16}$ [217-54-9] DHCSBRKYHMINPB-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	Q	99



A3 Organic species with oxygen (O)

A3.1 Carbon oxides

Table A3.1: Carbon oxides

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
carbon monoxide	9.7×10^{-6}	1300	Burkholder et al. (2019)	L	1
CO	8.0×10^{-6}	1400	Burkholder et al. (2019)	L	70
[630-08-0]	9.7×10^{-6}	1300	Burkholder et al. (2015)	L	1
UGFAIRIUMAVXCW-UHFFFAOYSA-N	8.0×10^{-6}	1400	Burkholder et al. (2015)	L	70
	9.7×10^{-6}	1300	Warneck and Williams (2012)	L	
	9.7×10^{-6}	1300	Sander et al. (2011)	L	1
	9.7×10^{-6}	1300	Sander et al. (2006)	L	1
	9.7×10^{-6}	1300	Fernández-Prini et al. (2003)	L	3
			Cargill (1990)	L	374
	9.4×10^{-6}	1300	Wilhelm et al. (1977)	L	
	9.7×10^{-6}	1300	Rettich et al. (1982)	M	375
	7.0×10^{-6}	1500	Schmidt (1979)	M	33, 34
	7.9×10^{-5}		Meadows and Spedding (1974)	M	
	8.3×10^{-6}		Power and Stegall (1970)	M	14
	7.9×10^{-6}	1200	Douglas (1967)	M	376, 377
	9.4×10^{-6}	1300	Winkler (1901)	M	378
	9.5×10^{-6}	1200	Bunsen (1855a)	M	43
	6.0×10^{-6}		Pierotti (1965)	T	
	1.0×10^{-5}		Hayer et al. (2022)	Q	20
	8.7×10^{-6}		Yaws (1999)	?	21
	9.4×10^{-6}	1300	Yaws et al. (1999)	?	21
	8.4×10^{-6}		Abraham and Weathersby (1994)	?	21
	9.4×10^{-6}	1400	Dean and Lange (1999)	?	379, 23
	8.6×10^{-6}		Yaws and Yang (1992)	?	21
carbon dioxide	3.4×10^{-4}	2300	Burkholder et al. (2019)	L	1
CO ₂	2.8×10^{-4}	2600	Burkholder et al. (2019)	L	70
[124-38-9]	3.4×10^{-4}	2300	Burkholder et al. (2015)	L	1
CURLTUGMZLYLDI-UHFFFAOYSA-N	2.8×10^{-4}	2600	Burkholder et al. (2015)	L	70
	3.3×10^{-4}	2400	Sander et al. (2011)	L	1
	3.3×10^{-4}	2400	Sander et al. (2006)	L	1
	3.3×10^{-4}	2300	Fernández-Prini et al. (2003)	L	3
	3.4×10^{-4}	2300	Carroll et al. (1991)	L	
	3.4×10^{-4}	2400	Crovetto (1991)	L	
	3.4×10^{-4}	2300	Yoo et al. (1986)	L	1
	3.4×10^{-4}	2400	Edwards et al. (1978)	L	1
	3.3×10^{-4}	2400	Wilhelm et al. (1977)	L	
	3.4×10^{-4}	2400	Weiss (1974)	L	1
	3.4×10^{-4}	2300	Zheng et al. (1997)	M	380
	3.3×10^{-4}	2400	Murray and Riley (1971)	M	381
	2.4×10^{-4}		Power and Stegall (1970)	M	14
	3.3×10^{-4}	2400	Morrison and Billett (1952)	M	382
	3.3×10^{-4}		Orcutt and SeEVERS (1937a)	M	



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Table A3.1: Carbon oxides (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.3×10^{-4}	2300	Kunerth (1922)	M	
	3.3×10^{-4}	2500	Geffcken (1904)	M	
	3.4×10^{-4}	2400	Bohr (1899)	M	383
	3.4×10^{-4}	2500	Bunsen (1855a)	M	43
	6.5×10^{-4}		Duchowicz et al. (2020)	V	186
	3.4×10^{-4}	2400	Chen et al. (1979)	R	1
	3.1×10^{-4}	2400	Chameides (1984)	T	
	3.3×10^{-4}	2400	Edwards et al. (1975)	T	1
	3.4×10^{-4}		Perry and Chilton (1973)	X	29
	3.4×10^{-4}	2400	Lelieveld and Crutzen (1991)	C	
	3.4×10^{-4}	2400	Pandis and Seinfeld (1989)	C	
	3.9×10^{-4}		Nunn (1958)	C	12
	2.3×10^{-4}		Hayer et al. (2022)	Q	20
	4.0		Duchowicz et al. (2020)	Q	
		2900	Kühne et al. (2005)	Q	
			Scharlin (1996)	E	1, 384
		2400	Kühne et al. (2005)	?	
	4.5×10^{-4}		Yaws (1999)	?	21
	3.3×10^{-4}	2400	Yaws et al. (1999)	?	21
	2.6×10^{-4}		Abraham and Weathersby (1994)	?	21
	3.3×10^{-4}	2400	Dean and Lange (1999)	?	385, 23
	4.5×10^{-4}		Yaws and Yang (1992)	?	21
	3.4×10^{-4}	2400	Seinfeld (1986)	?	21
	3.3×10^{-4}	2400	Hoffmann and Jacob (1984)	?	21
carbon suboxide C_3O_2 [504-64-3] GNEVIACKFGQMHB-UHFFFAOYSA-N	1.1×10^{-2}		Keßel et al. (2017)	M	386



A3.2 Alcohols (ROH)

Table A3.2: Alcohols (ROH)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methanol	2.0	5500	Burkholder et al. (2019)	L	1
CH ₃ OH	2.0	5500	Burkholder et al. (2015)	L	1
[67-56-1]	2.0	5400	Brockbank (2013)	L	1
OKKJLVBELUTLKV-UHFFFAOYSA-N	2.0	5600	Sander et al. (2011)	L	387, 1
	2.1	5300	Warneck (2006)	L	
	2.2	5200	Sander et al. (2006)	L	
	2.0	5500	Dohnal et al. (2006)	L	1
	1.7	4500	Fogg and Sangster (2003)	L	
	2.1	5400	Plyasunov and Shock (2000)	L	
	3.6×10^{-2}		St-Pierre et al. (2014)	M	173
	2.2	5300	O'Farrell and Waghorne (2010)	M	
	2.1		Vitenberg and Dobryakov (2008)	M	
	7.8×10^{-1}		Helburn et al. (2008)	M	
	2.2	5300	Lin and Chou (2006)	M	
	2.0	5600	Teja et al. (2001)	M	11, 338
	2.6	5900	Zhu et al. (2000)	M	
	2.0	5500	Gupta et al. (2000)	M	
	1.6		Altschuh et al. (1999)	M	
	2.1		Merk and Riederer (1997)	M	
	1.3		Kaneko et al. (1994)	M	14
	2.2		Li and Carr (1993)	M	
	2.6	3900	Pividal et al. (1992)	M	
	2.2	5200	Snider and Dawson (1985)	M	
	2.0		Richon et al. (1985)	M	
	1.3×10^1		Mazza (1980)	M	
	2.2		Rytting et al. (1978)	M	
	2.3		Burnett (1963)	M	
	2.3		Butler et al. (1935)	M	388
	7.6×10^{-2}		Abraham and Acree (2007)	V	
	1.8	6200	Fukuchi et al. (2002)	V	
	1.9		Hwang et al. (1992)	V	
	2.8		Riederer (1990)	V	
		5400	Abraham (1984)	V	
	2.2	5700	Glew and Moelwyn-Hughes (1953)	R	
	2.1	5400	Plyasunov et al. (2001)	T	
	1.5		Yaws (2003)	X	258
	1.5		Yaws (2003)	X	237
	1.6	5600	Schaffer and Daubert (1969)	X	298
	2.2		Gaffney and Senum (1984)	X	389
	2.1		Timmermans (1960)	X	390
	1.6		Dupeux et al. (2022)	Q	259
	2.1		Hayer et al. (2022)	Q	20
	5.0×10^{-1}		Keshavarz et al. (2022)	Q	
	2.8		Duchowicz et al. (2020)	Q	184
	3.4×10^{-1}		Wang et al. (2017)	Q	80, 238



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1		Wang et al. (2017)	Q	80, 239
	6.6		Wang et al. (2017)	Q	80, 240
	2.1		Li et al. (2014)	Q	241
	2.0		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	2.5		Raventos-Duran et al. (2010)	Q	245
	2.6×10^{-1}		Gharagheizi et al. (2010)	Q	246
	2.0		Hilal et al. (2008)	Q	
	2.9		Modarresi et al. (2007)	Q	67
		6200	Kühne et al. (2005)	Q	
	2.2		Yaffe et al. (2003)	Q	248, 249
	1.1		Yao et al. (2002)	Q	229, 267
	2.6		English and Carroll (2001)	Q	230, 231
	1.6		Katritzky et al. (1998)	Q	
	1.5		Yaws et al. (1997)	Q	
	2.0		Suzuki et al. (1992)	Q	232
	1.8		Nirmalakhandan and Speece (1988)	Q	
	2.4		Taft et al. (1985)	Q	
	2.2		Duchowicz et al. (2020)	?	185, 21
		5000	Kühne et al. (2005)	?	
	1.9		Yaws (1999)	?	21
	1.1		Abraham and Weathersby (1994)	?	21
	1.4		Yaws and Yang (1992)	?	21
	2.2		Abraham et al. (1990)	?	
ethanol	1.9	6400	Burkholder et al. (2019)	L	1
C ₂ H ₅ OH	1.9	6400	Burkholder et al. (2015)	L	1
[64-17-5]	1.8	6300	Brockbank (2013)	L	1
LFQSCWFLJHTTHZ-UHFFFAOYSA-N	1.9	6400	Sander et al. (2011)	L	1
	1.9	6300	Warneck (2006)	L	
	2.0	6600	Sander et al. (2006)	L	
	1.8	6300	Dohnal et al. (2006)	L	1
	1.7	5700	Fogg and Sangster (2003)	L	
	1.9	6300	Plyasunov and Shock (2000)	L	
	1.9	6200	Dubowski (1979)	L	1
	1.8	5900	Willey et al. (2017)	M	
	2.2	5500	O’Farrell and Waghorne (2010)	M	
	1.8		Vitenberg and Dobryakov (2008)	M	
	1.9	5800	Falabella et al. (2006)	M	11, 338
	1.9		Straver and de Loos (2005)	M	
			Cheng et al. (2004)	M	328
	1.1		Ueberfeld et al. (2001)	M	
	1.8	5800	Gupta et al. (2000)	M	
	1.3		Altschuh et al. (1999)	M	
	1.0		Eger et al. (1999)	M	14
	1.9		Merk and Riederer (1997)	M	
	8.3×10^{-1}		Kaneko et al. (1994)	M	14
	1.9		Li and Carr (1993)	M	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1	3900	Pividal et al. (1992)	M	
	1.9		Park et al. (1987)	M	
	1.9	6600	Snider and Dawson (1985)	M	
	2.0		Richon et al. (1985)	M	
	1.9	6000	Jones (1983)	M	1
	6.2		Mazza (1980)	M	
	1.9		Rytting et al. (1978)	M	
	2.3		Rohrschneider (1973)	M	
	2.1		Burnett (1963)	M	
	1.9	6500	Harger et al. (1950)	M	
	1.9		Butler et al. (1935)	M	
	4.7×10^{-2}		Abraham and Acree (2007)	V	
	1.7	6300	Fukuchi et al. (2002)	V	
	1.3		Hwang et al. (1992)	V	
		6300	Abraham (1984)	V	
	1.9	6300	Plyasunov et al. (2001)	T	
	1.4		Yaws (2003)	X	237
	1.5	6400	Schaffer and Daubert (1969)	X	298
	2.0		Gaffney and Senum (1984)	X	389
	1.6		Timmermans (1960)	X	390
	1.7		Hayer et al. (2022)	Q	20
	6.7×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1		Duchowicz et al. (2020)	Q	
	3.1×10^{-1}		Wang et al. (2017)	Q	80, 238
	2.0		Wang et al. (2017)	Q	80, 239
	2.3		Wang et al. (2017)	Q	80, 240
	1.6		Raventos-Duran et al. (2010)	Q	242, 243
	1.6		Raventos-Duran et al. (2010)	Q	244
	1.6		Raventos-Duran et al. (2010)	Q	245
	1.3		Gharagheizi et al. (2010)	Q	246
	1.1		Hilal et al. (2008)	Q	
	1.8		Modarresi et al. (2007)	Q	67
		6500	Kühne et al. (2005)	Q	
	2.0		Yaffe et al. (2003)	Q	248, 249
	1.4		Yao et al. (2002)	Q	229
	1.4		English and Carroll (2001)	Q	230, 231
	1.2		Katritzky et al. (1998)	Q	
	1.3		Yaws et al. (1997)	Q	
	1.4		Russell et al. (1992)	Q	279
	1.4		Suzuki et al. (1992)	Q	232
	1.6		Nirmalakhandan and Speece (1988)	Q	
	2.0		Duchowicz et al. (2020)	?	185, 21
	1.9		Bartelt-Hunt et al. (2008)	?	21
		6400	Kühne et al. (2005)	?	
	1.2		Yaws (1999)	?	21
	8.2×10^{-1}		Abraham and Weathersby (1994)	?	21
	1.2		Yaws and Yang (1992)	?	21



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.9		Abraham et al. (1990)	?	
1-propanol	1.4	6900	Burkholder et al. (2019)	L	391, 1
C ₃ H ₇ OH	1.4	6900	Burkholder et al. (2015)	L	392, 1
[71-23-8]	1.5	7000	Brockbank (2013)	L	1, 393
BDERNNFJNOPAEC-UHFFFAOYSA-N	1.4	6900	Sander et al. (2011)	L	394, 1
	1.3	7500	Sander et al. (2006)	L	
	1.4	6900	Dohnal et al. (2006)	L	1
	1.4	6200	Fogg and Sangster (2003)	L	
	1.5	6900	Plyasunov and Shock (2000)	L	
	1.5		Vitenberg and Dobryakov (2008)	M	
	1.2	6200	Falabella et al. (2006)	M	11, 338
	1.5		Straver and de Loos (2005)	M	
	3.2×10^{-1}		van Ruth et al. (2002)	M	14
	3.2×10^{-1}		van Ruth and Villeneuve (2002)	M	14, 361
	6.5×10^{-1}		van Ruth et al. (2001)	M	14
	1.2	6200	Gupta et al. (2000)	M	
	2.7		Altschuh et al. (1999)	M	
	1.5		Merk and Riederer (1997)	M	
	7.2×10^{-1}		Kaneko et al. (1994)	M	14
	1.4		Li and Carr (1993)	M	
	1.3	7500	Snider and Dawson (1985)	M	
	1.8		Richon et al. (1985)	M	
	3.7		Mazza (1980)	M	
	1.5		Rytting et al. (1978)	M	
	1.6		Burnett (1963)	M	
	1.4		Butler et al. (1935)	M	388
	3.1×10^{-2}		Abraham and Acree (2007)	V	
	1.8	7700	Fukuchi et al. (2002)	V	
	8.0×10^{-2}	4500	Djerki and Laub (1988)	V	
		6900	Abraham (1984)	V	
	1.5	6900	Plyasunov et al. (2001)	T	
	1.2		Yaws (2003)	X	258
	1.2		Dupeux et al. (2022)	Q	259
	1.5		Hayer et al. (2022)	Q	20
	9.0×10^{-1}		Keshavarz et al. (2022)	Q	
	1.2		Duchowicz et al. (2020)	Q	
	2.5×10^{-1}		Wang et al. (2017)	Q	80, 238
	1.3		Wang et al. (2017)	Q	80, 239
	1.2		Wang et al. (2017)	Q	80, 240
	1.2		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	1.2		Raventos-Duran et al. (2010)	Q	245
	7.0×10^{-1}		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	67
		6900	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	248, 272
	1.1		Yao et al. (2002)	Q	229



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2		English and Carroll (2001)	Q	230, 231
	1.7		Katritzky et al. (1998)	Q	
	1.2		Yaws et al. (1997)	Q	
	1.1		Russell et al. (1992)	Q	279
	1.1		Suzuki et al. (1992)	Q	232
	1.2		Nirmalakhandan and Speece (1988)	Q	
	1.3		Duchowicz et al. (2020)	?	185, 21
		7500	Kühne et al. (2005)	?	
	1.3		Yaws (1999)	?	21
	6.0×10^{-1}		Abraham and Weathersby (1994)	?	21
	1.1		Yaws and Yang (1992)	?	21
	1.5		Abraham et al. (1990)	?	
2-propanol	1.2	7100	Burkholder et al. (2019)	L	1
C ₃ H ₇ OH	1.2	7100	Burkholder et al. (2015)	L	1
(isopropanol)	1.2	6900	Brockbank (2013)	L	1
[67-63-0]	1.3	7500	Sander et al. (2011)	L	
KFZMGEQAYNKOFK-UHFFFAOYSA-N	1.3	7500	Sander et al. (2006)	L	
	1.2	6200	Fogg and Sangster (2003)	L	
	1.2	7000	Plyasunov and Shock (2000)	L	
	1.1	8400	Hiatt (2013)	M	
	6.8×10^{-1}		Helburn et al. (2008)	M	
	1.3	7300	Lin and Chou (2006)	M	
			Cheng et al. (2004)	M	328
			Cheng et al. (2003)	M	328
	1.8×10^{-1}		Ayuttaya et al. (2001)	M	340
	1.0×10^{-3}		Ayuttaya et al. (2001)	M	341
	5.7×10^{-1}		Ayuttaya et al. (2001)	M	342
	1.1		Kim et al. (2000)	M	
	9.2×10^{-1}		Altschuh et al. (1999)	M	
	1.2		Merk and Riederer (1997)	M	
	5.8×10^{-1}		Kaneko et al. (1994)	M	14
	7.9×10^{-1}	5700	Kolb et al. (1992)	M	277
	1.4		Pividal et al. (1992)	M	80
	9.8×10^{-1}		Yu (1992)	M	12
	1.2	7400	Snider and Dawson (1985)	M	
	2.1		Mazza (1980)	M	
	1.2		Rytting et al. (1978)	M	
	1.2		Butler et al. (1935)	M	
	1.2	7100	Fenclová et al. (2007)	V	1
	1.2	7600	Fukuchi et al. (2002)	V	
	1.7		Hine and Weimar (1965)	R	
	7.6×10^{-1}		Yaws (2003)	X	258
	2.4		Dupeux et al. (2022)	Q	259
	1.2		Hayer et al. (2022)	Q	20
	9.0×10^{-1}		Keshavarz et al. (2022)	Q	
	4.8×10^{-1}		Duchowicz et al. (2020)	Q	184
	2.8×10^{-1}		Wang et al. (2017)	Q	80, 238



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.0		Wang et al. (2017)	Q	80, 239
	1.2		Wang et al. (2017)	Q	80, 240
	1.2		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	1.2		Raventos-Duran et al. (2010)	Q	245
	4.3×10^{-1}		Hilal et al. (2008)	Q	
	7.0×10^{-1}		Modarresi et al. (2007)	Q	67
		6900	Kühne et al. (2005)	Q	
			Yaffe et al. (2003)	Q	356
	7.7×10^{-1}		Yao et al. (2002)	Q	229
	1.0		English and Carroll (2001)	Q	230, 274
	1.1		Katritzky et al. (1998)	Q	
	8.9×10^{-1}		Yaws et al. (1997)	Q	
	1.4		Russell et al. (1992)	Q	279
	9.7×10^{-1}		Suzuki et al. (1992)	Q	232
	1.1		Nirmalakhandan and Speece (1988)	Q	
	1.3		Taft et al. (1985)	Q	
	1.2		Duchowicz et al. (2020)	?	185, 21
		6000	Kühne et al. (2005)	?	
	8.0×10^{-1}		Yaws (1999)	?	21
	5.0×10^{-1}		Abraham and Weathersby (1994)	?	21
	8.8×10^{-1}		Yaws and Yang (1992)	?	21
	1.2		Abraham et al. (1990)	?	
glycidol $\text{C}_3\text{H}_6\text{O}_2$ [556-52-5] CTKINSOISVBQLD-UHFFFAOYSA-N	1.7×10^3		HSDB (2015)	Q	99
1-butanol $\text{C}_4\text{H}_9\text{OH}$ [71-36-3] LRHPLDYGVMQRHN-UHFFFAOYSA-N	1.2	7500	Burkholder et al. (2019)	L	1
	1.2	7500	Burkholder et al. (2015)	L	1
	1.2	7500	Brockbank (2013)	L	1
	1.2	7500	Sander et al. (2011)	L	1
	1.3	7200	Sander et al. (2006)	L	
	1.2	7500	Dohnal et al. (2006)	L	1
	1.1	6300	Fogg and Sangster (2003)	L	
	1.2	7400	Plyasunov and Shock (2000)	L	
	1.0	7000	Wu et al. (2022a)	M	
	2.0		Chao et al. (2017)	M	
	1.0	6800	Shunthirasingham et al. (2013)	M	
	1.3		Vitenberg and Dobryakov (2008)	M	
	1.1	6000	Lei et al. (2007)	M	395
	8.2×10^{-1}	6200	Falabella et al. (2006)	M	11, 338
	9.4×10^{-1}	6100	Hovorka et al. (2002)	M	11
	4.5×10^{-1}		van Ruth et al. (2002)	M	14
	4.4×10^{-1}		van Ruth and Villeneuve (2002)	M	14, 361
	4.8×10^{-1}		van Ruth et al. (2001)	M	14
	1.1		Kim et al. (2000)	M	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.2×10^{-1}	6200	Gupta et al. (2000)	M	
	1.2		Altschuh et al. (1999)	M	
	5.5×10^{-1}		Eger et al. (1999)	M	14
	1.1		Merk and Riederer (1997)	M	
	1.4×10^{-1}		Chaintreau et al. (1995)	M	
	5.1×10^{-1}		Kaneko et al. (1994)	M	14
	1.1		Li and Carr (1993)	M	
	6.1×10^{-1}	5600	Kolb et al. (1992)	M	277
	1.2	7200	Snider and Dawson (1985)	M	
	5.3×10^{-1}		Friant and Suffet (1979)	M	38
	1.2		Rytting et al. (1978)	M	
	1.1		Amoore and Buttery (1978)	M	
	1.1		Buttery et al. (1969)	M	
	1.4		Burnett (1963)	M	
	1.2		Butler et al. (1935)	M	388
	1.1		Chao et al. (2017)	V	
	1.1		Mackay et al. (2006c)	V	
	7.3×10^{-1}		Mackay et al. (1995)	V	
	8.3×10^{-1}		Hwang et al. (1992)	V	
	2.2×10^{-1}	4700	Djerki and Laub (1988)	V	
		7400	Abraham (1984)	V	
	1.2		Amoore and Buttery (1978)	V	
	1.2		Butler et al. (1935)	V	
	1.2		Yaws (2003)	X	258
	9.4×10^{-1}		Dupeux et al. (2022)	Q	259
	1.9		Hayer et al. (2022)	Q	20
	1.2		Keshavarz et al. (2022)	Q	
	1.3		Duchowicz et al. (2020)	Q	184
	2.0×10^{-1}		Wang et al. (2017)	Q	80, 238
	9.1×10^{-1}		Wang et al. (2017)	Q	80, 239
	1.3		Wang et al. (2017)	Q	80, 240
	1.2		Li et al. (2014)	Q	241
	9.4×10^{-1}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	5.6×10^{-1}		Hilal et al. (2008)	Q	
	1.0		Modarresi et al. (2007)	Q	67
		7200	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	248, 272
	1.1		Yao et al. (2002)	Q	229
	9.5×10^{-1}		English and Carroll (2001)	Q	230, 260
	1.8		Katritzky et al. (1998)	Q	
	1.1		Yaws et al. (1997)	Q	
	8.6×10^{-1}		Russell et al. (1992)	Q	279
	8.4×10^{-1}		Suzuki et al. (1992)	Q	232
	9.9×10^{-1}		Nirmalakhandan and Speece (1988)	Q	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1	6900	Duchowicz et al. (2020)	?	185, 21
	1.1		Kühne et al. (2005)	?	
	1.2		Yaws (1999)	?	21
	1.8		Abraham et al. (1990)	?	
			Mackay and Yeun (1983)	?	
2-butanol	1.1	7600	Burkholder et al. (2019)	L	1
C ₄ H ₁₀ O	1.1	7600	Burkholder et al. (2015)	L	1
(<i>sec</i> -butanol)	9.5×10^{-1}	7600	Brockbank (2013)	L	1
[78-92-2]	1.1	7300	Sander et al. (2011)	L	
BTANRVKQNVYAZ-UHFFFAOYSA-N	1.1	7300	Sander et al. (2006)	L	
	1.0	7400	Fogg and Sangster (2003)	L	
	9.9×10^{-1}	7600	Plyasunov and Shock (2000)	L	
	8.3×10^{-1}		Merk and Riederer (1997)	M	
	1.1	7300	Snider and Dawson (1985)	M	
	9.8×10^{-1}		Rytting et al. (1978)	M	
	9.6×10^{-1}		Butler et al. (1935)	M	
	9.5×10^{-1}	7600	Fenclová et al. (2007)	V	1
	1.1		Mackay et al. (2006c)	V	
	1.1		Mackay et al. (1995)	V	
	9.1×10^{-1}	7500	Cabani et al. (1975b)	T	
	6.7×10^{-1}		Yaws (2003)	X	258
	1.1		Dupeux et al. (2022)	Q	259
	1.2		Hayer et al. (2022)	Q	20
	1.2		Keshavarz et al. (2022)	Q	
	5.1×10^{-1}		Duchowicz et al. (2020)	Q	299
	2.3×10^{-1}		Wang et al. (2017)	Q	80, 238
	8.9×10^{-1}		Wang et al. (2017)	Q	80, 239
	7.3×10^{-1}		Wang et al. (2017)	Q	80, 240
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-1}		Hilal et al. (2008)	Q	
	4.9×10^{-1}		Modarresi et al. (2007)	Q	67
		7200	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	248, 249
	6.2×10^{-1}		Yao et al. (2002)	Q	229
	8.4×10^{-1}		English and Carroll (2001)	Q	230, 231
	5.7×10^{-1}		Katritzky et al. (1998)	Q	
	1.2		Yaws et al. (1997)	Q	
	7.7×10^{-1}		Suzuki et al. (1992)	Q	232
	9.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	1.1		Duchowicz et al. (2020)	?	185, 21
		7100	Kühne et al. (2005)	?	
	1.2		Yaws (1999)	?	21
	9.9×10^{-1}		Abraham et al. (1990)	?	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-1-propanol	8.3×10^{-1}	7200	Burkholder et al. (2019)	L	1
$C_4H_{10}O$	8.3×10^{-1}	7200	Burkholder et al. (2015)	L	1
(isobutanol)	8.0×10^{-1}	7400	Brockbank (2013)	L	1
[78-83-1]	1.0		Sander et al. (2011)	L	
ZXEKIIBDNHEJQC-UHFFFAOYSA-N	1.0		Sander et al. (2006)	L	
	8.5×10^{-1}	7200	Plyasunov and Shock (2000)	L	
	1.2		Chao et al. (2017)	M	
	2.2×10^{-1}		Kim and Kim (2014)	M	
			Cheng et al. (2004)	M	328
	6.7×10^{-1}	6100	Hovorka et al. (2002)	M	11
	1.1		Altschuh et al. (1999)	M	
	3.7×10^{-1}		Shiu and Mackay (1997)	M	
	7.8×10^{-1}		Merk and Riederer (1997)	M	
	4.4×10^{-1}		Kaneko et al. (1994)	M	14
	1.0		Snider and Dawson (1985)	M	
	8.0×10^{-1}		Rytting et al. (1978)	M	
	8.3×10^{-1}		Butler et al. (1935)	M	
	9.2×10^{-1}		Chao et al. (2017)	V	
	7.6×10^{-1}	7200	Fenclová et al. (2007)	V	1
	7.3×10^{-1}		Mackay et al. (2006c)	V	
	7.3×10^{-1}		Shiu and Mackay (1997)	V	
	7.3×10^{-1}		Mackay et al. (1995)	V	
	1.2		Keshavarz et al. (2022)	Q	
	5.1×10^{-1}		Duchowicz et al. (2020)	Q	
	2.3×10^{-1}		Wang et al. (2017)	Q	80, 238
	9.1×10^{-1}		Wang et al. (2017)	Q	80, 239
	7.6×10^{-1}		Wang et al. (2017)	Q	80, 240
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	5.1×10^{-1}		Hilal et al. (2008)	Q	
	6.1×10^{-1}		Modarresi et al. (2007)	Q	67
		7200	Kühne et al. (2005)	Q	
	3.7×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	6.2×10^{-1}		Yao et al. (2002)	Q	229
	5.7×10^{-1}		English and Carroll (2001)	Q	230, 231
	1.8		Katritzky et al. (1998)	Q	
	8.3×10^{-1}		Yaws et al. (1997)	Q	
	7.7×10^{-1}		Suzuki et al. (1992)	Q	232
	8.4×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	1.0		Duchowicz et al. (2020)	?	185, 21
		8100	Kühne et al. (2005)	?	
	8.4×10^{-1}		Yaws (1999)	?	21
	3.1×10^{-1}		Abraham and Weathersby (1994)	?	21
	8.0×10^{-1}		Abraham et al. (1990)	?	
	9.6×10^{-1}		Mackay and Yeun (1983)	?	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-2-propanol	7.9×10^{-1}	7600	Brockbank (2013)	L	1
$C_4H_{10}O$	6.9×10^{-1}	8300	Sander et al. (2011)	L	
(<i>tert</i> -butanol)	6.9×10^{-1}	8300	Sander et al. (2006)	L	
[75-65-0]	7.9×10^{-1}	7700	Plyasunov and Shock (2000)	L	
DKGAVHZHDRPRBM-UHFFFAOYSA-N	1.4	7900	Hiatt (2013)	M	
	1.1		Altschuh et al. (1999)	M	
	8.1×10^{-1}		Merk and Riederer (1997)	M	
			Koga (1995)	M	396
	6.8×10^{-1}	8300	Snider and Dawson (1985)	M	
	7.6×10^{-1}		Rytting et al. (1978)	M	
	8.3×10^{-1}		Butler et al. (1935)	M	
	8.0×10^{-1}	7700	Fenclová et al. (2007)	V	1
	2.4×10^{-1}		Yaws (2003)	X	258
	8.0×10^{-1}	6500	Pankow et al. (1996)	C	
	2.0		Dupeux et al. (2022)	Q	259
	1.2		Keshavarz et al. (2022)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	Q	184
	1.6×10^{-1}		Wang et al. (2017)	Q	80, 238
	6.6×10^{-1}		Wang et al. (2017)	Q	80, 239
	1.1		Wang et al. (2017)	Q	80, 240
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	4.1×10^{-1}		Modarresi et al. (2007)	Q	67
		7200	Kühne et al. (2005)	Q	
	7.9×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.9×10^{-1}		Yao et al. (2002)	Q	229
	9.0×10^{-1}		English and Carroll (2001)	Q	230, 231
	7.5×10^{-1}		Katritzky et al. (1998)	Q	
	7.3×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	3.0×10^{-1}		Yaws et al. (1997)	Q	
	6.1×10^{-1}		Suzuki et al. (1992)	Q	232
	7.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	1.1		Duchowicz et al. (2020)	?	185, 21
		8300	Kühne et al. (2005)	?	
	5.7×10^{-1}		Yaws (1999)	?	21
	7.7×10^{-1}		Abraham et al. (1990)	?	
			Burkholder et al. (2019)	W	397
			Burkholder et al. (2015)	W	398
1-pentanol	8.6×10^{-1}	7400	Brockbank (2013)	L	1
$C_5H_{11}OH$	1.0	7900	Dohnal et al. (2006)	L	1
(amyl alcohol)	8.9×10^{-1}	7800	Plyasunov and Shock (2000)	L	
[71-41-0]	8.1×10^{-1}	7100	Shunthirasingham et al. (2013)	M	
AMQJEAHLZJPGS-UHFFFAOYSA-N	7.5×10^{-1}	6100	Lei et al. (2007)	M	395
	9.4×10^{-1}	6800	Falabella et al. (2006)	M	11, 338
	9.5×10^{-1}	6900	Gupta et al. (2000)	M	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.7×10^{-1}		Merk and Riederer (1997)	M	
	4.2×10^{-1}		Kaneko et al. (1994)	M	14
	8.4×10^{-1}		Li and Carr (1993)	M	
	9.0×10^{-1}		Rytting et al. (1978)	M	
	7.8×10^{-1}		Butler et al. (1935)	M	
	8.3×10^{-1}		Mackay et al. (2006c)	V	
	8.3×10^{-1}		Mackay et al. (1995)	V	
	6.1×10^{-1}	4900	Djerki and Laub (1988)	V	
		7800	Abraham (1984)	V	
	7.8×10^{-1}		Amoore and Buttery (1978)	V	
	7.6×10^{-1}		Butler et al. (1935)	V	
	7.6×10^{-1}		Yaws (2003)	X	258
	7.3×10^{-1}		Dupeux et al. (2022)	Q	259
	1.6		Keshavarz et al. (2022)	Q	
	1.4		Duchowicz et al. (2020)	Q	
	1.8×10^{-1}		Wang et al. (2017)	Q	80, 238
	6.6×10^{-1}		Wang et al. (2017)	Q	80, 239
	9.1×10^{-1}		Wang et al. (2017)	Q	80, 240
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	4.5×10^{-1}		Hilal et al. (2008)	Q	
	7.6×10^{-1}		Modarresi et al. (2007)	Q	67
		7600	Kühne et al. (2005)	Q	
	7.9×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	5.3×10^{-1}		Yao et al. (2002)	Q	229
	7.7×10^{-1}		English and Carroll (2001)	Q	230, 231
	1.3		Katritzky et al. (1998)	Q	
	7.7×10^{-1}		Yaws et al. (1997)	Q	
	6.2×10^{-1}		Russell et al. (1992)	Q	358
	6.5×10^{-1}		Suzuki et al. (1992)	Q	232
	7.9×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	7.6×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		7700	Kühne et al. (2005)	?	
	7.7×10^{-1}		Yaws (1999)	?	21
	8.1×10^{-1}		Yaws and Yang (1992)	?	21
	9.0×10^{-1}		Abraham et al. (1990)	?	
	9.6×10^{-1}		Mackay and Yeun (1983)	?	
2-pentanol	6.7×10^{-1}	7900	Brockbank (2013)	L	1
$C_5H_{12}O$	6.5×10^{-1}	8000	Plyasunov and Shock (2000)	L	
(<i>sec</i> -pentanol)	7.1×10^{-1}	8000	Fenclová et al. (2010)	M	1
[6032-29-7]	3.0×10^{-1}		van Ruth et al. (2002)	M	14
JYVLIDXNZAXMDK-UHFFFAOYSA-N	2.6×10^{-1}		van Ruth and Villeneuve (2002)	M	14, 361
	2.3×10^{-1}		van Ruth et al. (2001)	M	14
	6.6×10^{-1}		Merk and Riederer (1997)	M	
	6.7×10^{-1}		Butler et al. (1935)	M	
	6.6×10^{-1}		Mackay et al. (2006c)	V	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.6×10^{-1}		Mackay et al. (1995)	V	
	6.5×10^{-1}		Yaws (2003)	X	258
	7.6×10^{-1}		Dupeux et al. (2022)	Q	259
	1.6		Keshavarz et al. (2022)	Q	
	5.3×10^{-1}		Duchowicz et al. (2020)	Q	
	1.8×10^{-1}		Wang et al. (2017)	Q	80, 238
	6.3×10^{-1}		Wang et al. (2017)	Q	80, 239
	6.2×10^{-1}		Wang et al. (2017)	Q	80, 240
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-1}		Hilal et al. (2008)	Q	
	3.5×10^{-1}		Modarresi et al. (2007)	Q	67
		7600	Kühne et al. (2005)	Q	
	6.7×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	6.4×10^{-1}		Yao et al. (2002)	Q	229
	7.0×10^{-1}		English and Carroll (2001)	Q	230, 260
	9.0×10^{-1}		Katritzky et al. (1998)	Q	
	6.5×10^{-1}		Yaws et al. (1997)	Q	
	5.8×10^{-1}		Suzuki et al. (1992)	Q	232
	7.2×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	6.7×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		7900	Kühne et al. (2005)	?	
	6.5×10^{-1}		Yaws (1999)	?	21
	6.7×10^{-1}		Abraham et al. (1990)	?	
3-pentanol	6.0×10^{-1}	7600	Brockbank (2013)	L	1
$C_5H_{12}O$	5.5×10^{-1}		Plyasunov and Shock (2000)	L	
[584-02-1]	6.4×10^{-1}	8000	Fenclová et al. (2010)	M	1
AQIXEPGDORPWBj-UHFFFAOYSA-N	5.0×10^{-1}		Duchowicz et al. (2020)	V	186
	6.3×10^{-1}	7900	Cabani et al. (1975b)	T	
	5.3×10^{-1}		Duchowicz et al. (2020)	Q	
	1.8×10^{-1}		Wang et al. (2017)	Q	80, 238
	6.6×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.3×10^{-1}		Wang et al. (2017)	Q	80, 240
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.2×10^{-1}		Hilal et al. (2008)	Q	
	5.2×10^{-1}		Modarresi et al. (2007)	Q	67
		7600	Kühne et al. (2005)	Q	
	6.7×10^{-1}		Yaffe et al. (2003)	Q	248, 272
	6.1×10^{-1}		Yao et al. (2002)	Q	229
	7.0×10^{-1}		English and Carroll (2001)	Q	230, 231
	5.0×10^{-1}		Katritzky et al. (1998)	Q	
	7.7×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	5.2×10^{-1}		Yaws et al. (1997)	Q	
		7500	Kühne et al. (2005)	?	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.3×10^{-1}		Yaws (1999)	?	21
	6.2×10^{-1}		Abraham et al. (1990)	?	
2-methyl-1-butanol $C_5H_{12}O$ [137-32-6] QPRQEDXDYOZYLA-UHFFFAOYSA-N	7.6×10^{-1}	7900	Brockbank (2013)	L	1
	7.1×10^{-1}		Plyasunov and Shock (2000)	L	
	7.8×10^{-1}	7700	Fenclová et al. (2010)	M	1
	3.3×10^{-1}		Kaneko et al. (1994)	M	14
	7.0×10^{-1}		Butler et al. (1935)	M	
	8.4×10^{-1}		Yaws (2003)	X	258
	4.6×10^{-1}		Dupeux et al. (2022)	Q	259
	1.6		Keshavarz et al. (2022)	Q	
	5.3×10^{-1}		Duchowicz et al. (2020)	Q	299
	1.8×10^{-1}		Wang et al. (2017)	Q	80, 238
	7.6×10^{-1}		Wang et al. (2017)	Q	80, 239
	5.5×10^{-1}		Wang et al. (2017)	Q	80, 240
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-1}		Hilal et al. (2008)	Q	
	5.9×10^{-1}		Modarresi et al. (2007)	Q	67
		7600	Kühne et al. (2005)	Q	
	7.0×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	4.7×10^{-1}		English and Carroll (2001)	Q	230, 274
	1.9		Katritzky et al. (1998)	Q	
	8.3×10^{-1}		Yaws et al. (1997)	Q	
	6.0×10^{-1}		Suzuki et al. (1992)	Q	232
	6.9×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	7.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		6800	Kühne et al. (2005)	?	
	8.4×10^{-1}		Yaws (1999)	?	21
	7.0×10^{-1}		Abraham et al. (1990)	?	
(S)-2-methyl-1-butanol $C_5H_{12}O$ [1565-80-6] QPRQEDXDYOZYLA-RXMQYKEDSA-N	3.9×10^{-1}		Hilal et al. (2008)	Q	
3-methyl-1-butanol $C_5H_{12}O$ (isopentanol) [123-51-3] PHTQWCKDNZKARW-UHFFFAOYSA-N	8.2×10^{-1}	8000	Brockbank (2013)	L	1
	7.0×10^{-1}		Plyasunov and Shock (2000)	L	
	6.7×10^{-1}	6900	Ammari and Schroen (2019)	M	11
	8.2×10^{-1}	7700	Fenclová et al. (2010)	M	1
	3.3×10^{-1}		van Ruth et al. (2002)	M	14
	3.2×10^{-1}		van Ruth and Villeneuve (2002)	M	14, 361
	3.2×10^{-1}		van Ruth et al. (2001)	M	14
	7.5×10^{-1}		Yaws (2003)	X	258
	7.1×10^{-1}		Dupeux et al. (2022)	Q	259
	1.6		Keshavarz et al. (2022)	Q	
	1.2×10^{-1}		Abney (2021)	Q	399
	5.3×10^{-1}		Duchowicz et al. (2020)	Q	299



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8×10^{-1}		Wang et al. (2017)	Q	80, 238
	7.4×10^{-1}		Wang et al. (2017)	Q	80, 239
	1.3		Wang et al. (2017)	Q	80, 240
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	4.6×10^{-1}		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	67
		7600	Kühne et al. (2005)	Q	
	6.1×10^{-1}		Yaffe et al. (2003)	Q	248, 272
	7.0×10^{-1}		Yao et al. (2002)	Q	229
	4.7×10^{-1}		English and Carroll (2001)	Q	230, 231
	6.9×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	7.4×10^{-1}		Yaws et al. (1997)	Q	
	7.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		8200	Kühne et al. (2005)	?	
	7.4×10^{-1}		Yaws (1999)	?	21
	7.0×10^{-1}		Abraham et al. (1990)	?	
2-methyl-2-butanol	6.5×10^{-1}	7900	Brockbank (2013)	L	1
$C_5H_{12}O$	7.1×10^{-1}	8200	Plyasunov and Shock (2000)	L	
(<i>tert</i> -pentanol)	7.2×10^{-1}	8200	Fenclová et al. (2010)	M	1
[75-85-4]	7.0×10^{-1}		Merk and Riederer (1997)	M	
MSXVEPNJUHWWQHW-UHFFFAOYSA-N	7.1×10^{-1}		Butler et al. (1935)	M	
	1.6		Keshavarz et al. (2022)	Q	
	2.3×10^{-1}		Duchowicz et al. (2020)	Q	
	1.2×10^{-1}		Wang et al. (2017)	Q	80, 238
	6.6×10^{-1}		Wang et al. (2017)	Q	80, 239
	4.8×10^{-1}		Wang et al. (2017)	Q	80, 240
	7.2×10^{-1}		HSDB (2015)	Q	99
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.7×10^{-1}		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	67
		7600	Kühne et al. (2005)	Q	
	7.9×10^{-1}		Yaffe et al. (2003)	Q	248, 272
	2.8×10^{-1}		Yao et al. (2002)	Q	229
	7.5×10^{-1}		English and Carroll (2001)	Q	230, 231
	6.9×10^{-1}		Katritzky et al. (1998)	Q	
	6.1×10^{-1}		Yaws et al. (1997)	Q	
	5.0×10^{-1}		Suzuki et al. (1992)	Q	232
	6.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	7.2×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		7200	Kühne et al. (2005)	?	
	5.6×10^{-2}		Yaws (1999)	?	21
	7.2×10^{-1}		Abraham et al. (1990)	?	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-2-butanol $C_5H_{12}O$ [598-75-4] MXLMTQWGSQIYOW-UHFFFAOYSA-N	5.1×10^{-1}	7600	Brockbank (2013)	L	1
	5.4×10^{-1}	7800	Fenclová et al. (2010)	M	1
	5.6×10^{-1}		Duchowicz et al. (2020)	V	186
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	
	2.1×10^{-1}		Wang et al. (2017)	Q	80, 238
	6.9×10^{-1}		Wang et al. (2017)	Q	80, 239
	4.2×10^{-1}		Wang et al. (2017)	Q	80, 240
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-1}		Hilal et al. (2008)	Q	
	7.1×10^{-1}		Modarresi et al. (2007)	Q	67
		7600	Kühne et al. (2005)	Q	
	6.1×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	4.5×10^{-1}		Katritzky et al. (1998)	Q	
5.4×10^{-1}		Yaws et al. (1997)	Q		
	7500	Kühne et al. (2005)	?		
	5.5×10^{-1}	Yaws (1999)	?	21	
2,2-dimethyl-1-propanol $C_5H_{12}O$ [75-84-3] KPSSIOMAKSHJG-UHFFFAOYSA-N	3.0×10^{-1}	7800	Brockbank (2013)	L	1, 400
	1.9×10^{-1}		Duchowicz et al. (2020)	V	186
	1.9×10^{-1}		HSDB (2015)	V	
	5.7×10^{-1}		Yaws (2003)	X	258
	3.7×10^{-1}		Dupeux et al. (2022)	Q	259
	2.3×10^{-1}		Duchowicz et al. (2020)	Q	
	1.2×10^{-1}		Wang et al. (2017)	Q	80, 238
	5.9×10^{-1}		Wang et al. (2017)	Q	80, 239
	3.0×10^{-1}		Wang et al. (2017)	Q	80, 240
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-1}		Hilal et al. (2008)	Q	
	5.7×10^{-1}		Modarresi et al. (2007)	Q	67
		7600	Kühne et al. (2005)	Q	
4.9×10^{-1}		Saxena and Hildemann (1996)	E	401	
	7900	Kühne et al. (2005)	?		
1-hexanol $C_6H_{14}O$ [111-27-3] ZSIAUFGUXNUGDI-UHFFFAOYSA-N	7.6×10^{-1}	7800	Brockbank (2013)	L	1
	6.6×10^{-1}	8200	Plyasunov and Shock (2000)	L	
	5.7×10^{-1}	7300	Shunthirasingham et al. (2013)	M	
	5.1×10^{-1}	6100	Lei et al. (2007)	M	395
	3.9×10^{-1}	5800	Falabella et al. (2006)	M	11, 338
	3.8×10^{-1}		Souchon et al. (2004)	M	
	2.5×10^{-1}		van Ruth et al. (2002)	M	14
	7.3×10^{-1}		van Ruth and Villeneuve (2002)	M	14, 361
	1.6×10^{-1}		van Ruth et al. (2001)	M	14
	3.9×10^{-1}	5800	Gupta et al. (2000)	M	
9.8×10^{-1}		Altschuh et al. (1999)	M		



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.5×10^{-1}		Eger et al. (1999)	M	14
	5.8×10^{-1}		Merk and Riederer (1997)	M	
	6.4×10^{-1}		Li and Carr (1993)	M	
	6.9×10^{-1}		Rytting et al. (1978)	M	
	5.8×10^{-1}		Buttery et al. (1969)	M	
	5.3×10^{-1}		Mackay et al. (2006c)	V	
	5.3×10^{-1}		Mackay et al. (1995)	V	
	7.6×10^{-1}		Hwang et al. (1992)	V	
	1.7	5100	Djerki and Laub (1988)	V	
		8200	Abraham (1984)	V	
	6.4×10^{-1}		Hine and Mookerjee (1975)	V	
	6.4×10^{-1}		Butler et al. (1935)	V	
	5.2×10^{-1}		Yaws (2003)	X	258
	5.8×10^{-1}		Dupeux et al. (2022)	Q	259
	2.1×10^{-1}		Keshavarz et al. (2022)	Q	
	1.4		Duchowicz et al. (2020)	Q	299
	1.4×10^{-1}		Wang et al. (2017)	Q	80, 238
	5.0×10^{-1}		Wang et al. (2017)	Q	80, 239
	8.5×10^{-1}		Wang et al. (2017)	Q	80, 240
	6.4×10^{-1}		Li et al. (2014)	Q	241
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.7×10^{-1}		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	67
		7900	Kühne et al. (2005)	Q	
	4.1×10^{-1}		Yao et al. (2002)	Q	229, 267
	6.2×10^{-1}		English and Carroll (2001)	Q	230, 231
	1.5		Katritzky et al. (1998)	Q	
	4.7×10^{-1}		Yaws et al. (1997)	Q	
	3.9×10^{-1}		Russell et al. (1992)	Q	279
	5.1×10^{-1}		Suzuki et al. (1992)	Q	232
	6.2×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	5.8×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		8400	Kühne et al. (2005)	?	
	4.7×10^{-1}		Yaws (1999)	?	21
	5.3×10^{-1}		Yaws and Yang (1992)	?	21
	6.9×10^{-1}		Abraham et al. (1990)	?	
2-hexanol $C_6H_{14}O$ [626-93-7] QNVRIHYSUZMSGM-UHFFFAOYSA-N	3.9×10^{-1}	8100	Brockbank (2013)	L	1
	5.2×10^{-1}		Plyasunov and Shock (2000)	L	
	4.8×10^{-1}		Merk and Riederer (1997)	M	
	4.0×10^{-1}		Duchowicz et al. (2020)	V	186
	4.2×10^{-1}		Yaws (2003)	X	258
	7.3×10^{-1}		Dupeux et al. (2022)	Q	259
	5.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.7×10^{-1}		Wang et al. (2017)	Q	80, 238
	4.6×10^{-1}		Wang et al. (2017)	Q	80, 239



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.6×10^{-1}		Wang et al. (2017)	Q	80, 240
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-1}		Hilal et al. (2008)	Q	
	2.8×10^{-1}		Modarresi et al. (2007)	Q	67
	4.0×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.8×10^{-1}		Yao et al. (2002)	Q	229
	1.1		Katritzky et al. (1998)	Q	
	4.2×10^{-1}		Yaws et al. (1997)	Q	
	4.2×10^{-1}		Yaws (1999)	?	21
3-hexanol $C_6H_{14}O$ [623-37-0] ZOCHHNOQQHDWHG-UHFFFAOYSA-N	3.7×10^{-1}	8400	Brockbank (2013)	L	1
	4.2×10^{-1}	8400	Plyasunov and Shock (2000)	L	
	2.5×10^{-1}		Duchowicz et al. (2020)	V	186
	2.3×10^{-1}		Meylan and Howard (1991)	V	
	2.0×10^{-1}		Hine and Mookerjee (1975)	V	
	3.9×10^{-1}	8400	Cabani et al. (1975b)	T	
	2.2×10^{-1}		Yaws (2003)	X	237
	5.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.7×10^{-1}		Wang et al. (2017)	Q	80, 238
	5.3×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.5×10^{-1}		Wang et al. (2017)	Q	80, 240
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-1}		Gharagheizi et al. (2010)	Q	246
	2.8×10^{-1}		Hilal et al. (2008)	Q	
	4.1×10^{-1}		Modarresi et al. (2007)	Q	67
	4.0×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	5.8×10^{-1}		English and Carroll (2001)	Q	230, 231
	4.1×10^{-1}		Yaws et al. (1997)	Q	
	4.8×10^{-1}		Suzuki et al. (1992)	Q	232
	5.6×10^{-1}		Meylan and Howard (1991)	Q	
	6.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	3.9×10^{-1}		Abraham et al. (1990)	?	
2-methyl-1-pentanol $C_6H_{14}O$ [105-30-6] PFNHSEQQEPMLNI-UHFFFAOYSA-N	4.6×10^{-1}		Plyasunov and Shock (2000)	L	
	2.3×10^{-1}		Duchowicz et al. (2020)	V	186
	2.3×10^{-1}		HSDB (2015)	V	
	5.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.7×10^{-1}		Wang et al. (2017)	Q	80, 238
	6.0×10^{-1}		Wang et al. (2017)	Q	80, 239
	5.5×10^{-1}		Wang et al. (2017)	Q	80, 240
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	4.4×10^{-1}		Hilal et al. (2008)	Q	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.6×10^{-1}		Modarresi et al. (2007)	Q	67
	3.1×10^{-1}		Yaws et al. (1997)	Q	
	3.1×10^{-1}		Yaws (1999)	?	21
3-methyl-1-pentanol $C_6H_{14}O$ [589-35-5] IWTBVKIGCDZRPL-UHFFFAOYSA-N	7.5×10^{-1}	8600	Brockbank (2013)	L	1
	1.7×10^{-1}		Wang et al. (2017)	Q	80, 238
	6.8×10^{-1}		Wang et al. (2017)	Q	80, 239
	9.6×10^{-1}		Wang et al. (2017)	Q	80, 240
	3.3×10^{-1}		Gharagheizi et al. (2012)	Q	
	3.8×10^{-1}		Hilal et al. (2008)	Q	
2-methyl-2-pentanol $C_6H_{14}O$ [590-36-3] WFRBDWRZVBPBDO-UHFFFAOYSA-N	2.8×10^{-1}		Duchowicz et al. (2020)	V	186
	3.1×10^{-1}		Hine and Mookerjee (1975)	V	
	2.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.0×10^{-1}		Wang et al. (2017)	Q	80, 238
	5.1×10^{-1}		Wang et al. (2017)	Q	80, 239
	3.9×10^{-1}		Wang et al. (2017)	Q	80, 240
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.2×10^{-1}		Hilal et al. (2008)	Q	
	7.7×10^{-1}		Modarresi et al. (2007)	Q	67
	2.9×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	6.2×10^{-1}		English and Carroll (2001)	Q	230, 231
	6.7×10^{-1}		Katritzky et al. (1998)	Q	
	5.0×10^{-1}		Yaws et al. (1997)	Q	
	3.9×10^{-1}		Suzuki et al. (1992)	Q	232
	4.7×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	3.1×10^{-1}		Abraham et al. (1990)	?	
3-methyl-2-pentanol $C_6H_{14}O$ [565-60-6] ZXNBBWHRUSXUFZ-UHFFFAOYSA-N	5.0×10^{-1}		Plyasunov and Shock (2000)	L	
	1.7×10^{-1}		Wang et al. (2017)	Q	80, 238
	8.1×10^{-1}		Wang et al. (2017)	Q	80, 239
	3.6×10^{-1}		Wang et al. (2017)	Q	80, 240
	4.0×10^{-1}		Yaffe et al. (2003)	Q	248, 272
	2.8×10^{-1}		Yaws et al. (1997)	Q	
4-methyl-2-pentanol $C_6H_{14}O$ [108-11-2] WVYWICLMDOOCFB-UHFFFAOYSA-N	2.2×10^{-1}	7300	Brockbank (2013)	L	1
	3.5×10^{-1}		Plyasunov and Shock (2000)	L	
	2.1×10^{-1}		Meylan and Howard (1991)	V	
	2.2×10^{-1}		Hine and Mookerjee (1975)	V	
	2.1×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	
	1.7×10^{-1}		Wang et al. (2017)	Q	80, 238
	5.6×10^{-1}		Wang et al. (2017)	Q	80, 239
	4.7×10^{-1}		Wang et al. (2017)	Q	80, 240
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.6×10^{-1}		Hilal et al. (2008)	Q	
	2.8×10^{-1}	7900	Modarresi et al. (2007)	Q	67
			Kühne et al. (2005)	Q	
	2.3×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	5.3×10^{-1}		Katritzky et al. (1998)	Q	
	1.9×10^{-1}		Yaws et al. (1997)	Q	
	4.0×10^{-1}		Suzuki et al. (1992)	Q	232
	5.6×10^{-1}		Meylan and Howard (1991)	Q	
	4.8×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	2.2×10^{-1}	8700	Duchowicz et al. (2020)	?	185, 21
			Kühne et al. (2005)	?	
	2.1×10^{-1}		Yaws (1999)	?	21, 402
	2.2×10^{-1}		Abraham et al. (1990)	?	
2-methyl-3-pentanol $C_6H_{14}O$ [565-67-3] ISTJMQSHILQAEC-UHFFFAOYSA-N	2.9×10^{-1}		Hine and Mookerjee (1975)	V	
	1.7×10^{-1}		Wang et al. (2017)	Q	80, 238
	6.9×10^{-1}		Wang et al. (2017)	Q	80, 239
	1.4×10^{-1}		Wang et al. (2017)	Q	80, 240
	3.3×10^{-1}		Hilal et al. (2008)	Q	
	5.8×10^{-1}		Modarresi et al. (2007)	Q	67
	2.9×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	3.7×10^{-1}		English and Carroll (2001)	Q	230, 274
	3.7×10^{-1}		Yaws et al. (1997)	Q	
	4.2×10^{-1}		Suzuki et al. (1992)	Q	232
	5.2×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	2.9×10^{-1}		Abraham et al. (1990)	?	
3-methyl-3-pentanol $C_6H_{14}O$ [77-74-7] FRDAATYAJDYRNW-UHFFFAOYSA-N	2.4×10^{-1}	7300	Brockbank (2013)	L	1
	4.7×10^{-1}		Plyasunov and Shock (2000)	L	
	4.8×10^{-1}		Merk and Riederer (1997)	M	
	5.6×10^{-1}		Duchowicz et al. (2020)	V	186
	2.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.0×10^{-1}		Wang et al. (2017)	Q	80, 238
	5.5×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.8×10^{-1}		Wang et al. (2017)	Q	80, 240
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.1×10^{-1}		Hilal et al. (2008)	Q	
	3.3×10^{-1}		Modarresi et al. (2007)	Q	67
	2.9×10^{-1}		Yaffe et al. (2003)	Q	248, 272
	5.6×10^{-1}		Katritzky et al. (1998)	Q	
	7.0×10^{-1}		Yaws et al. (1997)	Q	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-ethyl-1-butanol $C_6H_{14}O$ [97-95-0] TZYRSLHNPKEFV-UHFFFAOYSA-N	5.4×10^{-1}		Plyasunov and Shock (2000)	L	
	1.9×10^{-1}		Duchowicz et al. (2020)	V	186
	5.4×10^{-1}		Duchowicz et al. (2020)	Q	
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	4.7×10^{-1}		Hilal et al. (2008)	Q	
	5.5×10^{-1}		Modarresi et al. (2007)	Q	67
	3.5×10^{-1}		Yao et al. (2002)	Q	229
	2.0		Katritzky et al. (1998)	Q	
4.8×10^{-1}		Yaws et al. (1997)	Q		
4.8×10^{-1}		Yaws (1999)	?	21	
2,2-dimethyl-1-butanol $C_6H_{14}O$ [1185-33-7] XRMVWAKMXZNZIL-UHFFFAOYSA-N	1.0×10^{-1}		Wang et al. (2017)	Q	80, 238
	5.4×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.7×10^{-1}		Wang et al. (2017)	Q	80, 240
	4.0×10^{-1}		Yaffe et al. (2003)	Q	248, 272
	2.8×10^{-1}		Yaws et al. (1997)	Q	
2,3-dimethyl-1-butanol $C_6H_{14}O$ [19550-30-2] SXSWMUAUXEHKFGX-UHFFFAOYSA-N	1.7×10^{-1}		Wang et al. (2017)	Q	80, 238
	9.1×10^{-1}		Wang et al. (2017)	Q	80, 239
	5.1×10^{-1}		Wang et al. (2017)	Q	80, 240
	8.2×10^{-1}		Yaws et al. (1997)	Q	
	4.2×10^{-1}		Suzuki et al. (1992)	Q	403, 232
	4.7×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
2,3-dimethyl-2-butanol $C_6H_{14}O$ [594-60-5] IKECULIHBUCAKR-UHFFFAOYSA-N	3.8×10^{-1}		Plyasunov and Shock (2000)	L	
	9.9×10^{-1}		Duchowicz et al. (2020)	V	186
	3.0×10^{-1}		Hine and Mookerjee (1975)	V	404
	9.3×10^{-2}		Duchowicz et al. (2020)	Q	
	1.2×10^{-1}		Wang et al. (2017)	Q	80, 238
	6.3×10^{-1}		Wang et al. (2017)	Q	80, 239
	3.0×10^{-1}		Wang et al. (2017)	Q	80, 240
	2.0×10^{-1}		Hilal et al. (2008)	Q	
	2.4×10^{-1}		Modarresi et al. (2007)	Q	67
	1.0		Yaffe et al. (2003)	Q	248, 249
6.0×10^{-1}		Katritzky et al. (1998)	Q		
3,3-dimethyl-1-butanol $C_6H_{14}O$ [624-95-3] DUXCSEISVMREAX-UHFFFAOYSA-N	1.0×10^{-1}		Wang et al. (2017)	Q	80, 238
	5.6×10^{-1}		Wang et al. (2017)	Q	80, 239
	1.6		Wang et al. (2017)	Q	80, 240
	2.4×10^{-1}		Gharagheizi et al. (2012)	Q	
3,3-dimethyl-2-butanol $C_6H_{14}O$ [464-07-3] DFOXKPDFWGNLJU-UHFFFAOYSA-N	1.2×10^{-1}		Wang et al. (2017)	Q	80, 238
	5.3×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.0×10^{-1}		Wang et al. (2017)	Q	80, 240
	5.6×10^{-1}		HSDB (2015)	Q	99
	4.0×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	4.9×10^{-1}		Yaws et al. (1997)	Q	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-heptanol $C_7H_{16}O$ [543-49-7] CETWDUZRGINIHU-UHFFFAOYSA-N	3.3×10^{-1}	8700	Brockbank (2013)	L	1
	4.1×10^{-1}		Plyasunov and Shock (2000)	L	
	1.8×10^{-1}		Duchowicz et al. (2020)	V	186
	1.2×10^{-1}		Yaws (2003)	X	258
	1.2×10^{-1}		Yaws (2003)	X	237, 38
	5.8×10^{-1}		Dupeux et al. (2022)	Q	259
	5.5×10^{-1}		Duchowicz et al. (2020)	Q	
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-1}		Gharagheizi et al. (2010)	Q	246
	2.0×10^{-1}		Hilal et al. (2008)	Q	
	2.5×10^{-1}		Modarresi et al. (2007)	Q	67
2.6×10^{-1}		Yao et al. (2002)	Q	229	
1.2×10^{-1}		Yaws et al. (1997)	Q		
1.7×10^{-1}		Yaws (1999)	?	21, 38	
3-heptanol $C_7H_{16}O$ [589-82-2] RZKSECIXORKHQS-UHFFFAOYSA-N	3.2×10^{-1}	9100	Brockbank (2013)	L	1
	3.1×10^{-1}		Plyasunov and Shock (2000)	L	
	3.5×10^{-1}		Duchowicz et al. (2020)	V	186
	5.5×10^{-1}		Duchowicz et al. (2020)	Q	
	1.3×10^{-1}		Wang et al. (2017)	Q	80, 238
	4.1×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.2×10^{-1}		Wang et al. (2017)	Q	80, 240
	1.9×10^{-1}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	4.0×10^{-1}		Modarresi et al. (2007)	Q	67
	3.7×10^{-1}		Yaffe et al. (2003)	Q	248, 249
5.3×10^{-1}		Katritzky et al. (1998)	Q		
2.1×10^{-1}		Yaws et al. (1997)	Q		
4-heptanol $C_7H_{16}O$ [589-55-9] YVBCULSIZWMTFY-UHFFFAOYSA-N	3.4×10^{-1}	9100	Plyasunov and Shock (2000)	L	
	3.5×10^{-1}	9100	Cabani et al. (1975b)	T	
	1.8×10^{-1}		Gharagheizi et al. (2012)	Q	
	2.2×10^{-1}		Yaws et al. (1997)	Q	
2-methyl-1-hexanol $C_7H_{16}O$ [624-22-6] LCFKURIJYIJNRU-UHFFFAOYSA-N	6.9×10^{-1}	11000	Hiatt (2013)	M	
	1.7×10^{-1}		Yaws et al. (1997)	Q	
3-methyl-1-hexanol $C_7H_{16}O$ [13231-81-7] YGZVAQICDGBHMD-UHFFFAOYSA-N	1.3×10^{-1}		Yaws et al. (1997)	Q	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-1-hexanol $C_7H_{16}O$ [818-49-5] YNPVLWVKVZZBTM-UHFFFAOYSA-N	1.3×10^{-1}		Yaws et al. (1997)	Q	
5-methyl-1-hexanol $C_7H_{16}O$ [627-98-5] ZVHAANQQQZVVFU-UHFFFAOYSA-N	2.8×10^{-1}		Yaws et al. (1997)	Q	
2-methyl-2-hexanol $C_7H_{16}O$ [625-23-0] KRIMXCDMVRMCTC-UHFFFAOYSA-N	9.1×10^{-2} 4.0×10^{-1} 3.8×10^{-1} 6.7×10^{-1} 6.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Yaffe et al. (2003) Yaws et al. (1997)	Q Q Q Q Q	80, 238 80, 239 80, 240 248, 249
3-methyl-2-hexanol $C_7H_{16}O$ [2313-65-7] IRLSKJITMWPWNY-UHFFFAOYSA-N	1.5×10^{-1} 1.7×10^{-1} 1.2×10^{-1} 4.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-methyl-2-hexanol $C_7H_{16}O$ [2313-61-3] KZUBXUKRWLMPIO-UHFFFAOYSA-N	1.6×10^{-1} 5.1×10^{-1} 4.7×10^{-1} 5.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Yaws et al. (1997)	Q Q Q Q	80, 238 80, 239 80, 240
5-methyl-2-hexanol $C_7H_{16}O$ [627-59-8] ZDVJGWXFXGJSIU-UHFFFAOYSA-N	1.6×10^{-1} 4.3×10^{-1} 5.9×10^{-1} 2.4×10^{-1} 4.2×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q Q Q Q	80, 238 80, 239 80, 240
2-methyl-3-hexanol $C_7H_{16}O$ [617-29-8] RGRUUTLDBCWYBL-UHFFFAOYSA-N	5.8×10^{-1}		Yaws et al. (1997)	Q	
3-methyl-3-hexanol $C_7H_{16}O$ [597-96-6] KYWJZCSJMOILIZ-UHFFFAOYSA-N	9.1×10^{-2} 4.7×10^{-1} 2.6×10^{-1} 9.2×10^{-1} 7.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Yaffe et al. (2003) Yaws et al. (1997)	Q Q Q Q Q	80, 238 80, 239 80, 240 248, 272
4-methyl-3-hexanol $C_7H_{16}O$ [615-29-2] NZPGYIBESMMUFU-UHFFFAOYSA-N	1.1×10^{-1} 1.0×10^{-1} 1.3×10^{-1} 5.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-methyl-3-hexanol $C_7H_{16}O$ [623-55-2] RGCZULIFYUPTAR-UHFFFAOYSA-N	1.6×10^{-1} 1.5×10^{-1} 1.2×10^{-1} 5.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2-ethyl-1-pentanol $C_7H_{16}O$ [27522-11-8] UKFQWAVMIMCNEH-UHFFFAOYSA-N	1.0×10^{-1} 1.1×10^{-1} 1.1×10^{-1} 3.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-ethyl-1-pentanol $C_7H_{16}O$ [66225-51-2] DVEFUHVWVJONKR-UHFFFAOYSA-N	9.1×10^{-2} 1.7×10^{-1} 1.2×10^{-1} 3.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-ethyl-2-pentanol $C_7H_{16}O$ [609-27-8] NEHRITNOSGFGGS-UHFFFAOYSA-N	1.1×10^{-1} 1.7×10^{-1} 1.2×10^{-1} 4.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-ethyl-3-pentanol $C_7H_{16}O$ [597-49-9] XKIRHOWVQWCYBT-UHFFFAOYSA-N	3.0×10^{-1} 1.2 1.1		Plyasunov and Shock (2000) Yaffe et al. (2003) Yaws et al. (1997)	L Q Q	248, 249
2,2-dimethyl-1-pentanol $C_7H_{16}O$ [2370-12-9] QTOMCRXZFDHJOL-UHFFFAOYSA-N	9.6×10^{-2} 5.4×10^{-2} 1.1×10^{-1} 3.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,3-dimethyl-1-pentanol $C_7H_{16}O$ [10143-23-4] MIBBFRQOCRYDDB-UHFFFAOYSA-N	3.6×10^{-1}		Yaws et al. (1997)	Q	
2,4-dimethyl-1-pentanol $C_7H_{16}O$ [6305-71-1] OVOVDHYEQJKMD-UHFFFAOYSA-N	9.4×10^{-2} 9.5×10^{-2} 1.0×10^{-1} 3.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3,3-dimethyl-1-pentanol $C_7H_{16}O$ [19264-94-9] IFDHMBHPLKMOY-UHFFFAOYSA-N	3.5×10^{-1}		Yaws et al. (1997)	Q	
3,4-dimethyl-1-pentanol $C_7H_{16}O$ [6570-87-2] SVJNECJVNWTYQG-UHFFFAOYSA-N	1.6×10^{-1} 1.6×10^{-1} 1.1×10^{-1} 3.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4-dimethyl-1-pentanol $C_7H_{16}O$ [3121-79-7] OWCNPTHAWPMOJU-UHFFFAOYSA-N	8.5×10^{-2} 1.4×10^{-1} 1.1×10^{-1} 3.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,3-dimethyl-2-pentanol $C_7H_{16}O$ [4911-70-0] YRSIFCHKXFKNME-UHFFFAOYSA-N	9.2×10^{-1} 8.6×10^{-1}		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	248, 249
2,4-dimethyl-2-pentanol $C_7H_{16}O$ [625-06-9] FMLSQAUAAGVTJO-UHFFFAOYSA-N	4.0×10^{-1} 5.7×10^{-1}		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	248, 272
3,3-dimethyl-2-pentanol $C_7H_{16}O$ [19781-24-9] FCUOIGTWJDBTHR-UHFFFAOYSA-N	9.0×10^{-2} 1.0×10^{-1} 1.2×10^{-1} 5.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3,4-dimethyl-2-pentanol $C_7H_{16}O$ [64502-86-9] SODKTKJZYBOMMT-UHFFFAOYSA-N	1.8×10^{-1} 4.7×10^{-1}		Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q	
4,4-dimethyl-2-pentanol $C_7H_{16}O$ [6144-93-0] OIBKGNPMMOMSSI-UHFFFAOYSA-N	6.8×10^{-1}		Yaws et al. (1997)	Q	
2,2-dimethyl-3-pentanol $C_7H_{16}O$ [3970-62-5] HMSVXZJWPVIV-UHFFFAOYSA-N	4.0×10^{-1} 4.0×10^{-1}		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	248, 249
2,3-dimethyl-3-pentanol $C_7H_{16}O$ [595-41-5] RFZHJHSNHYIRNE-UHFFFAOYSA-N	9.2×10^{-1} 9.2×10^{-1}		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	248, 249
2,4-dimethyl-3-pentanol $C_7H_{16}O$ [600-36-2] BAYAKMPRFGNFW-UHFFFAOYSA-N	4.0×10^{-1} 3.8×10^{-1}		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	248, 249
2-ethyl-2-methyl-1-butanol $C_7H_{16}O$ [18371-13-6] KMWHQWJVSALJAW-UHFFFAOYSA-N	4.3×10^{-1}		Yaws et al. (1997)	Q	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.9×10^{-1}		Yaws et al. (1997)	Q	
	3.0×10^{-1}		Suzuki et al. (1992)	Q	232
	3.9×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
	4.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		7700	Kühne et al. (2005)	?	
	3.9×10^{-1}		Yaws (1999)	?	21
	6.2×10^{-1}		Yaws and Yang (1992)	?	21
	4.0×10^{-1}		Abraham et al. (1990)	?	
2-octanol $C_8H_{18}O$ [123-96-6] SJWFXCIHNDVPSH-UHFFFAOYSA-N	2.7×10^{-1}	9600	Brockbank (2013)	L	1
	3.5×10^{-1}		Plyasunov and Shock (2000)	L	
	2.7×10^{-1}		HSDB (2015)	V	
	2.7×10^{-1}		Meylan and Howard (1991)	V	
	9.6×10^{-1}		Yaws (2003)	X	258
	4.2×10^{-1}		Dupeux et al. (2022)	Q	259
	3.8×10^{-1}		Keshavarz et al. (2022)	Q	
	5.6×10^{-1}		Duchowicz et al. (2020)	Q	299
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.7×10^{-1}		Hilal et al. (2008)	Q	
	2.0×10^{-1}		Modarresi et al. (2007)	Q	67
	3.0×10^{-1}		Yaws et al. (1997)	Q	
	3.2×10^{-1}		Meylan and Howard (1991)	Q	
	8.0×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	9.6×10^{-1}		Yaws (1999)	?	21
3-octanol $C_8H_{18}O$ [589-98-0] NMRPBPVERJPACX-UHFFFAOYSA-N	3.2×10^{-1}	8300	Plyasunov and Shock (2000)	L	
	1.2×10^{-1}		Wu et al. (2022a)	M	
	1.3×10^{-1}		Yaws (2003)	X	237
	1.1×10^{-1}		Wang et al. (2017)	Q	80, 238
	3.2×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.3×10^{-1}		Wang et al. (2017)	Q	80, 240
	1.2×10^{-1}		Gharagheizi et al. (2012)	Q	
	7.9×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.1×10^{-1}		Yaws et al. (1997)	Q	
4-octanol $C_8H_{18}O$ [589-62-8] WOFPPJOZXUTRAU-UHFFFAOYSA-N	1.3×10^{-1}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-1}		Yaws et al. (1997)	Q	
2-methyl-1-heptanol $C_8H_{18}O$ [60435-70-3] QZESEQBMSFFHRY-UHFFFAOYSA-N	9.1×10^{-2}		Yaws (2003)	X	237
	5.7×10^{-2}		Gharagheizi et al. (2012)	Q	
	7.4×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-1}		Yaws et al. (1997)	Q	406



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-1-heptanol $C_8H_{18}O$ [1070-32-2] MUPPEBVXFKNMCI-UHFFFAOYSA-N	8.9×10^{-2} 7.5×10^{-2} 2.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246
4-methyl-1-heptanol $C_8H_{18}O$ [817-91-4] LLUQZGDMUIMPTC-UHFFFAOYSA-N	9.3×10^{-2} 7.5×10^{-2} 2.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246
5-methyl-1-heptanol $C_8H_{18}O$ [7212-53-5] KFARNLMRENFOHE-UHFFFAOYSA-N	1.1×10^{-1} 2.1×10^{-1}		Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q	
6-methyl-1-heptanol $C_8H_{18}O$ [1653-40-3] BWDBEAQIHAELV-UHFFFAOYSA-N	1.1×10^{-1} 1.1×10^{-1} 5.6×10^{-1} 2.0×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Yaws et al. (1997)	V V Q Q	186
2-methyl-2-heptanol $C_8H_{18}O$ [625-25-2] ACBMYVZWKYLIP-UHFFFAOYSA-N	5.1×10^{-1}		Yaws et al. (1997)	Q	
3-methyl-2-heptanol $C_8H_{18}O$ [31367-46-1] SZERMVMTUUYML-UHFFFAOYSA-N	7.8×10^{-2} 9.5×10^{-2} 7.9×10^{-2} 3.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-methyl-2-heptanol $C_8H_{18}O$ [56298-90-9] GUHWHNUGIGOSCN-UHFFFAOYSA-N	1.6×10^{-1} 3.4×10^{-1}		Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q	
5-methyl-2-heptanol $C_8H_{18}O$ [54630-50-1] FYMBAYNKBWGEIK-UHFFFAOYSA-N	1.0×10^{-1} 1.7×10^{-1} 7.7×10^{-2} 3.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
6-methyl-2-heptanol $C_8H_{18}O$ [4730-22-7] FCOUHTHQYOMLJT-UHFFFAOYSA-N	1.6×10^{-1} 3.3×10^{-1}		Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q	
2-methyl-3-heptanol $C_8H_{18}O$ [18720-62-2] QGVFLDUEHSIZIG-UHFFFAOYSA-N	3.8×10^{-1}		Yaws et al. (1997)	Q	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-3-heptanol $C_8H_{18}O$ [5582-82-1] PQOSNJHBSNZITJ-UHFFFAOYSA-N	2.9×10^{-1}		Yaws et al. (1997)	Q	
4-methyl-3-heptanol $C_8H_{18}O$ [14979-39-6] BKQICAFUAMYRLZ-UHFFFAOYSA-N	7.4×10^{-2} 4.7×10^{-2} 8.2×10^{-2} 5.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
5-methyl-3-heptanol $C_8H_{18}O$ [18720-65-5] SECKOSOTZOBWEI-UHFFFAOYSA-N	8.7×10^{-2} 6.6×10^{-2} 7.9×10^{-2} 5.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
6-methyl-3-heptanol $C_8H_{18}O$ [18720-66-6] MNBIBGDICHMQFN-UHFFFAOYSA-N	8.8×10^{-2} 7.9×10^{-2} 7.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-4-heptanol $C_8H_{18}O$ [21570-35-4] QXPLZEKPCGUWEM-UHFFFAOYSA-N	3.9×10^{-1}		Yaws et al. (1997)	Q	
3-methyl-4-heptanol $C_8H_{18}O$ [1838-73-9] JMRDKKYZLXDLN-UHFFFAOYSA-N	8.2×10^{-2} 6.2×10^{-2} 8.2×10^{-2} 4.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-methyl-4-heptanol $C_8H_{18}O$ [598-01-6] IQXGGRKRIRMOCQ-UHFFFAOYSA-N	4.5×10^{-1}		Yaws et al. (1997)	Q	
2-ethyl-1-hexanol $C_8H_{18}O$ [104-76-7] YIWUKEYIRIRTPP-UHFFFAOYSA-N	4.6×10^{-1} 1.5×10^{-1} 3.7×10^{-1} 3.8×10^{-1} 5.6×10^{-1} 7.0×10^{-2} 2.5×10^{-1} 3.1×10^{-1} 3.1×10^{-1} 3.1×10^{-1} 4.0×10^{-1} 1.1×10^{-1} 4.3×10^{-1} 4.2×10^{-2}	7200	Plyasunov and Shock (2000) Wu et al. (2022a) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yao et al. (2002) Yaws et al. (1997) Yaws (1999)	L M V V Q Q Q Q Q Q Q Q Q Q ?	186 271, 243 244 245 67 229, 267 21



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-1-hexanol $C_8H_{18}O$ [41065-95-6] LWWWJDXKQGVEZKT-UHFFFAOYSA-N	7.0×10^{-2} 9.5×10^{-2} 7.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-ethyl-1-hexanol $C_8H_{18}O$ [66576-32-7] RLGDVTUGYZAYIX-UHFFFAOYSA-N	7.0×10^{-2} 9.5×10^{-2} 7.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-1-hexanol $C_8H_{18}O$ [2370-13-0] GSSDZVRLQDXOPL-UHFFFAOYSA-N	4.9×10^{-1}		Yaws et al. (1997)	Q	
2,3-dimethyl-1-hexanol $C_8H_{18}O$ HIYVAULOHUDECC-UHFFFAOYSA-N	7.0×10^{-2} 5.5×10^{-2} 6.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-1-hexanol $C_8H_{18}O$ [3965-59-1] GDRBQWCGBCJTLB-UHFFFAOYSA-N	6.9×10^{-2} 5.7×10^{-2} 6.8×10^{-2} 4.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,5-dimethyl-1-hexanol $C_8H_{18}O$ [6886-16-4] OBOHUKJIPIBYTA-UHFFFAOYSA-N	6.5×10^{-2} 6.4×10^{-2} 6.8×10^{-2} 4.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3,3-dimethyl-1-hexanol $C_8H_{18}O$ [10524-70-6] RAKYQWCHMSXUEG-UHFFFAOYSA-N	5.7×10^{-2} 1.0×10^{-1} 7.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-1-hexanol $C_8H_{18}O$ [66576-57-6] QVFKMROLSPXCIX-UHFFFAOYSA-N	6.3×10^{-2} 9.9×10^{-2} 7.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyl-1-hexanol $C_8H_{18}O$ [13501-73-0] WETBJXIDTZXCBL-UHFFFAOYSA-N	6.1×10^{-2} 1.1×10^{-1} 7.0×10^{-2} 3.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4,4-dimethyl-1-hexanol $C_8H_{18}O$ [6481-95-4] VZWIUKUDEGQHIO-UHFFFAOYSA-N	5.6×10^{-2} 1.0×10^{-1} 7.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,5-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [60564-76-3] QABJATQYUASJEM-UHFFFAOYSA-N	6.2×10^{-2} 1.0×10^{-1} 7.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5,5-dimethyl-1-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [2768-18-5] QYFVEEMPFRFRFN-UHFFFAOYSA-N	5.6×10^{-2} 1.0×10^{-1} 7.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [24448-19-9] YBQZSEZVMFENOM-UHFFFAOYSA-N	7.7×10^{-2} 1.0×10^{-1} 7.9×10^{-2} 5.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-ethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ ALAPJIMGVQNJIU-UHFFFAOYSA-N	7.7×10^{-2} 1.5×10^{-1} 7.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [19550-03-9] BFKOEFFCFVMWPF-UHFFFAOYSA-N	7.0×10^{-1}		Yaws et al. (1997)	Q	
2,4-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [42328-76-7] RTRZHEPXWQXCCI-UHFFFAOYSA-N	8.9×10^{-1}		Yaws et al. (1997)	Q	
2,5-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [3730-60-7] JPUIYNHIEIXIFMV-UHFFFAOYSA-N	8.5×10^{-1}		Yaws et al. (1997)	Q	
3,3-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [22025-20-3] LTTHCWFPLXSQOD-UHFFFAOYSA-N	7.5×10^{-2} 5.5×10^{-2} 7.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [19550-05-1] LBWJWHMCZHKLU-UHFFFAOYSA-N	6.8×10^{-2} 1.1×10^{-1} 7.7×10^{-2} 5.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3,5-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [66576-27-0] VGGMROOHXNLMTP-UHFFFAOYSA-N	8.1×10^{-2} 8.1×10^{-2} 7.7×10^{-2} 7.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4,4-dimethyl-2-hexanol $\text{C}_8\text{H}_{18}\text{O}$ CJGWLHDFFPXIKQX-UHFFFAOYSA-N	7.2×10^{-2} 1.3×10^{-1} 7.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,5-dimethyl-2-hexanol $C_8H_{18}O$ KHSOOQUMPPYGAW-UHFFFAOYSA-N	7.9×10^{-2} 1.3×10^{-1} 7.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5,5-dimethyl-2-hexanol $C_8H_{18}O$ [31841-77-7] NMSUCVXVCHZTEH-UHFFFAOYSA-N	6.7×10^{-2} 1.4×10^{-1} 7.4×10^{-2} 6.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-ethyl-3-hexanol $C_8H_{18}O$ [597-76-2] WNDLTOTUHMHNOC-UHFFFAOYSA-N	7.2×10^{-1}		Yaws et al. (1997)	Q	
4-ethyl-3-hexanol $C_8H_{18}O$ [19780-44-0] BOJLCKCCKQMGKD-UHFFFAOYSA-N	1.3×10^{-1} 8.2×10^{-2} 6.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246
2,2-dimethyl-3-hexanol $C_8H_{18}O$ [4209-90-9] PFHLGQKVKALLMD-UHFFFAOYSA-N	6.2×10^{-2} 3.4×10^{-2} 8.1×10^{-2} 7.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,3-dimethyl-3-hexanol $C_8H_{18}O$ [4166-46-5] CGWJMIUMPDDHQC-UHFFFAOYSA-N	7.4×10^{-1}		Yaws et al. (1997)	Q	
2,4-dimethyl-3-hexanol $C_8H_{18}O$ [13432-25-2] UCRQJBCLZKHOGX-UHFFFAOYSA-N	7.0×10^{-2} 3.7×10^{-2} 8.1×10^{-2} 7.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,5-dimethyl-3-hexanol $C_8H_{18}O$ [19550-07-3] SNKTZHPOKPYBPT-UHFFFAOYSA-N	7.2×10^{-1}		Yaws et al. (1997)	Q	
3,4-dimethyl-3-hexanol $C_8H_{18}O$ [19550-08-4] FJXOYCIYKQJAAF-UHFFFAOYSA-N	8.6×10^{-1}		Yaws et al. (1997)	Q	
3,5-dimethyl-3-hexanol $C_8H_{18}O$ [4209-91-0] INMGJWCKWKMPN-UHFFFAOYSA-N	8.9×10^{-2} 1.4×10^{-1} 7.4×10^{-2} 8.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [19550-09-5] BARKHVPKOOSMNW-UHFFFAOYSA-N	7.2×10^{-1}		Yaws et al. (1997)	Q	
4,5-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ UAVZCGGBCLHIP-UHFFFAOYSA-N	8.7×10^{-2} 4.9×10^{-2} 7.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5,5-dimethyl-3-hexanol $\text{C}_8\text{H}_{18}\text{O}$ [66576-31-6] NPZRPUOKIPAIEL-UHFFFAOYSA-N	8.4×10^{-1}		Yaws et al. (1997)	Q	
2-propyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [58175-57-8] LASHFHLFDRTERB-UHFFFAOYSA-N	4.1×10^{-1}		Yaws et al. (1997)	Q	
2-ethyl-2-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [5970-63-8] VZCOFGHOKLEML-UHFFFAOYSA-N	4.3×10^{-1}		Yaws et al. (1997)	Q	
2-ethyl-3-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ ALPFTHGDLMTYRM-UHFFFAOYSA-N	6.7×10^{-2} 6.0×10^{-2} 6.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-ethyl-4-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [106-67-2] QCHSJPKDWOFACC-UHFFFAOYSA-N	4.4×10^{-1}		Yaws et al. (1997)	Q	
3-ethyl-2-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ VWQDMMBTEFDWNM-UHFFFAOYSA-N	6.9×10^{-2} 5.7×10^{-2} 6.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-3-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [10524-71-7] XYUCPYMMHKJSS-UHFFFAOYSA-N	6.3×10^{-2} 8.4×10^{-2} 7.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-4-methyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [38514-13-5] RWIFVESHBTZEM-UHFFFAOYSA-N	6.9×10^{-2} 8.3×10^{-2} 7.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethyl-1-pentanol $\text{C}_8\text{H}_{18}\text{O}$ [57409-53-7] GBONVOIRPAJSLA-UHFFFAOYSA-N	4.7×10^{-1}		Yaws et al. (1997)	Q	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4-trimethyl-1-pentanol $C_8H_{18}O$ [123-44-4] CWPPDVTYIJETDF-UHFFFAOYSA-N	5.6×10^{-1}		Yaws et al. (1997)	Q	
2,3,3-trimethyl-1-pentanol $C_8H_{18}O$ LFRFDOWJBYDJGD-UHFFFAOYSA-N	5.7×10^{-2} 6.0×10^{-2} 6.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4-trimethyl-1-pentanol $C_8H_{18}O$ [6570-88-3] PAZDSSMTPLLLIR-UHFFFAOYSA-N	5.5×10^{-2} 7.3×10^{-2} 6.3×10^{-2} 3.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,4,4-trimethyl-1-pentanol $C_8H_{18}O$ [16325-63-6] ZNRVVRWHPZZOTIE-UHFFFAOYSA-N	5.2×10^{-2} 5.2×10^{-1}		Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q	
3,3,4-trimethyl-1-pentanol $C_8H_{18}O$ OIPMJJVCOSACDS-UHFFFAOYSA-N	6.2×10^{-2} 7.6×10^{-2} 6.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,4-trimethyl-1-pentanol $C_8H_{18}O$ [16325-64-7] FQNYRSRCONKFCN-UHFFFAOYSA-N	6.2×10^{-2} 7.6×10^{-2} 6.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-2-methyl-2-pentanol $C_8H_{18}O$ [19780-63-3] FRUMTAZIGSJVOJ-UHFFFAOYSA-N	7.4×10^{-1}		Yaws et al. (1997)	Q	
3-ethyl-4-methyl-2-pentanol $C_8H_{18}O$ [66576-23-6] PFRFNYIOSQSDU-UHFFFAOYSA-N	7.6×10^{-2} 9.1×10^{-2} 7.7×10^{-2} 6.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,3,3-trimethyl-2-pentanol $C_8H_{18}O$ [23171-85-9] FBWWGYIEJGQWJP-UHFFFAOYSA-N	8.0×10^{-2} 1.2×10^{-1} 6.8×10^{-2} 7.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,3,4-trimethyl-2-pentanol $C_8H_{18}O$ [66576-26-9] FTPXXARYDFWPGU-UHFFFAOYSA-N	7.2×10^{-2} 1.7×10^{-1} 6.9×10^{-2} 7.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,4,4-trimethyl-2-pentanol $C_8H_{18}O$ [690-37-9] BSYJHYLAMMJNRC-UHFFFAOYSA-N	9.9×10^{-1}		Yaws et al. (1997)	Q	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3,4-trimethyl-2-pentanol $C_8H_{18}O$ [19411-41-7] BOBYQFFCQPLOB-UHFFFAOYSA-N	6.3×10^{-2} 6.5×10^{-2} 7.5×10^{-2} 6.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3,4,4-trimethyl-2-pentanol $C_8H_{18}O$ [10575-56-1] MXDGSCZQIMQLII-UHFFFAOYSA-N	7.4×10^{-1}		Yaws et al. (1997)	Q	
3-ethyl-2-methyl-3-pentanol $C_8H_{18}O$ [597-05-7] DMHIJUVUPKGLJ-UHFFFAOYSA-N	7.5×10^{-2} 8.1×10^{-2} 7.8×10^{-2} 7.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-ethyl-3-methyl-2-pentanol $C_8H_{18}O$ [66576-22-5] SLBLSROGXMPPF-UHFFFAOYSA-N	7.5×10^{-2} 5.5×10^{-2} 7.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethyl-3-pentanol $C_8H_{18}O$ [7294-05-5] KLIHWYNSISMOMR-UHFFFAOYSA-N	1.2 1.1		Yaffe et al. (2003) Yaws et al. (1997)	Q Q	248, 249
2,2,4-trimethyl-3-pentanol $C_8H_{18}O$ [5162-48-1] AXINNNJHLJWMTCC-UHFFFAOYSA-N	8.9×10^{-1}		Yaws et al. (1997)	Q	
2,3,4-trimethyl-3-pentanol $C_8H_{18}O$ [3054-92-0] PLSMHHUFDLYURK-UHFFFAOYSA-N	6.4×10^{-2} 7.6×10^{-2} 7.1×10^{-2} 7.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-methyl-2-(1-methylethyl)-1-butanol $C_8H_{18}O$ [18593-92-5] IDGDEUZERZKYHG-UHFFFAOYSA-N	6.6×10^{-2} 5.5×10^{-2} 6.3×10^{-2} 4.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,2,3,3-tetramethyl-1-butanol $C_8H_{18}O$ [66576-24-7] OCTRJUXIYWWWAR-UHFFFAOYSA-N	5.0×10^{-2} 3.8×10^{-2} 6.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-diethyl-1-butanol $C_8H_{18}O$ [13023-60-4] CBHXDVOSUKFRBE-UHFFFAOYSA-N	6.5×10^{-2} 3.7×10^{-2} 7.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.4×10^{-1}		Yaws et al. (1997)	Q	
	2.0×10^{-1}		Yaws (1999)	?	21, 80
3-nonanol $\text{C}_9\text{H}_{20}\text{O}$ [624-51-1] GYSCXPVAKHVAAY-UHFFFAOYSA-N	5.2×10^{-2}		Yaws (2003)	X	237
	9.6×10^{-2}		Wang et al. (2017)	Q	80, 238
	2.6×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.0×10^{-1}		Wang et al. (2017)	Q	80, 240
	8.4×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.2×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.0×10^{-1}		Yaws et al. (1997)	Q	
4-nonanol $\text{C}_9\text{H}_{20}\text{O}$ [5932-79-6] IXUOEGRSQCCEHB-UHFFFAOYSA-N	5.4×10^{-2}		Yaws (2003)	X	237
	8.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.2×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.1×10^{-1}		Yaws et al. (1997)	Q	
5-nonanol $\text{C}_9\text{H}_{20}\text{O}$ [623-93-8] FCBBRODPXVPZAH-UHFFFAOYSA-N	5.2×10^{-2}		Yaws (2003)	X	237
	8.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.2×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.9×10^{-1}		Yaws et al. (1997)	Q	
2-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [818-81-5] IGVGCQGTEINVOH-UHFFFAOYSA-N	4.8×10^{-2}		Yaws (2003)	X	237
	4.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
3-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [38514-02-2] CLFSZAMBOZSCOS-UHFFFAOYSA-N	4.8×10^{-2}		Yaws (2003)	X	237
	6.6×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
4-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [38514-03-3] MWWKESKJRHQWEF-UHFFFAOYSA-N	4.8×10^{-2}		Yaws (2003)	X	237
	6.6×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
5-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [38514-04-4] CGCDFYUPZXVGIX-UHFFFAOYSA-N	4.8×10^{-2}		Yaws (2003)	X	237
	6.6×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
6-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [38514-05-5] WWRGKAMABZHMCN-UHFFFAOYSA-N	4.3×10^{-2}		Yaws (2003)	X	237
	5.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.1×10^{-1}		Yaws et al. (1997)	Q	
7-methyl-1-octanol $\text{C}_9\text{H}_{20}\text{O}$ [2430-22-0] QDQDKYHPHANITQ-UHFFFAOYSA-N	4.3×10^{-2}		Yaws (2003)	X	237
	5.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.1×10^{-1}		Yaws et al. (1997)	Q	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-2-octanol $C_9H_{20}O$ [628-44-4] KBCNUEXDHWDIFX-UHFFFAOYSA-N	5.7×10^{-2} 1.7×10^{-1} 5.3×10^{-2} 4.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-methyl-2-octanol $C_9H_{20}O$ [27644-49-1] WQADSKJNOTZWML-UHFFFAOYSA-N	6.0×10^{-2} 5.7×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl-2-octanol $C_9H_{20}O$ [66793-81-5] IWFICVXFFNDWOJ-UHFFFAOYSA-N	6.0×10^{-2} 8.3×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
7-methyl-2-octanol $C_9H_{20}O$ [66793-83-7] NOEKZKTXHKNMAQ-UHFFFAOYSA-N	6.0×10^{-2} 8.3×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-3-octanol $C_9H_{20}O$ [26533-34-6] DIVBBSLQUDHECU-UHFFFAOYSA-N	5.7×10^{-2} 4.2×10^{-2} 5.5×10^{-2} 4.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-methyl-3-octanol $C_9H_{20}O$ [5340-36-3] JEWXYDDSLPIBBO-UHFFFAOYSA-N	5.4×10^{-2} 4.8×10^{-2} 1.3×10^{-1} 1.6×10^{-1} 5.6×10^{-2} 5.6×10^{-2} 3.6×10^{-1}		Yaws (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Gharagheizi et al. (2010) Yaws et al. (1997)	X X Q Q Q Q Q	237 237 246 246
4-methyl-3-octanol $C_9H_{20}O$ [66793-80-4] XPWBBDJBJRZCPW-UHFFFAOYSA-N	5.6×10^{-2} 4.5×10^{-2} 5.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
6-methyl-3-octanol $C_9H_{20}O$ [40225-75-0] MFYHIHFYDULUQP-UHFFFAOYSA-N	5.6×10^{-2} 6.6×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
7-methyl-3-octanol $C_9H_{20}O$ [66793-84-8] IDCFJIMYNKBKMB-UHFFFAOYSA-N	5.6×10^{-2} 6.6×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [40575-41-5] BIAVIOIDPRPYJK-UHFFFAOYSA-N	5.7×10^{-2} 6.2×10^{-2} 5.2×10^{-2} 4.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [26533-35-7] MJOKZMZDONULOD-UHFFFAOYSA-N	6.1×10^{-2} 3.8×10^{-2} 5.5×10^{-2} 4.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [23418-37-3] RXSIKQJLQRQQY-UHFFFAOYSA-N	5.5×10^{-2} 1.2×10^{-1} 5.6×10^{-2} 4.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
5-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [59734-23-5] YLTHHPQUTLMNIF-UHFFFAOYSA-N	5.9×10^{-2} 4.0×10^{-2} 5.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
6-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-82-6] KFRCBGHDZSOJV-UHFFFAOYSA-N	5.9×10^{-2} 5.8×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
7-methyl-4-octanol $\text{C}_9\text{H}_{20}\text{O}$ [33933-77-6] KJMBBHZOLRRVMV-UHFFFAOYSA-N	5.9×10^{-2} 5.8×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-ethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [817-60-7] QNJAZNNWHWYEO-UHFFFAOYSA-N	4.9×10^{-2} 4.4×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [3525-25-5] VRZRVXNGMZLDB-UHFFFAOYSA-N	4.2×10^{-2} 5.0×10^{-2} 2.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246
5-ethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [998-65-2] GOJBFVJUMYSMJJ-UHFFFAOYSA-N	4.9×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
3-ethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19780-39-3] MMQDVLWWGWJSFS-UHFFFAOYSA-N	5.9×10^{-2} 7.1×10^{-2} 5.8×10^{-2} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q	237 246



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-3-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19780-41-7] XKRZDNKANUBPV-UHFFFAOYSA-N	5.4×10^{-2} 8.7×10^{-2} 5.9×10^{-2} 4.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-ethyl-4-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [597-90-0] GNROHGFUVTWFG-UHFFFAOYSA-N	5.7×10^{-2} 7.9×10^{-2} 5.9×10^{-2} 4.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,2-dimethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [14250-79-4] WENIXZFPXMQPQQ-UHFFFAOYSA-N	4.5×10^{-2} 2.5×10^{-2} 4.8×10^{-2} 3.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4,6-dimethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [820-05-3] GCBXGQPBCBPHSP-UHFFFAOYSA-N	5.9×10^{-2} 4.0×10^{-2} 4.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
6,6-dimethyl-1-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [65769-10-0] IOFUAVGBFVXDAO-UHFFFAOYSA-N	5.4×10^{-2} 4.0×10^{-2} 4.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-00-1] PQSMEVPHTJECDDZ-UHFFFAOYSA-N	5.0×10^{-2} 1.3×10^{-1} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [65822-93-7] VORBOMMQBCSRQF-UHFFFAOYSA-N	5.0×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,5-dimethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [1561-18-8] LVIFBEPHIBJBEU-UHFFFAOYSA-N	5.0×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,6-dimethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [13254-34-7] HGDVHRITGWMJK-UHFFFAOYSA-N	5.9×10^{-2} 1.4×10^{-1} 5.0×10^{-2} 5.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4,6-dimethyl-2-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [51079-52-8] YYUGBYFBCFRGNZ-UHFFFAOYSA-N	4.4×10^{-2} 1.2×10^{-1} 4.9×10^{-2} 3.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5,6-dimethyl-2-heptanol $C_9H_{20}O$ [58795-24-7] ONBXNGYZZBRJA-UHFFFAOYSA-N	4.6×10^{-2} 1.2×10^{-1} 4.9×10^{-2} 3.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,2-dimethyl-3-heptanol $C_9H_{20}O$ [19549-70-3] QENWAAAGDINHGE-UHFFFAOYSA-N	5.3×10^{-2} 2.5×10^{-2} 5.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-3-heptanol $C_9H_{20}O$ [19549-71-4] JIEGVNXCNNWVPH-UHFFFAOYSA-N	5.7×10^{-2} 7.0×10^{-2} 5.4×10^{-2} 5.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,6-dimethyl-3-heptanol $C_9H_{20}O$ [19549-73-6] XZDMJRIWJSNEGC-UHFFFAOYSA-N	6.1×10^{-2} 3.3×10^{-2} 5.4×10^{-2} 5.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3,5-dimethyl-3-heptanol $C_9H_{20}O$ [19549-74-7] NOSOEGQQOMHBF-UHFFFAOYSA-N	5.4×10^{-2} 1.1×10^{-1} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-4-heptanol $C_9H_{20}O$ [66793-99-5] ZIKNXBYJTDTRQA-UHFFFAOYSA-N	5.7×10^{-2} 4.7×10^{-2} 5.0×10^{-2} 5.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,4-dimethyl-4-heptanol $C_9H_{20}O$ [19549-77-0] QKRRAXACNUNGCF-UHFFFAOYSA-N	5.9×10^{-2} 9.5×10^{-2} 5.2×10^{-2} 5.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,5-dimethyl-4-heptanol $C_9H_{20}O$ NXLQTSHQSAVKJB-UHFFFAOYSA-N	1.6×10^{-1}		Yaws et al. (1997)	Q	
2,6-dimethyl-4-heptanol $C_9H_{20}O$ [108-82-7] HXQPUEQDBSPXTE-UHFFFAOYSA-N	1.0×10^{-1} 7.7×10^{-2} 8.6×10^{-2} 2.0×10^{-1} 1.6×10^{-1} 2.5×10^{-1} 1.7×10^{-1} 3.7×10^{-1} 1.6×10^{-1} 1.7×10^{-1} 1.7×10^{-1}	9300	Brockbank (2013) Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998) Yaws et al. (1997) Yaws (1999)	L V Q Q Q Q Q Q Q Q ?	1 186 242, 243 244 245 67 21



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-dimethyl-4-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19549-78-1] UGAZGYFCTFGQQH-UHFFFAOYSA-N	5.5×10^{-2} 2.3×10^{-2} 5.5×10^{-2} 2.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3,5-dimethyl-4-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [19549-79-2] ZKXITRNKHWEQJU-UHFFFAOYSA-N	5.0×10^{-2} 3.2×10^{-2} 5.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,6-dimethyl-3-heptanol $\text{C}_9\text{H}_{20}\text{O}$ [1573-28-0] HVPGGLNDHUWMLS-UHFFFAOYSA-N	6.8×10^{-2} 1.0×10^{-1} 5.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-ethyl-3-methyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-04-5] DXXCMAAACWSRPE-UHFFFAOYSA-N	4.9×10^{-2} 3.7×10^{-2} 4.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-ethyl-4-methyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-06-7] NRZVENBFUCASY-UHFFFAOYSA-N	4.7×10^{-2} 4.0×10^{-2} 4.6×10^{-2} 1.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2-ethyl-5-methyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-07-8] KVJOUNJVQBRAO-UHFFFAOYSA-N	4.9×10^{-2} 3.7×10^{-2} 4.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-1-methyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ YNZQSDTXBBFQH-UHFFFAOYSA-N	5.0×10^{-2} 1.2×10^{-1} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-2-methyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-01-2] UDZCUJOKBNABRS-UHFFFAOYSA-N	1.3×10^{-1}		Yaws et al. (1997)	Q	
3,3,5-trimethyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [1484-87-3] HRXNWQMMTLJJQ-UHFFFAOYSA-N	4.1×10^{-2} 5.6×10^{-2} 4.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,4-trimethyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-73-5] OLRPKAJSAOYYCY-UHFFFAOYSA-N	4.2×10^{-2} 5.3×10^{-2} 4.5×10^{-2} 1.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5,5-trimethyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [3452-97-9] BODRLKRKPXBDBN-UHFFFAOYSA-N	4.1×10^{-2} 5.6×10^{-2} 4.5×10^{-2} 1.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4,5,5-trimethyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-75-7] IEGJUMYEWJOKHM-UHFFFAOYSA-N	3.4×10^{-2} 7.3×10^{-2} 4.5×10^{-2} 9.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2-propyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [817-46-9] JSUXZEJWGVYJG-UHFFFAOYSA-N	5.8×10^{-2} 3.3×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-propyl-1-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-85-9] MHJIVMBOGBUHH-UHFFFAOYSA-N	5.8×10^{-2} 4.8×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-2-methyl-2-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-02-3] HTOYXTGJEUOKPM-UHFFFAOYSA-N	5.3×10^{-2} 1.2×10^{-1} 5.2×10^{-2} 2.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,3,4-trimethyl-2-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [21102-13-6] JTOONBKGWVPOY-UHFFFAOYSA-N	3.7×10^{-2} 4.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,4,4-trimethyl-2-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-91-7] QMEHJTXRYVSFES-UHFFFAOYSA-N	3.4×10^{-2} 4.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,4,5-trimethyl-2-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-93-9] CIVZBWYMPDUPSQ-UHFFFAOYSA-N	3.7×10^{-2} 4.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,5,5-trimethyl-2-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-71-3] ASOCSFZHADJKFU-UHFFFAOYSA-N	3.4×10^{-2} 4.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
3-ethyl-2-methyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-03-4] VUMFTWNZYFBYEB-UHFFFAOYSA-N	4.8×10^{-2} 6.4×10^{-2} 5.5×10^{-2} 1.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-ethyl-4-methyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [51200-80-7] YOCLWWFBEJQTBM-UHFFFAOYSA-N	5.2×10^{-2} 5.5×10^{-2} 5.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-5-methyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [597-77-3] RMBUNHOAKTUXTC-UHFFFAOYSA-N	5.8×10^{-2} 6.6×10^{-2} 5.4×10^{-2} 2.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-ethyl-2-methyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [33943-21-4] GBUYIUMHXYBONU-UHFFFAOYSA-N	5.7×10^{-2} 2.5×10^{-2} 5.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-ethyl-3-methyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66794-05-6] DUGZCTGTSJAPCV-UHFFFAOYSA-N	5.2×10^{-2} 8.0×10^{-2} 5.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [5340-41-0] DHNHHYWBNQHG-N-UHFFFAOYSA-N	4.8×10^{-2} 4.7×10^{-2} 5.0×10^{-2} 2.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,2,4-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-89-3] YMBVVPXERVAJTB-UHFFFAOYSA-N	5.7×10^{-2} 5.5×10^{-2} 2.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246
2,2,5-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [3970-60-3] UCLXUUYVWJKXIK-UHFFFAOYSA-N	6.6×10^{-2} 5.3×10^{-2} 3.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246
2,3,4-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-90-6] LTKHKGAPVGSECA-UHFFFAOYSA-N	6.0×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,3,5-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [65927-60-8] ZVKQNIUBLJYSGN-UHFFFAOYSA-N	6.0×10^{-2} 4.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,4,4-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-92-8] PDIVDRVTPZNRDZ-UHFFFAOYSA-N	5.5×10^{-2} 5.5×10^{-2} 2.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5,5-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-72-4] NPUIBFBNZSKEAP-UHFFFAOYSA-N	5.7×10^{-2} 2.8×10^{-2} 5.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,4-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-74-6] QWJDXMFJOMPTCV-UHFFFAOYSA-N	5.5×10^{-2} 5.0×10^{-2} 2.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246
3,5,5-trimethyl-3-hexanol $\text{C}_9\text{H}_{20}\text{O}$ [66810-87-5] HGGJNDQMXCTKCR-UHFFFAOYSA-N	5.5×10^{-2} 4.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
4-methyl-2-propyl-1-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [54004-41-0] IGSWOIOCVEQRH-UHFFFAOYSA-N	5.0×10^{-2} 3.8×10^{-2} 4.6×10^{-2} 1.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-methyl-2-(1-methylethyl)-1-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [55505-24-3] CBHPZSADBWMIGE-UHFFFAOYSA-N	5.0×10^{-2} 3.1×10^{-2} 4.3×10^{-2} 1.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2-ethyl-2,4-dimethyl-1-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-98-4] JIZZVMCXCXJUHI-UHFFFAOYSA-N	4.4×10^{-2} 2.2×10^{-2} 4.5×10^{-2} 1.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-ethyl-2,2-dimethyl-1-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-95-1] HEQYMTUSVDQBW-UHFFFAOYSA-N	4.5×10^{-2} 2.2×10^{-2} 4.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,3,4-tetramethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-86-0] HLWCPAJEXXTJHY-UHFFFAOYSA-N	3.9×10^{-2} 8.6×10^{-2} 4.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3,4,4-tetramethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-87-1] DBCCRNKDJIOKIO-UHFFFAOYSA-N	3.9×10^{-2} 1.3×10^{-1} 4.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,4,4-tetramethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-88-2] AIQOKYGLKGGWOI-UHFFFAOYSA-N	3.9×10^{-2} 4.0×10^{-2} 4.8×10^{-2} 2.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-diethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-94-0] IENXYHLNFHBNRR-UHFFFAOYSA-N	4.5×10^{-2} 4.8×10^{-2} 5.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,3-dimethyl-3-ethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-97-3] AVQHNUMJCVRCBA-UHFFFAOYSA-N	3.7×10^{-2} 1.1×10^{-1} 4.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,4-dimethyl-3-ethyl-2-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [21102-09-0] YGQDLQQRBCOMKJ-UHFFFAOYSA-N	4.1×10^{-2} 7.2×10^{-2} 4.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-2,2-dimethyl-3-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [66793-96-2] CFWIFHZJKFFDFU-UHFFFAOYSA-N	4.8×10^{-2} 3.3×10^{-2} 5.1×10^{-2} 2.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-ethyl-2,4-dimethyl-3-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [3970-59-0] PZPYIRQFCOFLGJ-UHFFFAOYSA-N	4.9×10^{-2} 4.8×10^{-2} 3.7×10^{-2} 3.6×10^{-2} 5.1×10^{-2} 5.1×10^{-2} 2.1×10^{-1}		Yaws (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Gharagheizi et al. (2010) Yaws et al. (1997)	X X Q Q Q Q Q	237 237 246 246
2,2,3,4-tetramethyl-3-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [29772-39-2] KNTFAYXQHRNXSM-UHFFFAOYSA-N	4.4×10^{-2} 3.4×10^{-2} 4.6×10^{-2} 2.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,2,4,4-tetramethyl-3-pentanol $\text{C}_9\text{H}_{20}\text{O}$ [14609-79-1] WFJSHIHYLHRHB-UHFFFAOYSA-N	5.0×10^{-2} 5.4×10^{-2} 2.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246
1-decanol $\text{C}_{10}\text{H}_{22}\text{O}$ [112-30-1] MWKFXSUHUHTGQN-UHFFFAOYSA-N	2.0×10^{-1} 7.6×10^{-2} 6.5×10^{-2} 3.1×10^{-1} 1.9×10^{-1} 2.1×10^{-1} 2.8×10^{-1} 1.3×10^{-1} 1.5 1.6×10^{-1} 1.2×10^{-1} 2.0×10^{-1} 2.0×10^{-1}	9200 6600 5300	Brockbank (2013) Shunthirasingham et al. (2013) Lei et al. (2007) Altschuh et al. (1999) Abraham (1984) Yaws (2003) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008)	L M M M V X Q Q Q Q Q Q Q	1, 408 395 258 259 271, 243 244 245



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.6×10^{-1}		Modarresi et al. (2007)	Q	67
	2.1×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.2×10^{-1}		Yao et al. (2002)	Q	229
	9.9×10^{-1}		Katritzky et al. (1998)	Q	
	2.4×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	2.1×10^{-1}		Yaws et al. (1997)	Q	
	3.1×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	4.4×10^{-2}		Maniere et al. (2011)	?	241, 165
	2.1×10^{-1}		Yaws (1999)	?	21
	3.7×10^{-1}		Yaws and Yang (1992)	?	21
	1.9×10^{-1}		Abraham et al. (1990)	?	
2-decanol $C_{10}H_{22}O$ [1120-06-5] ACUZDYFTRHEKOS-UHFFFAOYSA-N	5.4×10^{-1}		Yaws et al. (1997)	Q	
3-decanol $C_{10}H_{22}O$ [1565-81-7] ICEQLGZWXUUIJ-UHFFFAOYSA-N	3.8×10^{-2}		Yaws (2003)	X	237
	7.8×10^{-2}		Wang et al. (2017)	Q	80, 238
	2.1×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.0×10^{-1}		Wang et al. (2017)	Q	80, 240
	7.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.5×10^{-2}		Gharagheizi et al. (2010)	Q	246
4-decanol $C_{10}H_{22}O$ [2051-31-2] DTDMYWXTWFLGJ-UHFFFAOYSA-N	3.8×10^{-2}		Yaws (2003)	X	237
	7.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.5×10^{-2}		Gharagheizi et al. (2010)	Q	246
	5.3×10^{-1}		Yaws et al. (1997)	Q	
5-decanol $C_{10}H_{22}O$ [5205-34-5] SZMNDOUFZGODBR-UHFFFAOYSA-N	4.5×10^{-2}		Yaws (2003)	X	237
	6.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.5×10^{-2}		Gharagheizi et al. (2010)	Q	246
	7.3×10^{-1}		Yaws et al. (1997)	Q	
2-methyl-1-nonanol $C_{10}H_{22}O$ [40589-14-8] BEGNRPGEHZBNKK-UHFFFAOYSA-N	3.0×10^{-2}		Yaws (2003)	X	237
	3.6×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-1}		Yaws et al. (1997)	Q	
2-methyl-2-nonanol $C_{10}H_{22}O$ [10297-57-1] VREDNSVJXRJXRI-UHFFFAOYSA-N	2.9×10^{-2}		Yaws (2003)	X	237
	3.9×10^{-2}		Gharagheizi et al. (2010)	Q	246
2-methyl-3-nonanol $C_{10}H_{22}O$ [26533-33-5] OFIYMUXECPHPZ-UHFFFAOYSA-N	3.6×10^{-2}		Yaws (2003)	X	237
	3.4×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Gharagheizi et al. (2010)	Q	246
	5.7×10^{-1}		Yaws et al. (1997)	Q	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-4-nonanol $C_{10}H_{22}O$ [26533-31-3] IBHHTADZYDLHPM-UHFFFAOYSA-N	3.6×10^{-2} 5.1×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methyl-5-nonanol $C_{10}H_{22}O$ [29843-62-7] RLQVUGAVOCBRNQ-UHFFFAOYSA-N	3.6×10^{-2} 5.1×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-1-nonanol $C_{10}H_{22}O$ [22663-64-5] BXQPYGLPOMTAPU-UHFFFAOYSA-N	3.5×10^{-2} 4.0×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-2-nonanol $C_{10}H_{22}O$ [60671-32-1] QCBDLZKDRUKOFS-UHFFFAOYSA-N	3.2×10^{-2} 5.9×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-3-nonanol $C_{10}H_{22}O$ [21078-72-8] VZBFPIMCUSPDLs-UHFFFAOYSA-N	3.2×10^{-2} 1.1×10^{-1} 4.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methyl-5-nonanol $C_{10}H_{22}O$ QRZAYHZIHWIJD-UHFFFAOYSA-N	3.6×10^{-2} 5.1×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-1-nonanol $C_{10}H_{22}O$ [1489-47-0] HECVGHIJHFNAIL-UHFFFAOYSA-N	3.1×10^{-2} 4.2×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-methyl-4-nonanol $C_{10}H_{22}O$ [23418-38-4] GDcoakPwVJcNGI-UHFFFAOYSA-N	3.2×10^{-2} 1.1×10^{-1} 4.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl-1-nonanol $C_{10}H_{22}O$ [2768-16-3] DBJSFYCKLLBKGB-UHFFFAOYSA-N	3.5×10^{-2} 4.0×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl-2-nonanol $C_{10}H_{22}O$ [66731-95-1] KZTLXVUOEODMR-UHFFFAOYSA-N	3.2×10^{-2} 8.7×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
5-methyl-3-nonanol $C_{10}H_{22}O$ [66719-43-5] CCSZLOPBDJWYHV-UHFFFAOYSA-N	3.6×10^{-2} 5.1×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl-4-nonanol $C_{10}H_{22}O$ [66719-44-6] BFYIAYZULSQBFQ-UHFFFAOYSA-N	3.6×10^{-2} 3.5×10^{-2} 3.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl-5-nonanol $C_{10}H_{22}O$ [33933-78-7] AGSIGVZAVLOKLP-UHFFFAOYSA-N	4.9×10^{-2} 9.1×10^{-2} 4.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
6-methyl-2-nonanol $C_{10}H_{22}O$ [66256-60-8] OYTRLQQIHEJFE-UHFFFAOYSA-N	3.2×10^{-2} 8.7×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
7-methyl-1-nonanol $C_{10}H_{22}O$ [33234-93-4] BJKXZCGJAOWNTN-UHFFFAOYSA-N	3.5×10^{-2} 4.0×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
7-methyl-2-nonanol $C_{10}H_{22}O$ [66256-61-9] GCOBJHFUTQUABB-UHFFFAOYSA-N	3.2×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
7-methyl-4-nonanol $C_{10}H_{22}O$ [26981-98-6] KLZAWUYSXUGWGQ-UHFFFAOYSA-N	3.6×10^{-2} 5.1×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
8-methyl-1-nonanol $C_{10}H_{22}O$ (isodecanol) [25339-17-7] PLLBRTOLHQQAQQ-UHFFFAOYSA-N	1.8×10^{-1}		HSDB (2015)	Q	99
8-methyl-2-nonanol $C_{10}H_{22}O$ [14779-92-1] ZVZKLBCGIYWGOU-UHFFFAOYSA-N	3.2×10^{-2} 8.7×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-1-octanol $C_{10}H_{22}O$ [2370-14-1] KEXGXAGJHHCTKD-UHFFFAOYSA-N	3.3×10^{-2} 1.6×10^{-2} 3.4×10^{-2} 5.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethyl-3-octanol $C_{10}H_{22}O$ [19841-72-6] AZIWNVAWODSERA-UHFFFAOYSA-N	3.9×10^{-2} 1.6×10^{-2} 4.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2-dimethyl-4-octanol $C_{10}H_{22}O$ [66719-52-6] IVLDCRDTRQCTIY-UHFFFAOYSA-N	4.2×10^{-2} 3.0×10^{-2} 3.5×10^{-2} 1.0		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,3-dimethyl-3-octanol $C_{10}H_{22}O$ [19781-10-3] AWHYRPPRRQITHX-UHFFFAOYSA-N	4.2×10^{-2} 4.3×10^{-2} 3.9×10^{-2} 1.0		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,4-dimethyl-2-octanol $C_{10}H_{22}O$ [18675-20-2] WHJCLXRPLJSSV-UHFFFAOYSA-N	2.7×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,4-dimethyl-4-octanol $C_{10}H_{22}O$ [33933-79-8] VRFMFBPJUSGFK-UHFFFAOYSA-N	4.1×10^{-2} 6.7×10^{-2} 3.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,5-dimethyl-4-octanol $C_{10}H_{22}O$ [66719-53-7] VIHAZZPWGKHJQE-UHFFFAOYSA-N	4.5×10^{-2} 2.1×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethyl-1-octanol $C_{10}H_{22}O$ [62417-08-7] ZKWASVBZSAGDBI-UHFFFAOYSA-N	3.5×10^{-2} 2.4×10^{-2} 3.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,6-dimethyl-2-octanol $C_{10}H_{22}O$ [18479-57-7] WRFXXJKURVTLISY-UHFFFAOYSA-N	2.7×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,6-dimethyl-4-octanol $C_{10}H_{22}O$ [66719-54-8] ZFOGJEKQQNVCFB-UHFFFAOYSA-N	3.5×10^{-2} 3.5×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,7-dimethyl-2-octanol $C_{10}H_{22}O$ [42007-73-8] JZZVQICFJITMO-UHFFFAOYSA-N	2.7×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,7-dimethyl-3-octanol $C_{10}H_{22}O$ [66719-55-9] VFUOFVONEDBLIJ-UHFFFAOYSA-N	4.3×10^{-2} 2.3×10^{-2} 3.8×10^{-2} 9.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,7-dimethyl-4-octanol $C_{10}H_{22}O$ [19781-11-4] FRJOBNOTOHIMIH-UHFFFAOYSA-N	2.3×10^{-2} 4.2×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4-dimethyl-4-octanol $C_{10}H_{22}O$ [66719-30-0] JEBZCASOCDXENQ-UHFFFAOYSA-N	4.1×10^{-2} 4.5×10^{-2} 3.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,5-dimethyl-3-octanol $C_{10}H_{22}O$ [56065-42-0] DMIBTMSBSULJMT-UHFFFAOYSA-N	4.0×10^{-2} 7.0×10^{-2} 3.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,6-dimethyl-3-octanol $C_{10}H_{22}O$ [151-19-9] NPHCXUPGMINOPP-UHFFFAOYSA-N	4.0×10^{-2} 6.9×10^{-2} 3.7×10^{-2} 9.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3,6-dimethyl-4-octanol $C_{10}H_{22}O$ [66719-31-1] XFUFFAQPWAGSDK-UHFFFAOYSA-N	4.5×10^{-2} 2.1×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,7-dimethyl-1-octanol $C_{10}H_{22}O$ (pelargol) [106-21-8] PRNCMAKCNVRZFX-UHFFFAOYSA-N	3.3×10^{-2} 3.3×10^{-2} 3.7×10^{-1} 3.8×10^{-2} 3.2×10^{-2} 5.0×10^{-1}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X X Q Q Q Q	258 237 259 246
3,7-dimethyl-2-octanol $C_{10}H_{22}O$ [15340-96-2] XCWMPYBKUYTLZ-UHFFFAOYSA-N	3.0×10^{-2} 5.6×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,7-dimethyl-3-octanol $C_{10}H_{22}O$ [78-69-3] DLHQZZUEERVIGQ-UHFFFAOYSA-N	3.7×10^{-2} 7.7×10^{-2} 3.7×10^{-2} 8.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4,5-dimethyl-1-octanol $C_{10}H_{22}O$ [66719-32-2] UQKHXPWOMZBLN-UHFFFAOYSA-N	3.3×10^{-2} 3.8×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,6-dimethyl-1-octanol $C_{10}H_{22}O$ [66719-33-3] JOWDWXPTKVUHBV-UHFFFAOYSA-N	3.3×10^{-2} 3.8×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,6-dimethyl-4-octanol $C_{10}H_{22}O$ [56065-43-1] QJVDAQVYZBSYCB-UHFFFAOYSA-N	4.1×10^{-2} 6.7×10^{-2} 3.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,7-dimethyl-1-octanol $C_{10}H_{22}O$ [66719-34-4] UWAGZVFFZJGLJU-UHFFFAOYSA-N	3.3×10^{-2} 3.8×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4,7-dimethyl-4-octanol $C_{10}H_{22}O$ [19781-13-6] OTISWHNJUCMBFI-UHFFFAOYSA-N	4.0×10^{-2} 6.9×10^{-2} 3.7×10^{-2} 9.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
7,7-dimethyl-1-octanol $C_{10}H_{22}O$ [66719-35-5] RYFZXYYQFYLUHM-UHFFFAOYSA-N	3.0×10^{-2} 3.8×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-ethyl-1-octanol $C_{10}H_{22}O$ [20592-10-3] HTRVTKUOKQWGMU-UHFFFAOYSA-N	3.9×10^{-2} 2.3×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-1-octanol $C_{10}H_{22}O$ [66719-36-6] VXOCEIUJVCHLRR-UHFFFAOYSA-N	3.9×10^{-2} 3.4×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-ethyl-3-octanol $C_{10}H_{22}O$ [2051-32-3] NPQPNSNHJUTUSA-UHFFFAOYSA-N	3.9×10^{-2} 5.7×10^{-2} 4.3×10^{-2} 7.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-ethyl-4-octanol $C_{10}H_{22}O$ [63126-48-7] WXJDPWUPZLVSF-UHFFFAOYSA-N	4.8×10^{-2} 2.2×10^{-2} 3.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
4-ethyl-4-octanol $C_{10}H_{22}O$ [38395-42-5] OYBUBRUQIKTRET-UHFFFAOYSA-N	4.3×10^{-2} 4.7×10^{-2} 4.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
6-ethyl-3-octanol $C_{10}H_{22}O$ [19781-27-2] JWZFCOOWAQHCBP-UHFFFAOYSA-N	4.3×10^{-2} 3.8×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,3-trimethyl-3-heptanol $C_{10}H_{22}O$ [29772-40-5] GCLFPNQSLCWZQA-UHFFFAOYSA-N	3.7×10^{-2} 2.7×10^{-2} 3.6×10^{-2} 1.1		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,2,4-trimethyl-4-heptanol $C_{10}H_{22}O$ [57233-31-5] KNACVESXMPHLNM-UHFFFAOYSA-N	4.1×10^{-2} 3.4×10^{-2} 1.3		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246
2,2,5-trimethyl-4-heptanol $C_{10}H_{22}O$ [66256-42-6] JHHGGYCQTXZCTL-UHFFFAOYSA-N	4.4×10^{-2} 3.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,2,6-trimethyl-3-heptanol $C_{10}H_{22}O$ [66256-43-7] AXUPPSSNJCYJOX-UHFFFAOYSA-N	3.8×10^{-2} 1.4×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2,6-trimethyl-4-heptanol $C_{10}H_{22}O$ [66256-44-8] ITTQYDBLGDGLMB-UHFFFAOYSA-N	4.4×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,3,6-trimethyl-3-heptanol $C_{10}H_{22}O$ [58046-40-5] BAZNYUOJWCTIQ-UHFFFAOYSA-N	3.8×10^{-2} 4.4×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,5-trimethyl-4-heptanol $C_{10}H_{22}O$ [66256-46-0] RCSCLTAIPNDFGC-UHFFFAOYSA-N	4.4×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2,4,6-trimethyl-2-heptanol $C_{10}H_{22}O$ [66256-47-1] VUZHXHGZVRACMM-UHFFFAOYSA-N	3.6×10^{-2} 1.0×10^{-1} 3.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,6-trimethyl-4-heptanol $C_{10}H_{22}O$ [60836-07-9] OSVYJSJPLCSACO-UHFFFAOYSA-N	4.4×10^{-2} 3.4×10^{-2} 1.3		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5,6-trimethyl-2-heptanol $C_{10}H_{22}O$ [66256-48-2] LQQYOLMGDBGEBE-UHFFFAOYSA-N	3.6×10^{-2} 1.1×10^{-1} 3.3×10^{-2} 9.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3,3,6-trimethyl-4-heptanol $C_{10}H_{22}O$ LTDMOZOPTDNTLG-UHFFFAOYSA-N	4.4×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
3,5,5-trimethyl-3-heptanol $C_{10}H_{22}O$ [66256-50-6] WOUVARFKMIYBY-UHFFFAOYSA-N	3.1×10^{-2} 7.7×10^{-2} 3.4×10^{-2} 8.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4,6,6-trimethyl-2-heptanol $C_{10}H_{22}O$ [51079-79-9] FHQUZUTAZYJRH-UHFFFAOYSA-N	3.6×10^{-2} 4.8×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-(1-methylethyl)-1-heptanol $C_{10}H_{22}O$ [38514-15-7] NTGBCQFKKOCODF-UHFFFAOYSA-N	3.1×10^{-2} 4.2×10^{-2} 3.2×10^{-2} 4.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-(1-methylethyl)-4-heptanol $C_{10}H_{22}O$ [51200-82-9] OHSMKBPEDBXYDU-UHFFFAOYSA-N	4.2×10^{-2} 3.0×10^{-2} 4.1×10^{-2} 1.0		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-ethyl-2-methyl-3-heptanol $C_{10}H_{22}O$ [66719-37-7] GYCRUUSYQLIBA-UHFFFAOYSA-N	4.0×10^{-2} 3.3×10^{-2} 4.1×10^{-2} 9.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3-ethyl-5-methyl-3-heptanol $C_{10}H_{22}O$ FGJMKJVRBZPS-UHFFFAOYSA-N	4.0×10^{-2} 4.8×10^{-2} 3.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-ethyl-4-methyl-3-heptanol $C_{10}H_{22}O$ [66731-94-0] XVSHXHABYNUHNI-UHFFFAOYSA-N	4.4×10^{-2} 2.2×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-propyl-1-heptanol $C_{10}H_{22}O$ [10042-59-8] YLQIQIAXYRMDL-UHFFFAOYSA-N	3.3×10^{-2} 3.0×10^{-2} 3.6×10^{-2} 4.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-propyl-4-heptanol $C_{10}H_{22}O$ [2198-72-3] SJTPBRMACCDJPZ-UHFFFAOYSA-N	4.2×10^{-2} 4.9×10^{-2} 4.3×10^{-2} 9.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,4-tetramethyl-3-hexanol $C_{10}H_{22}O$ [66256-63-1] SAFMWGCQYLRLS-UHFFFAOYSA-N	3.1×10^{-2} 2.2×10^{-2} 3.3×10^{-2} 9.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,2,4,4-tetramethyl-3-hexanol $C_{10}H_{22}O$ [66256-65-3] LKAPNEGVXBMYKE-UHFFFAOYSA-N	3.2×10^{-2} 6.7×10^{-3} 4.0×10^{-2} 1.0		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,2,5,5-tetramethyl-3-hexanol $C_{10}H_{22}O$ [55073-86-4] CFEYPBVKHMZCFR-UHFFFAOYSA-N	4.6×10^{-2} 3.6×10^{-2} 1.7		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246
2,3,4,4-tetramethyl-2-hexanol $C_{10}H_{22}O$ [66256-66-4] IELWGTFQRBDDCZ-UHFFFAOYSA-N	3.2×10^{-2} 6.7×10^{-2} 3.0×10^{-2} 1.0		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,3,4,4-tetramethyl-3-hexanol $C_{10}H_{22}O$ [66256-67-5] ZQFIWHOYWCJIHU-UHFFFAOYSA-N	2.5×10^{-2} 2.9×10^{-2} 3.3×10^{-2} 7.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,3,5,5-tetramethyl-3-hexanol $C_{10}H_{22}O$ [5396-09-8] KTSYBVKVNWGHBC-UHFFFAOYSA-N	2.5×10^{-2} 6.4×10^{-2} 3.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4,4,5-tetramethyl-3-hexanol $C_{10}H_{22}O$ [66256-68-6] VVRHXTVKOHXZJX-UHFFFAOYSA-N	2.8×10^{-2} 1.4×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,3,5,5-tetramethyl-2-hexanol $C_{10}H_{22}O$ [66256-69-7] USWQOMRDCYQMW-UHFFFAOYSA-N	3.2×10^{-2} 2.1×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3,4,4,5-tetramethyl-3-hexanol $C_{10}H_{22}O$ [66256-39-1] UHJJSWWLQIIJU-UHFFFAOYSA-N	2.5×10^{-2} 4.4×10^{-2} 3.2×10^{-2} 7.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3,4,5,5-tetramethyl-3-hexanol $C_{10}H_{22}O$ [66256-40-4] LBLUJHQRJVUQJR-UHFFFAOYSA-N	2.9×10^{-2} 5.2×10^{-2} 3.1×10^{-2} 8.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dimethyl-4-ethyl-3-hexanol $C_{10}H_{22}O$ [66719-48-0] NLGGBBOPZSANIC-UHFFFAOYSA-N	4.0×10^{-2} 4.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2-butyl-1-hexanol $C_{10}H_{22}O$ [2768-15-2] LAPPDPWPIZBBJY-UHFFFAOYSA-N	4.4×10^{-1}		Yaws et al. (1997)	Q	
4-ethyl-2,2-dimethyl-3-hexanol $C_{10}H_{22}O$ [66719-47-9] UOYRABPBVDJLW-UHFFFAOYSA-N	4.0×10^{-2} 4.0×10^{-2} 1.1		Yaws (2003) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q	237 246
4-methyl-2-(1-methylethyl)-1-hexanol $C_{10}H_{22}O$ [66719-41-3] VHGVOODVCUKVCL-UHFFFAOYSA-N	3.7×10^{-2} 1.8×10^{-2} 3.0×10^{-2} 7.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-methyl-2-propyl-1-hexanol $C_{10}H_{22}O$ [66256-62-0] VZXWJVFXZUFQS-UHFFFAOYSA-N	3.6×10^{-2} 2.3×10^{-2} 3.3×10^{-2} 5.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
5,5-dimethyl-2-ethyl-1-hexanol $C_{10}H_{22}O$ DXDJMJLAABGHOH-UHFFFAOYSA-N	2.7×10^{-2} 2.7×10^{-2} 3.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5,5-dimethyl-3-ethyl-3-hexanol $C_{10}H_{22}O$ [5340-62-5] FVVBGHIXYRKNGT-UHFFFAOYSA-N	3.7×10^{-2} 4.1×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
5-methyl-2-(1-methylethyl)-1-hexanol $C_{10}H_{22}O$ [2051-33-4] SFIQHFBITUETIBP-UHFFFAOYSA-N	3.0×10^{-2} 2.7×10^{-2} 3.0×10^{-2} 4.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2-methyl-3-(1-methylethyl)-3-hexanol $C_{10}H_{22}O$ (2,4-dimethyl-3-propyl-3-pentanol) [51200-81-8] GGOIYPAZTVTJBE-UHFFFAOYSA-N	4.3×10^{-2} 3.7×10^{-2} 2.1×10^{-2} 1.7×10^{-2} 3.7×10^{-2} 3.7×10^{-2} 9.6×10^{-1} 1.2		Yaws (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Gharagheizi et al. (2010) Yaws et al. (1997) Yaws et al. (1997)	X X Q Q Q Q Q Q	237 237 246 246



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,4,4-pentamethyl-3-pentanol $C_{10}H_{22}O$ [5857-69-2] UYFZQUABCZILAI-UHFFFAOYSA-N	2.4×10^{-2} 1.7×10^{-2} 3.1×10^{-2} 8.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
2,3-dimethyl-2- <i>tert</i> -butyl-1-butanol $C_{10}H_{22}O$ [81931-81-9] WQRJEFGWAMKEBO-UHFFFAOYSA-N	3.0×10^{-2} 1.1×10^{-2} 3.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,4-dimethyl-3-(1-methylethyl)-3-pentanol $C_{10}H_{22}O$ [51200-83-0] IFXNWIUSZUHIDG-UHFFFAOYSA-N	3.2×10^{-2} 1.6×10^{-2} 3.3×10^{-2} 8.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
3,4-dimethyl-3-isopropyl-2-pentanol $C_{10}H_{22}O$ [66719-50-4] DNBJFVXHMLZKHP-UHFFFAOYSA-N	4.0×10^{-2} 3.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
4,4-dimethyl-3-isopropyl-1-pentanol $C_{10}H_{22}O$ [66719-51-5] DQWFOEILQBIFY-UHFFFAOYSA-N	4.3×10^{-2} 3.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
3-ethyl-2,2,4-trimethyl-3-pentanol $C_{10}H_{22}O$ [66256-41-5] CHZVHXPAKQDRSE-UHFFFAOYSA-N	3.1×10^{-2} 1.5×10^{-2} 3.4×10^{-2} 9.9×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
4-methyl-2-(2-methylpropyl)-1-pentanol $C_{10}H_{22}O$ [22417-45-4] FXXCTCAZGTNNO-UHFFFAOYSA-N	3.5×10^{-2} 2.0×10^{-2} 3.0×10^{-2} 6.6×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaws et al. (1997)	X Q Q Q	237 246
1-undecanol $C_{11}H_{24}O$ [112-42-5] KJIOQYGWTOBHNH-UHFFFAOYSA-N	1.4×10^{-1} 2.2×10^{-1} 2.1×10^{-1} 1.4×10^{-1} 1.2×10^{-1} 1.7×10^{-1} 2.2×10^{-1} 3.0×10^{-1}		Brockbank (2013) Yaws (2003) Dupeux et al. (2022) HSDB (2015) Hilal et al. (2008) Yao et al. (2002) Yaws et al. (1997) Yaws (1999)	L X Q Q Q Q Q Q ?	 258 259 99 229 21



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
1-tetradecanol $C_{14}H_{30}O$ [112-72-1] HLZKNKRTKFSKGZ-UHFFFAOYSA-N	6.2×10^{-2}		Duchowicz et al. (2020)	V	186	
	6.2×10^{-2}		HSDB (2015)	V		
	2.2×10^{-1}		Abraham (1984)	R		
	9.4×10^{-2}		Yaws (2003)	X	258	
	1.2×10^{-1}		Dupeux et al. (2022)	Q	259	
	1.5		Duchowicz et al. (2020)	Q		
	6.2×10^{-2}		Hilal et al. (2008)	Q		
	2.7×10^{-1}		Modarresi et al. (2007)	Q	67	
	9.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249	
	6.6×10^{-2}		Yao et al. (2002)	Q	229	
2-tetradecanol $C_{14}H_{30}O$ [4706-81-4] BRGJIMZXMW MCC-UHFFFAOYSA-N	9.5×10^{-2}		Yaws et al. (1997)	Q		
	9.5×10^{-2}		Yaws (1999)	?	21	
	3.9×10^3		Yaws and Yang (1992)	?	21, 409	
	1.7×10^{-1}		Gharagheizi et al. (2012)	Q		
	1-pentadecanol $C_{15}H_{32}O$ [629-76-5] REIUXOLGHVXAEO-UHFFFAOYSA-N	2.2×10^{-1}		Abraham (1984)	V	
		2.5×10^{-2}		Yaws (2003)	X	237
		8.9×10^{-2}		Gharagheizi et al. (2012)	Q	
2.7×10^{-2}			Gharagheizi et al. (2010)	Q	246	
2.5×10^{-1}			Yaffe et al. (2003)	Q	248, 249	
2.5×10^{-1}			Yaws et al. (1997)	Q		
1-hexadecanol $C_{16}H_{34}O$ (cetyl alcohol) [124-29-8] BXWNKGSJHAJOGX-UHFFFAOYSA-N	3.0×10^3		Yaws and Yang (1992)	?	21, 410	
	2.1×10^{-1}		Duchowicz et al. (2020)	V	186	
	2.1×10^{-1}		HSDB (2015)	V		
	3.5×10^{-1}		Abraham (1984)	R		
	6.4×10^{-2}		Yaws (2003)	X	237	
	1.5		Duchowicz et al. (2020)	Q		
	7.4×10^{-2}		Gharagheizi et al. (2012)	Q		
	3.8×10^{-2}		Gharagheizi et al. (2010)	Q	246	
	3.9×10^{-2}		Hilal et al. (2008)	Q		
	2.1×10^{-1}		Modarresi et al. (2007)	Q	67	
	2.5×10^{-1}		Yaffe et al. (2003)	Q	248, 272	
2-hexadecanol $C_{16}H_{34}O$ [14852-31-4] FVDRFBGMOWJEOR-UHFFFAOYSA-N	1.0×10^{-1}		Yaws et al. (1997)	Q		
	1.0×10^{-1}		Yaws (1999)	?	21	
	5.9×10^{-1}		Yaws and Yang (1992)	?	21	
	1.6×10^{-2}		Yaws (2003)	X	237	
	1.1×10^{-2}		Gharagheizi et al. (2010)	Q	246	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-heptadecanol $C_{17}H_{36}O$ [1454-85-9] GOQYKNQRPGWPLP-UHFFFAOYSA-N	4.5×10^{-2} 7.1×10^{-2} 6.6×10^{-2} 4.6×10^{-2} 4.5×10^{-2} 1.2×10^1		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yaffe et al. (2003) Yaws et al. (1997) Yaws and Yang (1992)	X Q Q Q Q ?	237 246 248, 249 21
2-heptadecanol $C_{17}H_{36}O$ [16813-18-6] ZNYQHFLBAPNPRC-UHFFFAOYSA-N	8.7×10^{-3} 1.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
1-octadecanol $C_{18}H_{38}O$ [112-92-5] GLDOVTGHNKAZLK-UHFFFAOYSA-N	1.2×10^{-2} 1.2×10^{-2} 3.8×10^{-1} 1.5 2.5×10^{-2} 1.7×10^{-1} 3.1×10^{-3} 3.1×10^{-3} 1.2×10^{-2} 9.1×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Abraham (1984) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yaws et al. (1997) Yaws (1999) Yaws and Yang (1992)	V V R Q Q Q Q Q ? ?	186 67 248, 249 21, 411 21, 411
1-nonadecanol $C_{19}H_{40}O$ [1454-84-8] XGFDHKJUZCCPKQ-UHFFFAOYSA-N	9.9×10^{-2}		Yaws et al. (1997)	Q	
1-eicosanol $C_{20}H_{42}O$ [629-96-9] BTFJIXJCSYFAL-UHFFFAOYSA-N	4.7×10^{-1} 5.5×10^{-2} 1.8×10^{-2}		HSDB (2015) Gharagheizi et al. (2012) Yaws et al. (1997)	Q Q Q	99
1-docosanol $C_{22}H_{46}O$ (behenic alcohol) [661-19-8] NOPFSRXAKWQILS-UHFFFAOYSA-N	6.2×10^{-3}		HSDB (2015)	Q	99
1-tetracosanol $C_{24}H_{50}O$ [506-51-4] TYWMIZZBOVGFOV-UHFFFAOYSA-N	3.4×10^{-3}		HSDB (2015)	Q	99
cyclopentanol C_5H_9OH [96-41-3] XCIXKGXIYUWCLL-UHFFFAOYSA-N	4.2 2.2 4.3 3.8 2.0 4.4	8200 5900 8000 7200	Plyasunov and Shock (2000) Hovorka et al. (2002) Cabani et al. (1975b) HSDB (2015) Hilal et al. (2008) Kühne et al. (2005) Nirmalakhandan et al. (1997)	L M T Q Q Q Q	 11 99



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.3	7300	Kühne et al. (2005) Abraham et al. (1990)	? ?	
cyclohexanol $C_6H_{11}OH$ [108-93-0]	4.3	7700	Brockbank (2013)	L	1
	4.4	8500	Plyasunov and Shock (2000)	L	
	2.5		Chao et al. (2017)	M	
HPXRVGTGHNJAIH-UHFFFAOYSA-N	4.3	7700	Hovorka et al. (2002)	M	11
	2.2		Altschuh et al. (1999)	M	
	2.7		Chao et al. (2017)	V	
	4.5		Mackay et al. (2006c)	V	
	4.5		Mackay et al. (1995)	V	
	3.5		Meylan and Howard (1991)	V	
	1.7		Hine and Mookerjee (1975)	V	
	4.1	8500	Cabani et al. (1975b)	T	
	3.9		Yaws (2003)	X	258
	3.6		Howard (1993)	X	412
	6.2		Dupeux et al. (2022)	Q	259
	1.1		Keshavarz et al. (2022)	Q	
	4.1		Duchowicz et al. (2020)	Q	
	4.5×10^{-1}		Wang et al. (2017)	Q	80, 238
	4.5		Wang et al. (2017)	Q	80, 239
	6.3		Wang et al. (2017)	Q	80, 240
	1.6		Li et al. (2014)	Q	241
	2.0		Raventos-Duran et al. (2010)	Q	242, 243
	2.5		Raventos-Duran et al. (2010)	Q	244
	2.0		Raventos-Duran et al. (2010)	Q	245
	3.3		Hilal et al. (2008)	Q	
	2.3		Modarresi et al. (2007)	Q	67
		7500	Kühne et al. (2005)	Q	
	3.8		Yaffe et al. (2003)	Q	248, 249
	1.3		Yao et al. (2002)	Q	229
	4.1		English and Carroll (2001)	Q	230, 231
	2.3		Katritzky et al. (1998)	Q	
	2.7		Nirmalakhandan et al. (1997)	Q	
	3.6		Russell et al. (1992)	Q	279
	2.0		Suzuki et al. (1992)	Q	232
	2.0		Meylan and Howard (1991)	Q	
	3.4		Nirmalakhandan and Speece (1988)	Q	
	2.2		Duchowicz et al. (2020)	?	185, 21
		7500	Kühne et al. (2005)	?	
	3.9		Yaws (1999)	?	21
	4.1		Abraham et al. (1990)	?	
cycloheptanol $C_7H_{13}OH$ [502-41-0]	4.6	9000	Plyasunov and Shock (2000)	L	
	4.2	9000	Cabani et al. (1975b)	T	
	1.0		Hilal et al. (2008)	Q	
QCRFMSUKWRQZEM-UHFFFAOYSA-N	3.7		English and Carroll (2001)	Q	230, 231
	4.2		Abraham et al. (1990)	?	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methylcyclohexanol $C_7H_{13}OH$ [589-91-3] MQWCXKKGQLNYQG-UHFFFAOYSA-N	2.5		Ebert et al. (2023)	?	318
2-methylcyclohexanol $C_7H_{14}O$ [583-59-5] NDVWOBYBJYUSMF-UHFFFAOYSA-N	1.4 1.3 5.9 1.7 1.6 1.6 1.6 1.3 3.2 1.3		Chao et al. (2017) Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M M Q Q Q Q Q Q Q ?	184 242, 243 244 245 67 185, 21
3-methylcyclohexanol $C_7H_{14}O$ [591-23-1] HTSABYAWKQAHBT-UHFFFAOYSA-N	2.9 2.7 5.9 1.7 1.6 1.6 1.6 1.7 2.7		Chao et al. (2017) Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Modarresi et al. (2007) Duchowicz et al. (2020)	M M Q Q Q Q Q Q ?	299 242, 243 244 245 67 185, 21
MCM:C8BCOH $C_8H_{14}O$ CEOBYJRLFASWKU-UHFFFAOYSA-N	8.7×10^{-1} 2.4 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
(4-methylcyclohexyl)methanol $C_8H_{16}O$ [34885-03-5] OSINZLLLLCUKJH-UHFFFAOYSA-N	1.5		HSDB (2015)	Q	99
borneol $C_{10}H_{18}O$ [507-70-0] DTGKSKDOIYIVQL-UHFFFAOYSA-N	4.4×10^{-1}		Ebert et al. (2023)	?	316
fenchol $C_{10}H_{18}O$ (fenchyl alcohol) [1632-73-1] IAIHUHQCLTYTSF-UHFFFAOYSA-N	3.5×10^{-1}		Ebert et al. (2023)	?	371
menthol $C_{10}H_{20}O$ [1490-04-6] NOOLISFMXDJSKH-UHFFFAOYSA-N	3.1×10^{-1}		Ebert et al. (2023)	?	318



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylisoborneol $C_{11}H_{20}O$ [2371-42-8] LFYXNXGVLGKVCJ-BOBPJJCASA-N	8.9×10^{-2} 1.6	9800	Ömür-Özbek and Dietrich (2005) Wu et al. (2022a)	M Q	413
geosmin $C_{12}H_{22}O$ [19700-21-1] JLPUXFOGCDVKGO-GRYCIOLGSA-N	8.1×10^{-2} 4.1	9800	Ömür-Özbek and Dietrich (2005) Wu et al. (2022a)	M Q	413
cyclododecanol $C_{12}H_{24}O$ [1724-39-6] SFVWPXMPCRCIVOK-UHFFFAOYSA-N	3.4 6.8 4.5 3.7×10^{-1}		Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Zhang et al. (2010)	M Q Q Q	287, 288
	3.4 8.0 5.3×10^{-2} 1.6 2.5×10^{-1} 3.4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	Q Q Q Q Q ?	287, 289 287, 290 287, 291 67 185, 21
cedrol $C_{15}H_{26}O$ [77-53-2] SVURIXNDRWRAFU-OGMFBOKVSA-N	6.7		Dupeux et al. (2022)	Q	259
patchoulol $C_{15}H_{26}O$ [5986-55-0] GGHMUJBZYLWFD-CUZKYEQNSA-N	1.3×10^1		Dupeux et al. (2022)	Q	259
perhydrobisphenol a $C_{15}H_{28}O_2$ [80-04-6] CDBAMNGURPMUTG-UHFFFAOYSA-N	9.7 6.1×10^4 3.4×10^4 1.8×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3-(5,5,6-trimethyl-2-norbornyl)cyclohexanol $C_{16}H_{28}O$ [3407-42-9] BWVZAZPLUTUBKD-UHFFFAOYSA-N	6.1×10^{-1} 1.6×10^1 1.1×10^1 2.7×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol $C_{16}H_{28}O$ [66068-84-6] PCFHYANYPQEMPU-UHFFFAOYSA-N	6.1×10^{-1} 1.8×10^1 4.4×10^1 2.7×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-buten-1-ol <chem>CH3CHCHCH2OH</chem> [6117-91-5] WCASXYBKJHWFMY-UHFFFAOYSA-N	3.1 3.9 1.2 2.7 3.0	6900	Plyasunov and Shock (2000) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Saxena and Hildemann (1996)	L Q Q Q Q E	242, 243 244 245 401
3-buten-1-ol <chem>C4H8O</chem> [627-27-0] ZSPTYLOMNJNZNG-UHFFFAOYSA-N		7000	Plyasunov and Shock (2000)	L	
4-penten-1-ol <chem>C5H10O</chem> [821-09-0] LQAVWYMTUMSFBE-UHFFFAOYSA-N		7300	Plyasunov and Shock (2000)	L	
3-pentyn-1-ol <chem>C5H8O</chem> [10229-10-4] IDYNOORNKYEHHO-UHFFFAOYSA-N		7800	Plyasunov and Shock (2000)	L	
2-methyl-3-buten-2-ol <chem>C5H9O</chem> [115-18-4] HNVRRHXSXBLFLIG-UHFFFAOYSA-N	6.4×10^{-1} 4.7×10^{-1} 1.6 7.9×10^{-1} 3.6×10^{-1} 1.2 7.3×10^{-1} 2.5 6.2×10^{-1} 9.9×10^{-1} 6.0×10^{-1} 1.6 4.7×10^{-1}		Iraci et al. (1999) Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M M Q Q Q Q Q Q Q Q Q Q ?	38 299 80, 238 80, 239 80, 240 242, 243 244 245 67 185, 21
2-methyl-3-butyln-2-ol <chem>C5H8O</chem> [115-19-5] CEBKHWANWSNTI-UHFFFAOYSA-N	2.5 1.6 1.5 1.0 8.3 2.5		Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M Q Q Q Q ?	67 185, 21
3-methyl-1-pentyn-3-ol <chem>C6H10O</chem> (meparfynol; methyl pentynol) [77-75-8] QXLPXWSKPNQLE-UHFFFAOYSA-N	9.9×10^{-1} 7.0 4.3		Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998)	Q Q Q	67



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-cyclohexen-1-ol $C_6H_{10}O$ [822-67-3] PQANGXXSEABURG-UHFFFAOYSA-N		8500	Plyasunov and Shock (2000)	L	
bicyclo[2.2.1]heptan-2-ol $C_7H_{12}O$ (norborneol) [1632-68-4] ZQTYQMYDIHMKQB-UHFFFAOYSA-N	2.2	5000	van Roon et al. (2005)	V	
2-octen-1-ol $C_8H_{16}O$ [22104-78-5] AYQPVPFZWQIERS-UHFFFAOYSA-N	7.7×10^{-1}		Wu et al. (2022a)	Q	413
1-octen-3-ol $C_8H_{16}O$ [3391-86-4] VSMOENVRRABVKN-UHFFFAOYSA-N	1.9×10^{-1} 2.5×10^{-1} 1.3×10^{-1}	7900	Wu et al. (2022a) Druaux et al. (1998) Roberts and Pollien (1997)	M M M	
3,7-dimethyl-6-octen-1-ol $C_{10}H_{20}O$ (citronellol) [106-22-9] QMVPMAAFGQKVCJ-UHFFFAOYSA-N	5.2 4.9×10^{-1}		Martins et al. (2017) Dupeux et al. (2022)	V Q	315 259
3,7-dimethyl-1,6-octadien-3-ol $C_{10}H_{18}O$ (linalool) [78-70-6] CDOSHBSFJOMGT-UHFFFAOYSA-N	2.0×10^{-1} 3.8×10^{-1} 4.6×10^{-1} 4.0×10^{-1} 4.8×10^{-1} 4.8×10^{-1} 2.1×10^{-1} 1.6 1.3×10^{-1} 3.3×10^{-1} 2.5×10^{-1} 2.5 6.2×10^{-1} 2.5×10^{-1} 6.9×10^{-1} 1.4 1.5×10^{-2} 4.6×10^{-1}	4400 14000	Leng et al. (2013) Copolovici and Niinemets (2007) Altschuh et al. (1999) Martins et al. (2017) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Li et al. (1998) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Savary et al. (2014) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Hertel and Sommer (2006) Duchowicz et al. (2020)	M M M V V V Q Q Q Q Q Q Q Q Q Q Q ?	315 259 184 271, 243 244 245 67 415 185, 21
linalool oxide $C_{10}H_{18}O_2$ [1365-19-1] BXOURKNXQXLKRK-UHFFFAOYSA-N	3.0×10^2		Dupeux et al. (2022)	Q	259



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>E</i>)-3,7-dimethyl-2,6-octadien-1-ol $C_{10}H_{18}O$ (geraniol) [106-24-1] GLZPCOQZEFWAFX-JXMROGBWSA-N	3.1 1.6 1.7×10^{-1}		Martins et al. (2017) Dupeux et al. (2022) HSDB (2015)	V Q Q	315 259 99
(<i>Z</i>)-3,7-dimethyl-2,6-octadien-1-ol $C_{10}H_{18}O$ [106-25-2] GLZPCOQZEFWAFX-YFHOEESVSA-N	8.6×10^{-1} 2.1×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
tricyclo[3.3.1.1(3,7)]decan-1-ol $C_{10}H_{16}O$ (1-adamantanol) [768-95-6] VLLNJDMDJRNFK-UHFFFAOYSA-N	6.0	5300	van Roon et al. (2005)	V	
3,7,11-trimethyl-2,6,10-dodecatrien-1-ol $C_{15}H_{26}O$ (farnesol) [4602-84-0] CRDAMVZIKSXFV-YFVJMOTDSA-N	3.9×10^{-2}		HSDB (2015)	Q	99
(<i>Z</i>)-9-octadecen-1-ol $C_{18}H_{36}O$ (oleyl alcohol) [143-28-2] ALSTYHKOOCCGGFT-KTKRTIGZSA-N	2.1×10^{-2}		HSDB (2015)	Q	99
(3 <i>E</i> ,13 <i>Z</i>)-octadeca-3,13-dien-1-ol $C_{18}H_{34}O$ [66410-28-4] QBNCGBJHGBGHLI-IYUNJCAVSA-N	2.4×10^{-1}		Ebert et al. (2023)	?	318
dihydroabietyl alcohol $C_{20}H_{34}O$ [26266-77-3] FLMIYUXOBAUKJM-UHFFFAOYSA-N	1.9×10^{-1} 2.4×10^1 2.6×10^1 2.0×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
ethylestrenol $C_{20}H_{32}O$ [965-90-2] AOXRBFYPMWLR-UHFFFAOYSA-N	4.3×10^{-1}		HSDB (2015)	Q	99
<i>trans</i> -phytol $C_{20}H_{40}O$ [150-86-7] BOTWFXYSFPMFNR-PYDDKJGSSA-N	1.0×10^{-2}		Ebert et al. (2023)	?	365



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hydroxybenzene	1.8×10^1	3000	Schwardt et al. (2021)	L	1
C_6H_5OH	2.2×10^1	8900	Brockbank (2013)	L	1
(phenol)	2.2×10^1	9800	Ji et al. (2008)	M	
[108-95-2]	2.8×10^1	2700	Guo and Brimblecombe (2007)	M	
ISWSIDIOOBJBQZ-UHFFFAOYSA-N	6.4	7700	Feigenbrugel et al. (2004b)	M	
	3.0×10^1	5900	Harrison et al. (2002)	M	
	1.9×10^1		Sheikheldin et al. (2001)	M	12
	>4.2		Altschuh et al. (1999)	M	
	8.1×10^1	7400	Tabai et al. (1997)	M	11
	4.2		Heal et al. (1995)	M	373
	1.6×10^1	6000	Dohnal and Fenclová (1995)	M	
	1.5×10^1		Tremp et al. (1993)	M	12
	1.7×10^1	6100	Abd-El-Bary et al. (1986)	M	
	7.6		Warner et al. (1980)	M	
	2.0×10^1		Mackay et al. (2006c)	V	
	2.5×10^1		Lide and Frederikse (1995)	V	
	1.9×10^1		Mackay et al. (1995)	V	
	1.9×10^1		Shiu et al. (1994)	V	
	3.4		Hwang et al. (1992)	V	
	1.1×10^1		Riederer (1990)	V	
	9.0×10^1		Leuenberger et al. (1985)	V	416
	4.8		Hine and Weimar (1965)	R	
	2.8×10^1	6800	Parsons et al. (1971)	T	417
	1.3×10^1		Yaws (2003)	X	258
	1.9	3600	Janini and Quaddora (1986)	X	298
	1.9×10^1	7300	Goldstein (1982)	X	298
	2.5×10^1		Howard (1989)	X	418
	3.0×10^1		Gaffney and Senum (1984)	X	389
	3.7×10^1		McCarty (1980)	X	368
	2.5×10^1		Schüürmann (2000)	C	21
	7.6		Shiu et al. (1994)	C	
	7.6		Smith et al. (1993)	C	
	2.1×10^1		Ryan et al. (1988)	C	
	7.6		Shen (1982)	C	
	1.8×10^1		Dupeux et al. (2022)	Q	259
	6.4×10^1		Keshavarz et al. (2022)	Q	
	4.2×10^1		Duchowicz et al. (2020)	Q	184
	6.3×10^1		Wang et al. (2017)	Q	80, 238
	1.1×10^1		Wang et al. (2017)	Q	80, 239
	3.6×10^1		Wang et al. (2017)	Q	80, 240
	2.5×10^1		Li et al. (2014)	Q	241
	9.9		Raventos-Duran et al. (2010)	Q	242, 243
	7.8		Raventos-Duran et al. (2010)	Q	244
	1.6×10^1		Raventos-Duran et al. (2010)	Q	245
	4.4		Hilal et al. (2008)	Q	
	1.8×10^1		Modarresi et al. (2007)	Q	67
		6200	Kühne et al. (2005)	Q	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.0×10^1		Yaffe et al. (2003)	Q	248, 249
	2.9×10^1		English and Carroll (2001)	Q	230, 231
	6.9		Katritzky et al. (1998)	Q	
	2.0×10^1		Russell et al. (1992)	Q	279
	2.0×10^1		Suzuki et al. (1992)	Q	232
	9.9		Nirmalakhandan and Speece (1988)	Q	
	3.0×10^1		Duchowicz et al. (2020)	?	185, 21
		5400	Kühne et al. (2005)	?	
	1.3×10^1		Yaws (1999)	?	21
	1.6×10^1		Abraham et al. (1990)	?	
(hydroxymethyl)-benzene $C_6H_5CH_2OH$ (benzyl alcohol) [100-51-6] WVDDGKGOMKODPV-UHFFFAOYSA-N	1.7×10^1		Chao et al. (2017)	M	
	$>3.7 \times 10^1$		Altschuh et al. (1999)	M	
	2.5×10^1		Chao et al. (2017)	V	
	6.2×10^{-2}		Mackay et al. (2006c)	V	
	6.2×10^{-2}		Mackay et al. (1995)	V	
	2.9×10^1		Abraham et al. (1994a)	R	
	3.8×10^1		Yaws (2003)	X	258
	3.8×10^1		Yaws (2003)	X	237
	2.5×10^1		Howard (1993)	X	412
	1.6×10^1		Dupeux et al. (2022)	Q	259
	2.3×10^1		Keshavarz et al. (2022)	Q	
	2.3×10^1		Duchowicz et al. (2020)	Q	299
	3.8×10^1		Wang et al. (2017)	Q	80, 238
	4.9×10^1		Wang et al. (2017)	Q	80, 239
	3.8×10^1		Wang et al. (2017)	Q	80, 240
	8.6×10^1		Gharagheizi et al. (2012)	Q	
	9.9×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^1		Raventos-Duran et al. (2010)	Q	244
	4.9×10^1		Raventos-Duran et al. (2010)	Q	245
	4.1×10^1		Gharagheizi et al. (2010)	Q	246
	2.2×10^1		Hilal et al. (2008)	Q	
	5.5×10^1		Modarresi et al. (2007)	Q	67
	1.1×10^1		Yao et al. (2002)	Q	229
	2.1×10^1		English and Carroll (2001)	Q	230, 231
	6.9×10^1		Nirmalakhandan et al. (1997)	Q	
	8.9×10^1		Saxena and Hildemann (1996)	E	401
	2.9×10^1		Duchowicz et al. (2020)	?	185, 21
	2.9×10^1		HSDB (2015)	?	419
	3.8×10^1		Yaws (1999)	?	21
	1.8×10^1		Abraham et al. (1990)	?	



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) [$\frac{\text{mol}}{\text{m}^3 \text{ Pa}}$]	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-hydroxy-2-methylbenzene <chem>HOC6H4CH3</chem>	6.7	7400	Brockbank (2013)	L	1
(2-cresol; <i>o</i> -cresol) [95-48-7] QWVGKYWNOKOFNN-UHFFFAOYSA-N	6.5		Chao et al. (2017)	M	
	4.2	8500	Feigenbrugel et al. (2004b)	M	
	1.1×10^1	6700	Harrison et al. (2002)	M	
	6.3		Altschuh et al. (1999)	M	
	5.6	5800	Dohnal and Fenclová (1995)	M	
	7.1		Tremp et al. (1993)	M	12
	8.2	7300	Parsons et al. (1972)	M	417
	5.8		Chao et al. (2017)	V	
			Mackay et al. (2006c)	V	420
	6.2		Lide and Frederikse (1995)	V	
	6.4		Mackay et al. (1995)	V	
	3.5×10^1		Leuenberger et al. (1985)	V	416
	8.8		Yaws (2003)	X	258
	2.6	4600	Janini and Quaddora (1986)	X	298
	6.2		Howard (1989)	X	418
	8.2		Gaffney and Senum (1984)	X	389
	8.3		Schüürmann (2000)	C	21
	8.4		Dupeux et al. (2022)	Q	259
	5.9		Keshavarz et al. (2022)	Q	
	2.3×10^1		Duchowicz et al. (2020)	Q	
	3.9×10^1		Wang et al. (2017)	Q	80, 238
	1.2×10^1		Wang et al. (2017)	Q	80, 239
	1.1×10^1		Wang et al. (2017)	Q	80, 240
	8.0		Li et al. (2014)	Q	241
	1.2×10^1		Gharagheizi et al. (2012)	Q	
	5.3		Hilal et al. (2008)	Q	
	6.2		Modarresi et al. (2007)	Q	67
		6500	Kühne et al. (2005)	Q	
	8.8		Yaffe et al. (2003)	Q	248, 249
	9.9		Yao et al. (2002)	Q	229, 267
	9.5		English and Carroll (2001)	Q	230, 231
	4.6		Katritzky et al. (1998)	Q	
	1.5×10^1		Suzuki et al. (1992)	Q	232
	7.2		Nirmalakhandan and Speece (1988)	Q	
	8.2		Duchowicz et al. (2020)	?	185, 21
		8100	Kühne et al. (2005)	?	
	5.8		Yaws (1999)	?	21, 12
	1.2×10^1		Yaws and Yang (1992)	?	21, 12
	8.0		Abraham et al. (1990)	?	
1-hydroxy-3-methylbenzene <chem>HOC6H4CH3</chem>	1.2×10^1	6200	Brockbank (2013)	L	1
(3-cresol; <i>m</i> -cresol) [108-39-4] RLSSMJSEOOYNOY-UHFFFAOYSA-N	7.9	9000	Feigenbrugel et al. (2004b)	M	
	1.2×10^1		Altschuh et al. (1999)	M	
	1.2×10^1	6000	Dohnal and Fenclová (1995)	M	
	1.3×10^1		Mackay et al. (2006c)	V	
	1.2×10^1		Schüürmann (2000)	V	
	1.1×10^1		Lide and Frederikse (1995)	V	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^1		Mackay et al. (1995)	V	
	1.1×10^1		Meylan and Howard (1991)	V	
	4.9×10^1		Leuenberger et al. (1985)	V	416
	2.2×10^1		Yaws (2003)	X	258
	6.1	7700	Janini and Quaddora (1986)	X	298
	1.1×10^1		Howard (1989)	X	418
	1.8×10^1		Dupeux et al. (2022)	Q	259
	5.9		Keshavarz et al. (2022)	Q	
	2.3×10^1		Duchowicz et al. (2020)	Q	184
	1.2×10^1		Gharagheizi et al. (2012)	Q	
	3.9		Hilal et al. (2008)	Q	
	1.1×10^1		Modarresi et al. (2007)	Q	67
		6500	Kühne et al. (2005)	Q	
	1.2×10^1		Yaffe et al. (2003)	Q	248, 249
	1.0×10^1		Yao et al. (2002)	Q	229
	1.7×10^1		Katritzky et al. (1998)	Q	
	1.6×10^1		Meylan and Howard (1991)	Q	
	1.2×10^1		Duchowicz et al. (2020)	?	185, 21
		6500	Kühne et al. (2005)	?	
	1.4×10^1		Yaws (1999)	?	21, 12
	1.4×10^1		Yaws and Yang (1992)	?	21, 12
	4.3		Abraham et al. (1990)	?	
1-hydroxy-4-methylbenzene <chem>HOC6H4CH3</chem> (4-cresol; <i>p</i> -cresol) [106-44-5] IWDCLRJOBJRNH-UHFFFAOYSA-N	1.3×10^1	6600	Brockbank (2013)	L	1
	1.0×10^1	9300	Feigenbrugel et al. (2004b)	M	
	>2.9		Altschuh et al. (1999)	M	
	1.3×10^1	6100	Dohnal and Fenclová (1995)	M	
	1.3×10^1		Tremp et al. (1993)	M	12
	1.3×10^1	7200	Parsons et al. (1972)	M	417
	1.8×10^1		Mackay et al. (2006c)	V	
	1.0×10^1		Lide and Frederikse (1995)	V	
	1.5×10^1		Mackay et al. (1995)	V	
	4.5×10^1		Leuenberger et al. (1985)	V	416
	1.2		Smith and Bomberger (1980)	V	24
	2.2×10^1		Yaws (2003)	X	258
	5.2	4600	Janini and Quaddora (1986)	X	298
	1.0×10^1		Howard (1989)	X	418
	9.9		Gaffney and Senum (1984)	X	389
	1.3×10^1		Schüürmann (2000)	C	21
	1.6×10^1		Dupeux et al. (2022)	Q	259
	5.9		Keshavarz et al. (2022)	Q	
	2.3×10^1		Duchowicz et al. (2020)	Q	184
	1.8×10^1		Gharagheizi et al. (2012)	Q	
	4.2		Hilal et al. (2008)	Q	
	1.7×10^1		Modarresi et al. (2007)	Q	67
		6500	Kühne et al. (2005)	Q	
	8.8		Yaffe et al. (2003)	Q	248, 272
	1.5×10^1		Yao et al. (2002)	Q	229



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.7×10^1		English and Carroll (2001)	Q	230, 231
	1.5×10^1		Katritzky et al. (1998)	Q	
	1.4×10^1		Suzuki et al. (1992)	Q	232
	7.0		Nirmalakhandan and Speece (1988)	Q	
	9.9		Duchowicz et al. (2020)	?	185, 21
		6000	Kühne et al. (2005)	?	
	1.3×10^1		Yaws (1999)	?	21, 12
	2.5×10^1		Yaws and Yang (1992)	?	21, 12
	1.3×10^1		Abraham et al. (1990)	?	
1-hydroxy-2,3-dimethylbenzene $C_8H_{10}O$	6.7	6100	Brockbank (2013)	L	1
(2,3-xylenol; 2,3-dimethylphenol)	9.3		Sheikheldin et al. (2001)	M	12
[526-75-0] QWBBPBRQALCEIZ-UHFFFAOYSA-N	1.0×10^1	6800	Dohnal and Fenclová (1995)	M	
	3.2		HSDB (2015)	V	
	1.8×10^1		Mackay et al. (2006c)	V	
	1.9×10^1		Mackay et al. (1995)	V	
	4.9×10^1		Leuenberger et al. (1985)	V	416
	1.3×10^1		Abraham et al. (1994a)	R	
	7.9		Keshavarz et al. (2022)	Q	
	1.2×10^1		Duchowicz et al. (2020)	Q	184
	2.2×10^1		Wang et al. (2017)	Q	80, 238
	1.4×10^1		Wang et al. (2017)	Q	80, 239
	9.6		Wang et al. (2017)	Q	80, 240
	6.2		Raventos-Duran et al. (2010)	Q	242, 243
	7.8		Raventos-Duran et al. (2010)	Q	244
	1.6×10^1		Raventos-Duran et al. (2010)	Q	245
	5.8		Hilal et al. (2008)	Q	
	5.2		Modarresi et al. (2007)	Q	67
	1.4×10^1		Yaffe et al. (2003)	Q	248, 249
	1.2×10^1		English and Carroll (2001)	Q	230, 231
	4.6×10^1		Nirmalakhandan et al. (1997)	Q	
	1.3×10^1		Duchowicz et al. (2020)	?	185, 21
1-hydroxy-2,4-dimethylbenzene $C_8H_{10}O$	3.5	5500	Brockbank (2013)	L	1
(2,4-xylenol; 2,4-dimethylphenol)	6.6		Sheikheldin et al. (2001)	M	12
[105-67-9] KUFFFULVDNCHOFZ-UHFFFAOYSA-N	4.9	6100	Dohnal and Fenclová (1995)	M	
	1.9×10^{-3}	-3200	Ashworth et al. (1988)	M	33, 278
	5.5		Mackay et al. (2006c)	V	
	1.6×10^1		Lide and Frederikse (1995)	V	
	5.5		Mackay et al. (1995)	V	
	5.5×10^{-1}		Hwang et al. (1992)	V	
	4.9		Meylan and Howard (1991)	V	
	1.6×10^1		Leuenberger et al. (1985)	V	416
	1.0×10^1		Abraham et al. (1994a)	R	
	4.7		Yaws (2003)	X	258
	4.1	6600	Goldstein (1982)	X	298
	1.6×10^1		Howard (1989)	X	418
	5.8×10^{-1}		Smith et al. (1993)	C	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.4×10^{-1}		Ryan et al. (1988)	C	
	1.7×10^1		Petrasek et al. (1983)	C	
	6.7		Dupeux et al. (2022)	Q	259
	7.9		Keshavarz et al. (2022)	Q	
	1.2×10^1		Duchowicz et al. (2020)	Q	299
	2.2×10^1		Wang et al. (2017)	Q	80, 238
	1.2×10^1		Wang et al. (2017)	Q	80, 239
	8.7		Wang et al. (2017)	Q	80, 240
	4.6		Gharagheizi et al. (2012)	Q	
	6.2		Raventos-Duran et al. (2010)	Q	242, 243
	6.2		Raventos-Duran et al. (2010)	Q	244
	1.6×10^1		Raventos-Duran et al. (2010)	Q	245
	5.1		Hilal et al. (2008)	Q	
	4.3		Modarresi et al. (2007)	Q	67
	1.1×10^1		Yaffe et al. (2003)	Q	248, 249
	1.6×10^1		English and Carroll (2001)	Q	230, 231
	6.7		Katritzky et al. (1998)	Q	
	4.6×10^1		Nirmalakhandan et al. (1997)	Q	
	1.4×10^1		Meylan and Howard (1991)	Q	
	1.0×10^1		Duchowicz et al. (2020)	?	185, 21
1-hydroxy-2,5-dimethylbenzene	8.2	8700	Brockbank (2013)	L	1
$\text{C}_8\text{H}_{10}\text{O}$	7.5	6800	Dohnal and Fenclová (1995)	M	
(2,5-xyleneol; 2,5-dimethylphenol)	1.4		HSDB (2015)	V	
[95-87-4]	7.5		Mackay et al. (2006c)	V	
NKTOLZVEWDHZMU-UHFFFAOYSA-N	7.4		Mackay et al. (1995)	V	
	3.8×10^1		Leuenberger et al. (1985)	V	416
	8.8		Abraham et al. (1994a)	R	
	1.9		Yaws (2003)	X	258
	5.7		Dupeux et al. (2022)	Q	259
	7.9		Keshavarz et al. (2022)	Q	
	1.2×10^1		Duchowicz et al. (2020)	Q	299
	2.2×10^1		Wang et al. (2017)	Q	80, 238
	1.2×10^1		Wang et al. (2017)	Q	80, 239
	8.9		Wang et al. (2017)	Q	80, 240
	6.2		Raventos-Duran et al. (2010)	Q	242, 243
	6.2		Raventos-Duran et al. (2010)	Q	244
	1.6×10^1		Raventos-Duran et al. (2010)	Q	245
	5.2		Hilal et al. (2008)	Q	
	4.8		Modarresi et al. (2007)	Q	67
	3.1		Yaffe et al. (2003)	Q	248, 272
	1.4×10^1		English and Carroll (2001)	Q	230, 274
	4.6×10^1		Nirmalakhandan et al. (1997)	Q	
	8.8		Duchowicz et al. (2020)	?	185, 21



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-hydroxy-2,6-dimethylbenzene $C_8H_{10}O$	1.6	6300	Brockbank (2013)	L	1
(2,6-xylenol; 2,6-dimethylphenol) [576-26-1] NXXYKOUNUYWIHA-UHFFFAOYSA-N	2.3	6200	Dohnal and Fenclová (1995)	M	
	1.3		Hawthorne et al. (1985)	M	
	2.5		Mackay et al. (2006c)	V	
	2.6		Mackay et al. (1995)	V	
	2.6		Shiu et al. (1994)	V	
	5.2		Leuenberger et al. (1985)	V	416
	2.9		Abraham et al. (1994a)	R	
	1.4		Yaws (2003)	X	258
	1.6		Dupeux et al. (2022)	Q	259
	7.9		Keshavarz et al. (2022)	Q	
	3.0		Duchowicz et al. (2020)	Q	299
	6.2		Raventos-Duran et al. (2010)	Q	242, 243
	3.9		Raventos-Duran et al. (2010)	Q	244
	1.6×10^1		Raventos-Duran et al. (2010)	Q	245
	9.2		Hilal et al. (2008)	Q	
	1.8		Modarresi et al. (2007)	Q	67
	3.1		Yaffe et al. (2003)	Q	248, 249
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	4.6×10^1		Nirmalakhandan et al. (1997)	Q	
	1.5		Duchowicz et al. (2020)	?	185, 21
	1.4		Yaws (1999)	?	21
1-hydroxy-3,4-dimethylbenzene $C_8H_{10}O$	2.6×10^1	7200	Brockbank (2013)	L	1
(3,4-xylenol; 3,4-dimethylphenol) [95-65-8] YCOXTKKNXUZSKD-UHFFFAOYSA-N	2.4×10^1	7100	Dohnal and Fenclová (1995)	M	
	8.2		HSDB (2015)	V	
	4.6×10^1		Mackay et al. (2006c)	V	
	4.7×10^1		Mackay et al. (1995)	V	
	4.7×10^1		Shiu et al. (1994)	V	
	1.1×10^2		Leuenberger et al. (1985)	V	416
	2.4×10^1		Abraham et al. (1994a)	R	
	1.1×10^1		Yaws (2003)	X	258
	1.8×10^1		Dupeux et al. (2022)	Q	259
	7.9		Keshavarz et al. (2022)	Q	
	1.2×10^1		Duchowicz et al. (2020)	Q	299
	1.1×10^1		Gharagheizi et al. (2012)	Q	
	6.2		Raventos-Duran et al. (2010)	Q	242, 243
	7.8		Raventos-Duran et al. (2010)	Q	244
	1.6×10^1		Raventos-Duran et al. (2010)	Q	245
	4.4		Hilal et al. (2008)	Q	
	1.2×10^1		Modarresi et al. (2007)	Q	67
	2.4×10^1		Yaffe et al. (2003)	Q	248, 249
	2.1×10^1		English and Carroll (2001)	Q	230, 260
	4.6×10^1		Nirmalakhandan et al. (1997)	Q	
	2.4×10^1		Duchowicz et al. (2020)	?	185, 21



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.9		Raventos-Duran et al. (2010)	Q	244
	1.2×10^1		Raventos-Duran et al. (2010)	Q	245
	1.6		Modarresi et al. (2007)	Q	67
	2.2		Yaffe et al. (2003)	Q	248, 249
	3.1		Katritzky et al. (1998)	Q	
1-hydroxy-3-ethylbenzene $C_8H_{10}O$ (3-ethylphenol) [620-17-7] HMNKTRSOROOSPP-UHFFFAOYSA-N	4.9		Karl et al. (2003)	M	
	1.6×10^1		Abraham et al. (1994a)	R	
	7.9		Keshavarz et al. (2022)	Q	
	2.4×10^1		Duchowicz et al. (2020)	Q	184
	9.0		HSDB (2015)	Q	99
	6.2		Raventos-Duran et al. (2010)	Q	242, 243
	4.9		Raventos-Duran et al. (2010)	Q	244
	1.2×10^1		Raventos-Duran et al. (2010)	Q	245
	3.4		Hilal et al. (2008)	Q	
	2.1×10^1		Modarresi et al. (2007)	Q	67
	1.5×10^1		Yaffe et al. (2003)	Q	248, 249
	1.8×10^1		English and Carroll (2001)	Q	230, 231
	5.4×10^1		Nirmalakhandan et al. (1997)	Q	
	1.6×10^1		Duchowicz et al. (2020)	?	185, 21
1-hydroxy-4-ethylbenzene $C_8H_{10}O$ (4-ethylphenol) [123-07-9] HXDOZKJGKXYMEW-UHFFFAOYSA-N	8.2		HSDB (2015)	V	
	2.1×10^1		Mackay et al. (2006c)	V	
	1.3×10^1		Abraham et al. (1994a)	R	
	7.9		Keshavarz et al. (2022)	Q	
	2.4×10^1		Duchowicz et al. (2020)	Q	299
	6.2		Raventos-Duran et al. (2010)	Q	271, 243
	6.2		Raventos-Duran et al. (2010)	Q	244
	1.2×10^1		Raventos-Duran et al. (2010)	Q	245
	3.8		Hilal et al. (2008)	Q	
	9.4		Modarresi et al. (2007)	Q	67
	1.6×10^1		English and Carroll (2001)	Q	230, 231
	5.4×10^1		Nirmalakhandan et al. (1997)	Q	
	1.3×10^1		Duchowicz et al. (2020)	?	185, 21
2,3,4-trimethylphenol $C_9H_{12}O$ [526-85-2] XRUGBBIQLIVCSI-UHFFFAOYSA-N	1.3×10^1		Wang et al. (2017)	Q	80, 238
	1.8×10^1		Wang et al. (2017)	Q	80, 239
	8.9		Wang et al. (2017)	Q	80, 240
2,3,5-trimethylphenol $C_9H_{12}O$ [697-82-5] OGRAOKJKVGDSEFR-UHFFFAOYSA-N	1.2×10^1		Mackay et al. (2006c)	V	
	1.2×10^1		Mackay et al. (1995)	V	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,6-trimethylphenol $C_9H_{12}O$ [2416-94-6] QQOMQLYQAXGHSU-UHFFFAOYSA-N	2.5 2.5 1.6 2.5 1.1×10^1 1.3 1.1×10^1 4.1×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q Q Q	186 80, 238 80, 239 80, 240 67
2,4,6-trimethylphenol $C_9H_{12}O$ [527-60-6] BPRYUXCVCCNUFE-UHFFFAOYSA-N	3.8 3.2 1.3 1.4 1.6 2.5 8.9 1.2 4.9 3.1 1.2×10^1 9.2 1.2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Mackay et al. (1995) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V V V Q Q Q Q Q Q Q Q	186 80, 238 80, 239 80, 240 242, 243 244 245 67
3,4,5-trimethylphenol $C_9H_{12}O$ [527-54-8] FDQQNNZKEJIHMS-UHFFFAOYSA-N	3.4×10^1 3.8×10^1		Mackay et al. (2006c) Mackay et al. (1995)	V V	
1-hydroxy-4-propylbenzene $C_9H_{12}O$ (4-propylphenol) [645-56-7] KLSLBUSXWBJMJC-UHFFFAOYSA-N	1.7 8.6 1.1×10^1 2.5×10^1 4.9 3.9 9.9 3.1 1.0×10^1 8.8 1.2×10^1 4.3×10^1 8.7		Mackay et al. (2006c) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	V R Q Q Q Q Q Q Q Q Q Q ?	 271, 243 244 245 67 248, 249 230, 260 185, 21
2-(1-methylethyl)-phenol $C_9H_{12}O$ [88-69-7] CRBJBYGJVIBWIY-UHFFFAOYSA-N	2.6 2.8×10^1 3.9 4.5 2.8		Mackay et al. (2006c) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008)	V Q Q Q Q	 80, 238 80, 239 80, 240



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-phenylisopropanol $\text{C}_9\text{H}_{12}\text{O}$ [617-94-7] BDCFWDZNLCTMF-UHFFFAOYSA-N	2.0×10^1 1.4×10^1 1.2×10^1 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	80, 238 80, 239 80, 240 99
2-ethyl-3-methylphenol $\text{C}_9\text{H}_{12}\text{O}$ [6161-62-2] OCKYMBMCPAOFLL-UHFFFAOYSA-N	1.8×10^1 8.9 5.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-ethyl-5-methylphenol $\text{C}_9\text{H}_{12}\text{O}$ [1687-61-2] LTRVUFFOMIUCPJ-UHFFFAOYSA-N	1.8×10^1 8.0 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-ethyl-6-methylphenol $\text{C}_9\text{H}_{12}\text{O}$ [1687-64-5] CIRRFQIWFQSS-UHFFFAOYSA-N	3.3 6.2 6.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
5-ethyl-3-methylphenol $\text{C}_9\text{H}_{12}\text{O}$ [698-71-5] XTCHLXABLZQNNN-UHFFFAOYSA-N	1.5×10^1 1.3×10^1 4.9 3.9		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q	186 242, 243 244
	9.9 2.9 1.8×10^1		Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	Q Q Q	245 67
1-(2-methylphenyl)ethanol $\text{C}_9\text{H}_{12}\text{O}$ [7287-82-3] SDCBYRLJYGORNK-UHFFFAOYSA-N	2.1×10^1 2.9×10^1 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-propylphenol $\text{C}_9\text{H}_{12}\text{O}$ [644-35-9] LCHYEKKJCUJAKN-UHFFFAOYSA-N	2.7×10^1 5.6 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1-phenyl-1-propanol $\text{C}_9\text{H}_{12}\text{O}$ [93-54-9] DYUQAZSOFZSPHD-UHFFFAOYSA-N	2.8×10^1 2.3×10^1 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2,3-dimethylbenzyl alcohol $\text{C}_9\text{H}_{12}\text{O}$ [13651-14-4] ZQQIVMXQYUZZKIQ-UHFFFAOYSA-N	1.3×10^1 7.4×10^1 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4-dimethylbenzyl alcohol $C_9H_{12}O$ [6966-10-5] OKGZCXPDKKKZAP-UHFFFAOYSA-N	1.3×10^1 6.2×10^1 5.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
3,5-dimethylbenzyl alcohol $C_9H_{12}O$ [27129-87-9] IQWWTJDRVBWBEL-UHFFFAOYSA-N	1.3×10^1 3.7×10^1 4.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-(1,1-dimethylethyl)-phenol $C_{10}H_{14}O$ [88-18-6] WJQOZHYUIDYNHM-UHFFFAOYSA-N	3.9×10^{-1} 4.4 7.0		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	186 99
3-(1,1-dimethylethyl)-phenol $C_{10}H_{14}O$ [585-34-2] CYEKUDPFXBLGHH-UHFFFAOYSA-N	5.1 4.4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
2-(1-methylpropyl)phenol $C_{10}H_{14}O$ [89-72-5] NGFPWHGISWUQOI-UHFFFAOYSA-N	4.7		HSDB (2015)	Q	99
4-(1-methylpropyl)-phenol $C_{10}H_{14}O$ (4-sec-butylphenol) [99-71-8] ZUTYZAFDFLLILI-UHFFFAOYSA-N	3.6 4.3		Mackay et al. (2006c) Mackay et al. (1995)	V V	
4-tert-butylphenol $C_{10}H_{14}O$ [98-54-4] QHPQWRBYOIRBIT-UHFFFAOYSA-N	8.9 1.6×10^1 2.1×10^1 1.4×10^1 4.4 2.1 4.8 8.8 6.7 2.5×10^1 2.4×10^1 5.2 2.7 8.3 1.5×10^{-1} 8.8	7700	Parsons et al. (1972) Mackay et al. (2006c) Mackay et al. (1995) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Nirmalakhandan and Speece (1988) Duchowicz et al. (2020) Betterton (1992) Abraham et al. (1990)	M V V Q Q Q Q Q Q Q Q Q Q ? ? ?	417 67 248, 249 230, 231 232 185, 21 421



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Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-5-(1-methylethyl)-phenol $C_{10}H_{14}O$ (carvacrol) [499-75-2] RECUKUPTGUEGMW-UHFFFAOYSA-N	1.5 2.4	9300	Martins et al. (2017) van Roon et al. (2005)	V V	315
5-methyl-2-(1-methylethyl)-phenol $C_{10}H_{14}O$ (thymol) [89-83-8] MGSRCZKZVOBKFT-UHFFFAOYSA-N	2.0×10^1 1.5 3.0 5.1 3.1 2.0 7.8 2.8 7.1×10^{-1}	9300	Duchowicz et al. (2020) Martins et al. (2017) van Roon et al. (2005) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V V Q Q Q Q Q Q	186 315 242, 243 244 245 67
1-(3,5-dimethylphenyl)ethanol $C_{10}H_{14}O$ [5379-18-0] RHBAJFPGUNNLFU-UHFFFAOYSA-N	1.2×10^1 1.8×10^1 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
6-ethyl-2,4-xyleneol $C_{10}H_{14}O$ [2219-79-6] MXHAHSBTOVDBK-UHFFFAOYSA-N	2.0 5.8 6.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-(1,1-dimethylethyl)-4-methylphenol $C_{11}H_{16}O$ [2409-55-4] IKEHOXWJQXIQAG-UHFFFAOYSA-N	6.6		HSDB (2015)	Q	99
4-(1,1-dimethylpropyl)phenol $C_{11}H_{16}O$ [80-46-6] NRZWYNLFLDQOX-UHFFFAOYSA-N	4.9		HSDB (2015)	V	
MCM:DE35TOH $C_{11}H_{16}O$ OZZOZHUVUMFILP-UHFFFAOYSA-N	1.0×10^1 1.6×10^1 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DEMPHOH $C_{11}H_{16}O$ VUDWBUZLGA SXDX-UHFFFAOYSA-N	1.8 3.8 6.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
josenol $C_{11}H_{14}O$ (2-methyl-3-(4-methylphenyl)-2-propen-1-ol) [56138-10-4] WWWATUWNHYNMNW-UHFFFAOYSA-N	4.5×10^1		Dupeux et al. (2022)	Q	259



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
lilyflore $C_{12}H_{16}O$ [285977-85-7] UWSPWQQZFOSTHS-UHFFFAOYSA-N	1.3×10^1		Dupeux et al. (2022)	Q	259
benzhydrol $C_{13}H_{12}O$ [91-01-0] QILSFLSDHQAZET-UHFFFAOYSA-N	3.8×10^2		Ebert et al. (2023)	?	318
1-hydroxy-4-octylbenzene $C_{14}H_{22}O$ (4-octylphenol) [1806-26-4] NTDQQZYCCIDJRK-UHFFFAOYSA-N	1.3 2.0		Mackay et al. (2006c) Mackay et al. (1995)	V V	
4-(1,1,3,3-tetramethylbutyl)-phenol $C_{14}H_{22}O$ (<i>p-tert</i> -octylphenol) [140-66-9] ISAVYTVYFVQUUDY-UHFFFAOYSA-N	2.3 1.4 2.2 2.3 1.0×10^1 1.8	9000	Xie et al. (2004) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
1-hydroxy-4-nonylbenzene $C_{15}H_{24}O$ (4-nonylphenol) [104-40-5] IGFHQQFPSIBGKE-UHFFFAOYSA-N	2.9×10^{-1} 2.9×10^{-1} 3.6×10^{-1} 6.4×10^{-1} 2.8×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Mackay et al. (1995) Duchowicz et al. (2020)	V V V V Q	186
2,6-bis(1,1-dimethylethyl)-4-methylphenol $C_{15}H_{24}O$ (butylated hydroxytoluene; BHT) [128-37-0] NLZUEZXRPGMBCV-UHFFFAOYSA-N	2.9×10^{-3}		Yoshida et al. (1983)	V	
4-(3',5'-dimethyl-3'-heptyl)-phenol(+) $C_{15}H_{24}O$ RYIHVPUIXFRNI-IUODEOHRSA-N	2.9	8700	Xie et al. (2004)	M	
4-(3',5'-dimethyl-3'-heptyl)-phenol(-) $C_{15}H_{24}O$ RYIHVPUIXFRNI-SWLSCSKDSA-N	3.3	8600	Xie et al. (2004)	M	



Table A3.2: Alcohols (ROH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.5×10^2		English and Carroll (2001)	Q	230, 231
	1.5×10^3		Nirmalakhandan et al. (1997)	Q	
	1.6×10^2		Duchowicz et al. (2020)	?	185, 21
2-naphthalenol $C_{10}H_8O$ (2-naphthol) [135-19-3] JWAZRIHNYRIHIV-UHFFFAOYSA-N	1.1×10^2		Mackay et al. (2006c)	V	
	3.6×10^2		Abraham et al. (1994a)	R	
	2.1×10^2		Keshavarz et al. (2022)	Q	
	1.7×10^2		Duchowicz et al. (2020)	Q	
	2.1×10^2		HSDB (2015)	Q	99
	7.0×10^1		Hilal et al. (2008)	Q	
	2.7×10^2		Modarresi et al. (2007)	Q	67
		7400	Kühne et al. (2005)	Q	
	5.8×10^2		English and Carroll (2001)	Q	230, 231
	1.7×10^3		Nirmalakhandan et al. (1997)	Q	
	3.6×10^2		Duchowicz et al. (2020)	?	185, 21
		7200	Kühne et al. (2005)	?	
<i>o</i> -hydroxybiphenyl $C_{12}H_{10}O$ [90-43-7] LLEMOWNGBBNAJR-UHFFFAOYSA-N	9.4		Duchowicz et al. (2020)	V	186
	9.4		HSDB (2015)	V	
	2.9×10^{-1}		Mackay et al. (2006c)	V	
	2.1×10^2		Duchowicz et al. (2020)	Q	
	3.1×10^1		Hilal et al. (2008)	Q	
	1.1×10^1		Modarresi et al. (2007)	Q	67
<i>p</i> -hydroxybiphenyl $C_{12}H_{10}O$ [92-69-3] YXVFYQXJAXKLAK-UHFFFAOYSA-N	1.6×10^{-1}		Mackay et al. (2006c)	V	
	1.9×10^2		HSDB (2015)	Q	99
2,4,6-tris(1,1-dimethylethyl)phenol $C_{18}H_{30}O$ [732-26-3] PFEFOYRSMXVNEL-UHFFFAOYSA-N	1.0		Zhang et al. (2010)	Q	287, 288
	5.6×10^{-2}		Zhang et al. (2010)	Q	287, 289
	3.3×10^{-2}		Zhang et al. (2010)	Q	287, 290
	5.3×10^{-2}		Zhang et al. (2010)	Q	287, 291
dehydroabietol $C_{20}H_{30}O$ [3772-55-2] WSKGRAGZAQRSED-IOJLRTSASA-N	8.4		Zhang et al. (2010)	Q	287, 288
	1.8×10^2		Zhang et al. (2010)	Q	287, 289
	2.4×10^1		Zhang et al. (2010)	Q	287, 290
	7.2×10^{-1}		Zhang et al. (2010)	Q	287, 291
2,2'-methylenebis(6-(1,1-dimethylethyl)-4-methylphenol) $C_{23}H_{32}O_2$ [119-47-1] KGRVJHAUYBGFFP-UHFFFAOYSA-N	1.2×10^6		HSDB (2015)	Q	99
2,4-dinonylphenol $C_{24}H_{42}O$ [137-99-5] FDAJTLLBHNHECW-UHFFFAOYSA-N	1.5×10^{-1}		HSDB (2015)	Q	99
	1.6×10^{-1}		Zhang et al. (2010)	Q	287, 288
	3.8×10^{-1}		Zhang et al. (2010)	Q	287, 289
	7.0×10^{-1}		Zhang et al. (2010)	Q	287, 290
	2.5×10^{-1}		Zhang et al. (2010)	Q	287, 291



Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-propanediol $C_3H_8O_2$ (propylene glycol) [57-55-6] DNIAPMSPFPWPGF-UHFFFAOYSA-N	2.7×10^3	9500	Burkholder et al. (2019)	L	
	2.7×10^3		Burkholder et al. (2015)	L	
	7.7×10^2		Duchowicz et al. (2020)	V	186
	7.6×10^2		HSDB (2015)	V	
	2.7×10^3		Compernelle and Müller (2014b)	V	
	2.7×10^3		Yaws (2003)	X	258
	2.7×10^3		Yaws (2003)	X	237
	1.9×10^3		Dupeux et al. (2022)	Q	259
	3.5×10^2		Duchowicz et al. (2020)	Q	
	3.1×10^2		Wang et al. (2017)	Q	80, 238
1,3-propanediol $C_3H_8O_2$ [504-63-2] YPFDHNVEDLHUCE-UHFFFAOYSA-N	1.6×10^4	9500	Burkholder et al. (2019)	L	
	1.6×10^4		Burkholder et al. (2015)	L	
	9.1×10^3		Bone et al. (1983)	M	12
	1.6×10^4		Compernelle and Müller (2014b)	V	
	7.4×10^2		Wang et al. (2017)	Q	80, 238
	6.3×10^3		Wang et al. (2017)	Q	80, 239
	4.8×10^3		Wang et al. (2017)	Q	80, 240
	3.1×10^3		Raventos-Duran et al. (2010)	Q	271, 243
	2.5×10^3		Raventos-Duran et al. (2010)	Q	244
	6.2×10^1		Raventos-Duran et al. (2010)	Q	245
1,2,3-propanetriol $C_3H_8O_3$ (glycerol) [56-81-5] PEDCQBHVMGVHV-UHFFFAOYSA-N	4.7×10^6	11000	Burkholder et al. (2019)	L	
	4.7×10^6		Burkholder et al. (2015)	L	
	5.8×10^2		Butler and Ramchandani (1935)	M	424
	4.7×10^6		Compernelle and Müller (2014b)	V	
	5.0×10^6		Hwang et al. (1992)	V	
	3.8×10^2		Keshavarz et al. (2022)	Q	
	1.7×10^5		Duchowicz et al. (2020)	Q	
	5.7×10^2		Saxena and Hildemann (1996) Duchowicz et al. (2020)	E ?	401, 429 185, 21
1,2-butanediol $C_4H_{10}O_2$ [584-03-2] BMRWNKZVCUKKSR-UHFFFAOYSA-N	2.1×10^3	9900	Burkholder et al. (2019)	L	430
	2.1×10^3		Burkholder et al. (2015)	L	431
	$>3.4 \times 10^2$		Altschuh et al. (1999)	M	
	1.7×10^3		Duchowicz et al. (2020)	V	186
	2.1×10^3		Compernelle and Müller (2014b)	V	
	4.4×10^2		Duchowicz et al. (2020)	Q	
	2.9×10^2		Wang et al. (2017)	Q	80, 238
	7.6×10^2	Wang et al. (2017)	Q	80, 239	
	4.8×10^2	Wang et al. (2017)	Q	80, 240	



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Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-butanediol $C_4H_{10}O_2$ [107-88-0] PUPZLCDOIYMWBV-UHFFFAOYSA-N	7.0×10^3	10000	Burkholder et al. (2019)	L	
	7.0×10^3		Burkholder et al. (2015)	L	
	4.1×10^3		Duchowicz et al. (2020)	V	186
	7.0×10^3		Compernelle and Müller (2014b)	V	
	9.5×10^2		Duchowicz et al. (2020)	Q	
	6.9×10^2		Wang et al. (2017)	Q	80, 238
	4.0×10^3		Wang et al. (2017)	Q	80, 239
	2.5×10^3		Wang et al. (2017)	Q	80, 240
	4.9×10^4	Saxena and Hildemann (1996)	E	401	
1,4-butanediol $C_4H_{10}O_2$ [110-63-4] WERYXYBDMZQEQL-UHFFFAOYSA-N	3.5×10^4	11000	Burkholder et al. (2019)	L	
	3.5×10^4		Burkholder et al. (2015)	L	
	$>9.0 \times 10^2$		Altschuh et al. (1999)	M	
	7.6×10^3		Duchowicz et al. (2020)	V	186
	7.6×10^3		HSDB (2015)	V	
	3.5×10^4		Compernelle and Müller (2014b)	V	
	2.4×10^3		Duchowicz et al. (2020)	Q	
	6.0×10^2		Wang et al. (2017)	Q	80, 238
	7.6×10^3		Wang et al. (2017)	Q	80, 239
	9.6×10^3		Wang et al. (2017)	Q	80, 240
	3.1×10^4		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^3		Raventos-Duran et al. (2010)	Q	244
	3.9×10^1		Raventos-Duran et al. (2010)	Q	245
	8.0×10^3		Hilal et al. (2008)	Q	
1.6×10^3	Modarresi et al. (2007)	Q	67		
	1.9×10^4	Saxena and Hildemann (1996)	E	401, 432	
		Yaws (1999)	?	21, 12	
2,3-butanediol $C_4H_{10}O_2$ [513-85-9] OWBTYPJTUOEWEK-UHFFFAOYSA-N	1.1×10^3	9900	Burkholder et al. (2019)	L	
	1.1×10^3		Burkholder et al. (2015)	L	
	3.4×10^2		Duchowicz et al. (2020)	V	186
	3.4×10^2		HSDB (2015)	V	
	1.1×10^3		Compernelle and Müller (2014b)	V	
	9.7×10^2		Yaws (2003)	X	237, 12
	1.7×10^2		Duchowicz et al. (2020)	Q	
	3.3×10^2		Wang et al. (2017)	Q	80, 238
	1.2×10^3		Wang et al. (2017)	Q	80, 239
	4.1×10^2		Wang et al. (2017)	Q	80, 240
	1.7×10^3	Gharagheizi et al. (2012)	Q		
	7.8×10^2	Gharagheizi et al. (2010)	Q	246	
		Saxena and Hildemann (1996)	E	401, 433	
<i>meso</i> -2,3-butanediol $C_4H_{10}O_2$ [5341-95-7] OWBTYPJTUOEWEK-ZXZARUISSA-N	2.2×10^2		Duchowicz et al. (2020)	V	186
	6.8×10^2		Yaws (2003)	X	237, 12
	1.7×10^2		Duchowicz et al. (2020)	Q	
	1.6×10^3		Gharagheizi et al. (2012)	Q	
	7.8×10^2		Gharagheizi et al. (2010)	Q	246



Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylpropane-1,2-diol $C_4H_{10}O_2$ [558-43-0] BTVWZWFKMIUSGS-UHFFFAOYSA-N	1.8×10^2 5.1×10^2 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-methylpropane-1,3-diol $C_4H_{10}O_2$ [2163-42-0] QWGRWMMWINDWRQN-UHFFFAOYSA-N	6.9×10^2 5.0×10^3 2.6×10^3 4.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	80, 238 80, 239 80, 240 99
1,2,3-butanetriol $C_4H_{10}O_3$ [4435-50-1] YAXKTBLXMTYWDQ-UHFFFAOYSA-N	3.0×10^9		Saxena and Hildemann (1996)	E	401
1,2,4-butanetriol $C_4H_{10}O_3$ [3068-00-6] ARXKVVRQIOZGF-UHFFFAOYSA-N	7.1×10^5 1.9×10^6 3.2×10^5 3.0×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Saxena and Hildemann (1996)	Q Q Q E	80, 238 80, 239 80, 240 401
1,2,3,4-butanetetrol $C_4H_{10}O_4$ (1,2,3,4-tetrahydroxybutane; tetritol) [7541-59-5] UNXHWFMMPAWVPI-UHFFFAOYSA-N	2.0×10^{14}		Saxena and Hildemann (1996)	E	401
2(R),3(S)-1,2,3,4-butanetetrol $C_4H_{10}O_4$ (erythritol) [149-32-6] UNXHWFMMPAWVPI-ZXZARUISSA-N	1.1×10^{10} 1.1×10^{10} 2.5×10^9 1.1×10^{10} 3.2×10^4 4.1×10^8 3.2×10^4	16000	Burkholder et al. (2019) Burkholder et al. (2015) Qin et al. (2021) Compernelle and Müller (2014b) Qin et al. (2021) Qin et al. (2021) HSDB (2015)	L L M V Q Q Q	434 435 436 99
1,2-pentanediol $C_5H_{12}O_2$ [5343-92-0] WCVRQHFJLLWFE-UHFFFAOYSA-N	1.4×10^3 2.2×10^2 5.9×10^2 4.2×10^2		Compernelle and Müller (2014b) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V Q Q Q	80, 238 80, 239 80, 240
1,3-pentanediol $C_5H_{12}O_2$ [3174-67-2] RUOPINZRYMFPBF-UHFFFAOYSA-N	5.6×10^2 3.1×10^3 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1,4-pentanediol $C_5H_{12}O_2$ [626-95-9] GLOBUAZSRIOKLN-UHFFFAOYSA-N	2.3×10^4 5.6×10^2 3.9×10^3 4.8×10^3		Compernelle and Müller (2014b) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V Q Q Q	80, 238 80, 239 80, 240



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Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,5-pentanediol $C_5H_{12}O_2$ [111-29-5] ALQSHHUCVQOPAS-UHFFFAOYSA-N	7.0×10^4 2.0×10^4 1.6×10^4 3.1×10^1	12000	Compernelle and Müller (2014b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q	 242, 243 244 245
	7.7×10^3 3.9×10^4		Hilal et al. (2008) Saxena and Hildemann (1996)	Q E	 401
2,3-pentanediol $C_5H_{12}O_2$ [42027-23-6] XLMFDCKSFJWJTP-UHFFFAOYSA-N	2.6×10^2 1.2×10^3 1.7×10^2 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Saxena and Hildemann (1996)	Q Q Q E	80, 238 80, 239 80, 240 401
2,4-pentanediol $C_5H_{12}O_2$ [625-69-4] GTCCGKPBJSJVRZ-UHFFFAOYSA-N	3.8×10^3 6.5×10^2 5.4×10^3 2.3×10^3		Compernelle and Müller (2014b) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V Q Q Q	 80, 238 80, 239 80, 240
	3.0×10^4		Saxena and Hildemann (1996)	E	401
3-methylbutane-1,2-diol $C_5H_{12}O_2$ [50468-22-9] HJJZIMFAIMUSBW-UHFFFAOYSA-N	2.6×10^2 8.5×10^2 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
3-methylbutane-1,3-diol $C_5H_{12}O_2$ [2568-33-4] XPFCZYUVICHKDS-UHFFFAOYSA-N	4.0×10^2 2.6×10^3 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-methylbutane-1,2-diol $C_5H_{12}O_2$ [41051-72-3] DOPZLYNWNJHAOS-UHFFFAOYSA-N	1.6×10^2 4.3×10^2 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-methylbutane-1,3-diol $C_5H_{12}O_2$ [684-84-4] GNBPEYCELJMS-UHFFFAOYSA-N	6.5×10^2 4.7×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-methylbutane-1,4-diol $C_5H_{12}O_2$ [2938-98-9] MWCBGWLXCXSUTHK-UHFFFAOYSA-N	5.6×10^2 6.0×10^3 6.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-methylbutane-2,3-diol $C_5H_{12}O_2$ [5396-58-7] IDEOPBXRUBNYBN-UHFFFAOYSA-N	1.8×10^2 7.3×10^2 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethylpropane-1,3-diol $C_5H_{12}O_2$ [126-30-7] SLCVBVVXLSEKPL-UHFFFAOYSA-N	4.0×10^2 3.1×10^3 6.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-(hydroxymethyl)-2-methyl-1,3-propanediol $C_5H_{12}O_3$ [77-85-0] QXJQHYBHAIHNGG-UHFFFAOYSA-N	9.0×10^2		HSDB (2015)	Q	99
2-methylbutane-1,2,4-triol $C_5H_{12}O_3$ [62875-07-4] XYHGSPUTABMVOC-UHFFFAOYSA-N	3.9×10^5 1.0×10^6 1.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C56OH $C_5H_{12}O_3$ RXEJCNRKXVSDJ-UHFFFAOYSA-N	6.6×10^5 2.0×10^6 8.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO124C5 $C_5H_{12}O_3$ MOIOWCZVZKHQIC-UHFFFAOYSA-N	6.6×10^5 1.3×10^6 1.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO134C5 $C_5H_{12}O_3$ ANUUQAHHEZMTAS-UHFFFAOYSA-N	6.6×10^5 3.2×10^6 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MBOAOH $C_5H_{12}O_3$ QFZITDCVRJQLMZ-UHFFFAOYSA-N	3.0×10^5 1.1×10^6 5.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-pentene-2,4,5-triol $C_5H_{10}O_3$ (ME1TRIOL) MTMASQITBHTGFU-UHFFFAOYSA-N	4.8×10^7	11000	Wieser et al. (2023)	Q	437
2-methyl-3-butene-1,2,3-triol $C_5H_{10}O_3$ YXPJRFYSYSVRDQI-UHFFFAOYSA-N	3.9×10^8 1.5×10^2 3.1×10^2		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	434 435 436
(E)-2-methyl-1-butene-1,3,4-triol $C_5H_{10}O_3$ FVYHKVMWBMOFGS-DUXPHYHUSA-N	6.2×10^8 1.3×10^2 3.7×10^6		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	434 435 436
(Z)-2-methyl-1-butene-1,3,4-triol $C_5H_{10}O_3$ FVYHKVMWBMOFGS-RQOWECAXSA-N	7.8×10^8 1.3×10^2 3.7×10^6		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	434 435 436
2-methylthreitol $C_5H_{12}O_4$ HGVJFBSSLICXEM-WHFBIKZSA-N	2.0×10^8 2.4×10^4 3.3×10^8		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	434 435 436



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Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylerythritol $C_5H_{12}O_4$ [93921-83-6] HGVJFBSSLICXEM-CRCLSJGQSA-N	3.1×10^8 2.4×10^4 3.3×10^8 6.2×10^{10} 3.1×10^8 3.1×10^4		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021) Isaacman-VanWertz et al. (2016) Isaacman-VanWertz et al. (2016) Isaacman-VanWertz et al. (2016)	M Q Q Q Q Q	434 435 436 438, 439 440, 441 442
2-Methylbutane-1,2,3,4-tetrol $C_5H_{12}O_4$ (MeBuTETROL) [42933-13-1] HGVJFBSSLICXEM-UHFFFAOYSA-N	6.1×10^{10}	14000	Wieser et al. (2023)	Q	437
2,2-bis(hydroxymethyl)1,3-propanediol $C_5H_{12}O_4$ (pentaerythritol) [115-77-5] WXZMFSXDPGVJJK-UHFFFAOYSA-N	7.3×10^{10} 7.3×10^{10} 7.3×10^{10} 1.5×10^9 2.4×10^4 1.2×10^8 2.4×10^9	16000	Burkholder et al. (2019) Burkholder et al. (2015) Compernelle and Müller (2014b) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	L L V X Q Q Q	237, 12 99 246
1,2,3,4,5-pentanepentol $C_5H_{12}O_5$ [7643-75-6] HEBKCHPVOIAQTA-UHFFFAOYSA-N	8.9×10^{18}		Saxena and Hildemann (1996)	E	401
(2R,3R,4S)-pentane-1,2,3,4,5-pentol $C_5H_{12}O_5$ (xylitol) [87-99-0] HEBKCHPVOIAQTA-SCDXWVJYSA-N	4.9×10^8 3.9×10^{11} 6.6×10^5 7.3×10^{11} 6.6×10^5	17000	Qin et al. (2021) Compernelle and Müller (2014b) Qin et al. (2021) Qin et al. (2021) HSDB (2015)	M V Q Q Q	434 435 436 99
(2R,3S,4S)-pentane-1,2,3,4,5-pentol $C_5H_{12}O_5$ (adonitol; ribitol) [488-81-3] HEBKCHPVOIAQTA-ZXFHETKHSAN	4.6×10^{11}	18000	Compernelle and Müller (2014b)	V	
(2R,4R)-pentane-1,2,3,4,5-pentol $C_5H_{12}O_5$ (arabitol; arabinitol) [2152-56-9] HEBKCHPVOIAQTA-QWZWWQMSAN	9.9×10^9 6.7×10^{11} 6.6×10^5 7.3×10^{11}	18000	Qin et al. (2021) Compernelle and Müller (2014b) Qin et al. (2021) Qin et al. (2021)	M V Q Q	434 435 436



Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
levoglucosan $C_6H_{10}O_5$ [498-07-7] TWNIBLMWSKIRAT-VFUOTHLCSA-N	4.9×10^{10} 6.9×10^7 4.3×10^{10}		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	434 435 436
fructose $C_6H_{12}O_6$ [30237-26-4] BJHIKXHVXCXFLS-UYFOZJQFSA-N	1.2×10^9 1.0×10^9 1.6×10^{14}		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	434 435 436
mannose $C_6H_{12}O_6$ [3458-28-4] GZCGUPFRVQAUEE-KVTDHHQDSA-N	1.2×10^9 1.7×10^5 1.4×10^{13}		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	434 435 436
glucose $C_6H_{12}O_6$ [50-99-7] GZCGUPFRVQAUEE-SLPGGIOYSA-N	7.8×10^8 1.0×10^9 1.8×10^{15}		Qin et al. (2021) Qin et al. (2021) Qin et al. (2021)	M Q Q	434 435 436
1,2-hexanediol $C_6H_{14}O_2$ [6920-22-5] FHKSXSQHXQEMOK-UHFFFAOYSA-N	1.7×10^3 1.9×10^2 4.4×10^2 4.2×10^2		Compernelle and Müller (2014b) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V Q Q Q	 80, 238 80, 239 80, 240
1,4-hexanediol $C_6H_{14}O_2$ [16432-53-4] QVTWBMUAJHVAIJ-UHFFFAOYSA-N	4.5×10^2 3.3×10^3 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1,6-hexanediol $C_6H_{14}O_2$ [629-11-8] XXMIOPMDWAUFGU-UHFFFAOYSA-N	4.5×10^4 3.0×10^4		HSDB (2015) Saxena and Hildemann (1996)	Q E	99 401
2,3-hexanediol $C_6H_{14}O_2$ [617-30-1] QCIYAEYRVFUFAP-UHFFFAOYSA-N	2.1×10^2 8.7×10^2 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2,5-hexanediol $C_6H_{14}O_2$ [2935-44-6] OHMBHFSEKCCCBW-UHFFFAOYSA-N	1.4×10^4 5.1×10^2 5.9×10^3 2.0×10^3 2.0×10^4		Compernelle and Müller (2014b) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Saxena and Hildemann (1996)	V Q Q Q E	 80, 238 80, 239 80, 240 401
1,2-cyclohexanediol $C_6H_{12}O_2$ [931-17-9] PFURGBBHAOXLIO-UHFFFAOYSA-N	6.6×10^2 1.4×10^4 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-1,3-pentanediol $C_6H_{14}O_2$ [149-31-5] SPXWGAHNKXLXAP-UHFFFAOYSA-N	3.0×10^4		Saxena and Hildemann (1996)	E	401
2-methyl-1,4-pentanediol $C_6H_{14}O_2$ [6287-17-8] PNJNLGNHYSWUPT-UHFFFAOYSA-N	5.1×10^2 4.0×10^3 4.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-methyl-2,4-pentanediol $C_6H_{14}O_2$ [107-41-5] SVTBMSDMJJWYQN-UHFFFAOYSA-N	2.5×10^1 2.0×10^4		HSDB (2015) Saxena and Hildemann (1996)	Q E	99 401
3-methyl-1,3-pentanediol $C_6H_{14}O_2$ [33879-72-0] HIYKOZFIVZIBFO-UHFFFAOYSA-N	3.1×10^2 2.3×10^3 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
3-methyl-1,4-pentanediol $C_6H_{14}O_2$ [26787-63-3] WOHXXIWTEHLCQK-UHFFFAOYSA-N	5.1×10^2 5.8×10^3 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
4-methyl-1,4-pentanediol $C_6H_{14}O_2$ [1462-10-8] HAIVWDGLCRYQMC-UHFFFAOYSA-N	3.1×10^2 2.9×10^3 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2,3-dimethyl-2,3-butanediol $C_6H_{14}O_2$ [76-09-5] IVDFJHOHABJVEH-UHFFFAOYSA-N	1.0×10^2 8.7×10^2 6.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2,3-dimethyl-1,4-butanediol $C_6H_{14}O_2$ [57716-80-0] SKQUTIPQJKQFRA-UHFFFAOYSA-N	5.1×10^2 8.1×10^3 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2,2-dimethyl-1,4-butanediol $C_6H_{14}O_2$ [32812-23-0] GGSZUUPRBBBHRI-UHFFFAOYSA-N	3.1×10^2 4.5×10^3 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1,2,6-hexanetriol $C_6H_{14}O_3$ [106-69-4] ZWMVLYRJXORSEP-UHFFFAOYSA-N	2.0×10^9		Saxena and Hildemann (1996)	E	401



Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:H134M3C5	3.6×10^5		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₄ O ₃	2.4×10^6		Wang et al. (2017)	Q	80, 239
XPUHQFLUQJINS-UHFFFAOYSA-N	8.3×10^4		Wang et al. (2017)	Q	80, 240
1,2,3,4,5,6-hexahydroxy hexane C ₆ H ₁₄ O ₆ [45007-61-2] FBPFZTCFMRRESA-UHFFFAOYSA-N	3.9×10^{23}		Saxena and Hildemann (1996)	E	401
(2S,3R,4R,5R)-hexane-1,2,3,4,5,6-hexol C ₆ H ₁₄ O ₆ (sorbitol) [50-70-4] FBPFZTCFMRRESA-JGWLITMVSA-N	6.6×10^{14}	22000	Compernelle and Müller (2014b)	V	
	1.4×10^7		HSDB (2015)	Q	99
(2R,3R,4R,5R)-hexane-1,2,3,4,5,6-hexol C ₆ H ₁₄ O ₆ (mannitol) [69-65-8] FBPFZTCFMRRESA-KVDHHDQDSA-N	3.1×10^9		Qin et al. (2021)	M	434
	1.8×10^{15}	22000	Compernelle and Müller (2014b)	V	
	1.4×10^7		Qin et al. (2021)	Q	435
	1.0×10^{15}		Qin et al. (2021)	Q	436
	1.4×10^7		HSDB (2015)	Q	99
(2R,3S,4R,5S)-hexane-1,2,3,4,5,6-hexol C ₆ H ₁₄ O ₆ (dulcitol; galactitol) [608-66-2] FBPFZTCFMRRESA-GUCUJZJUSA-N	9.0×10^{14}	22000	Compernelle and Müller (2014b)	V	
1,2,4,5-cyclohexanetetrol C ₆ H ₁₂ O ₄ (1,2,4,5-tetrahydroxycyclohexane) [35652-37-0] RDIDGZFQASQXBU-UHFFFAOYSA-N	3.9×10^{14}		Saxena and Hildemann (1996)	E	401
1,2,3,4,5,6-hexahydroxycyclohexane C ₆ H ₁₂ O ₆ [87-89-8] CDAISMWEOUEBRE-UHFFFAOYSA-N	9.9×10^{23}		Saxena and Hildemann (1996)	E	401
1,7-heptanediol C ₇ H ₁₆ O ₂ [629-30-1] SXCBDZAEHILGLM-UHFFFAOYSA-N	2.0×10^4		Compernelle and Müller (2014b)	V	443
			Saxena and Hildemann (1996)	E	401
2,4-heptanediol C ₇ H ₁₆ O ₂ [20748-86-1] XVEOUOTUJBYHNL-UHFFFAOYSA-N	2.0×10^4		Saxena and Hildemann (1996)	E	401



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Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-heptanediol C ₇ H ₁₆ O ₂ [70444-25-6] XTVHTJKQKUOEQA-UHFFFAOYSA-N	4.2 × 10 ² 4.7 × 10 ³ 7.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
4-methyl-1,4-hexanediol C ₇ H ₁₆ O ₂ [40646-08-0] ZRCYHJNCCBSTSZ-UHFFFAOYSA-N	2.5 × 10 ² 2.6 × 10 ³ 1.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-methyl-2,5-hexanediol C ₇ H ₁₆ O ₂ [29044-06-2] KZWQVDXGMOSSNY-UHFFFAOYSA-N	2.9 × 10 ² 4.1 × 10 ³ 1.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
3-methyl-2,5-hexanediol C ₇ H ₁₆ O ₂ PMORVUNYTOZCSE-UHFFFAOYSA-N	4.8 × 10 ² 7.6 × 10 ³ 2.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2,2-diethyl-1,3-propanediol C ₇ H ₁₆ O ₂ [115-76-4] XRVCFPZJAHWYTB-UHFFFAOYSA-N	2.0 × 10 ⁴		Saxena and Hildemann (1996)	E	401
1,2,3,4,5-pentahydroxyheptane C ₇ H ₁₆ O ₅ HUYORHVLGRMTGF-UHFFFAOYSA-N	4.9 × 10 ¹⁸		Saxena and Hildemann (1996)	E	401
1,2,3,4,6-pentahydroxyheptane C ₇ H ₁₆ O ₅ HBKKLPCMKBGRJH-UHFFFAOYSA-N	3.9 × 10 ¹⁸		Saxena and Hildemann (1996)	E	401
1,2,3,5,7-pentahydroxyheptane C ₇ H ₁₆ O ₅ NSOOVWLSFZLKQX-UHFFFAOYSA-N	4.9 × 10 ¹⁸		Saxena and Hildemann (1996)	E	401
1,2,3,4,5,6-hexahydroxyheptane C ₇ H ₁₆ O ₆ (1-deoxy-heptitol) [688007-16-1] YMEXGEAJNZRQEH-VIFPVBQESA-N	3.0 × 10 ²³		Saxena and Hildemann (1996)	E	401
3,6-octanediol C ₈ H ₁₈ O ₂ [24434-09-1] BCKOQWWRTBBSGR-UHFFFAOYSA-N	3.7 × 10 ² 4.1 × 10 ³ 2.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1,4-cyclohexanedimethanol C ₈ H ₁₆ O ₂ [105-08-8] YIMQCDZDWXUDCA-UHFFFAOYSA-N	1.5 × 10 ⁵		HSDB (2015)	V	



Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-ethyl-1,3-hexanediol C ₈ H ₁₈ O ₂ [94-96-2] RWLALWYNXFYRGW-UHFFFAOYSA-N	7.2 × 10 ² 5.4 × 10 ² 7.8 × 10 ² 7.8 × 10 ² 1.6 × 10 ¹ 1.1 × 10 ² 7.5 × 10 ² 2.0 × 10 ⁴		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Saxena and Hildemann (1996)	V Q Q Q Q Q Q E	186 242, 243 244 245 67 401
2,2,4-trimethyl-1,3-pentanediol C ₈ H ₁₈ O ₂ [144-19-4] JCTXKRPTIMZBJT-UHFFFAOYSA-N	2.2 × 10 ² 9.2 × 10 ¹ 1.4 × 10 ¹		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	186 99
2,5-dimethyl-2,5-hexanediol C ₈ H ₁₈ O ₂ [110-03-2] ZWNMRZQYWRIGMM-UHFFFAOYSA-N	1.4 × 10 ¹ 1.9 × 10 ³ 7.9 × 10 ² 4.7 × 10 ¹		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,9-nonanediol C ₉ H ₂₀ O ₂ [3937-56-2] ALVZNPYWJMLXKV-UHFFFAOYSA-N			Compernelle and Müller (2014b)	V	444
3,6-nonanediol C ₉ H ₂₀ O ₂ [4469-85-6] YKEWIFGQPMVBEF-UHFFFAOYSA-N	3.0 × 10 ² 3.2 × 10 ³ 1.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1,10-decanediol C ₁₀ H ₂₂ O ₂ [112-47-0] FOTKYAAJKYLFFN-UHFFFAOYSA-N			Compernelle and Müller (2014b)	V	445
3,6-decanediol C ₁₀ H ₂₂ O ₂ RBFBEPALGOYNGK-UHFFFAOYSA-N	2.4 × 10 ² 2.6 × 10 ³ 2.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:APINBOH C ₁₀ H ₁₈ O ₂ MOILFCKRQFVFS-UHFFFAOYSA-N	5.5 × 10 ² 3.2 × 10 ³ 6.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:APINCOH C ₁₀ H ₁₈ O ₂ OMDMTHRBGUBUCO-UHFFFAOYSA-N	1.8 × 10 ³ 2.0 × 10 ⁵ 3.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BPINAHOH C ₁₀ H ₁₈ O ₂ VXXAKGMRLUXFQH-UHFFFAOYSA-N	5.5 × 10 ² 7.4 × 10 ² 1.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BPINCOH C ₁₀ H ₁₈ O ₂ XYKGEKWHBMLSGS-UHFFFAOYSA-N	1.6 × 10 ³ 3.5 × 10 ⁵ 5.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO36C11 C ₁₁ H ₂₄ O ₂ VCLRIEYYOZNUNU-UHFFFAOYSA-N	2.2 × 10 ² 2.0 × 10 ³ 2.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO36C12 C ₁₂ H ₂₆ O ₂ CLQOYXKLYNGAHW-UHFFFAOYSA-N	1.7 × 10 ² 1.6 × 10 ³ 1.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-butene-1,4-diol C ₄ H ₈ O ₂ [110-64-5] ORTVZLZNOYNASJ-UHFFFAOYSA-N	>3.4 × 10 ² 2.5 × 10 ³ 1.2 × 10 ⁵ 3.4 × 10 ⁴		Altschuh et al. (1999) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q	 80, 238 80, 239 80, 240
3-butene-1,2-diol C ₄ H ₈ O ₂ [497-06-3] ITMIAZBRRZANGB-UHFFFAOYSA-N	7.8 × 10 ² 8.5 × 10 ² 3.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-butyne-1,4-diol C ₄ H ₆ O ₂ (1,4-dihydroxy-2-butyne) [110-65-6] DLDJFQGPPSQZKI-UHFFFAOYSA-N	>2.0 × 10 ³ 5.8 × 10 ⁵		Altschuh et al. (1999) HSDB (2015)	M V	
MCM:C524OH C ₅ H ₁₀ O ₃ PGARYUHLQUORKU-UHFFFAOYSA-N	1.3 × 10 ⁶ 6.5 × 10 ⁴ 6.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ISOPAHO C ₅ H ₁₀ O ₂ FLXLJBCELUWWCG-UHFFFAOYSA-N	1.6 × 10 ³ 7.4 × 10 ⁴ 3.4 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ISOPBOH C ₅ H ₁₀ O ₂ XZRGYMKUQMPDQH-UHFFFAOYSA-N	4.5 × 10 ² 5.4 × 10 ² 7.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ISOPDOH C ₅ H ₁₀ O ₂ HBHXLSPUXXICF-UHFFFAOYSA-N	5.3 × 10 ² 7.4 × 10 ² 2.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C622OH C ₆ H ₁₂ O ₂ VCGCHTQYUUAIGQ-UHFFFAOYSA-N	1.0 × 10 ³ 4.3 × 10 ³ 7.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C624OH C ₆ H ₁₂ O ₂ BZQZWOYZOVQJLT-UHFFFAOYSA-N	1.0 × 10 ³ 3.6 × 10 ³ 8.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C720OH C ₇ H ₁₂ O ₂ JRLLENLHZCUEBJ-UHFFFAOYSA-N	4.5 × 10 ³ 8.7 × 10 ⁴ 7.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMAOH C ₁₀ H ₁₈ O ₂ WKZWTZTZWGEWE-UHFFFAOYSA-N	5.1 × 10 ² 5.5 × 10 ³ 1.9 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMCOH C ₁₀ H ₁₈ O ₂ ZJALAEQNHJQSTN-UHFFFAOYSA-N	6.9 × 10 ² 4.3 × 10 ³ 1.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
(<i>E,E</i>)-8,10-dodecadien-1-ol C ₁₂ H ₂₂ O (codlemone) [33956-49-9] CSWBSLXBXRFNST-MQQKCMAXSA-N	1.7		Ebert et al. (2023)	?	316
MCM:BCAOH C ₁₅ H ₂₆ O ₂ XZTGVWRBZDBQLP-UHFFFAOYSA-N	5.4 × 10 ² 1.2 × 10 ⁴ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCCOH C ₁₅ H ₂₆ O ₂ ALNVAIGKARRJOT-UHFFFAOYSA-N	6.8 × 10 ² 1.8 × 10 ⁴ 5.9 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1,2-dihydroxybenzene C ₆ H ₄ (OH) ₂ (pyrocatechol) [120-80-9] YCIMNLLNPGFGHC-UHFFFAOYSA-N	8.2 × 10 ³ 8.2 × 10 ³ 1.8 × 10 ³ 1.6 × 10 ² 4.5 × 10 ¹ 2.6 × 10 ³ 1.4 × 10 ⁴ 5.4 × 10 ³ 4.4 × 10 ³ 7.8 × 10 ³ 1.6 × 10 ³ 1.6 × 10 ⁵ 1.2 × 10 ³ 7.9 × 10 ²		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Schüürmann (2000) Mackay et al. (1995) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	V V V V V Q Q Q Q Q Q Q Q Q Q Q	186 80, 238 80, 239 80, 240 242, 243 244 245 67
1,3-dihydroxybenzene C ₆ H ₄ (OH) ₂ (resorcinol) [108-46-3] GHMLBKRAJXXBS-UHFFFAOYSA-N	1.0 × 10 ⁵ 1.0 × 10 ⁵ 8.5 × 10 ⁴ 5.0 × 10 ³ 6.4 × 10 ⁴ 8.1 × 10 ⁴ 1.4 × 10 ⁵ 2.4 × 10 ⁴	8300 7400	Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Schüürmann (2000) Goldstein (1982) Goldstein (1982) Duchowicz et al. (2020) Gharagheizi et al. (2012)	V V V V X X Q Q	186 446 298



Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:METCATECH C ₉ H ₁₂ O ₂ IFERDOUSBGAOD-UHFFFAOYSA-N	4.4 × 10 ³ 1.9 × 10 ³ 3.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETCATECH C ₉ H ₁₂ O ₂ QTXIMHKRKLXRS-UHFFFAOYSA-N	4.4 × 10 ³ 2.2 × 10 ³ 3.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PCATECHOL C ₉ H ₁₂ O ₂ GOZVFLWHGAXTPA-UHFFFAOYSA-N	5.9 × 10 ³ 1.5 × 10 ³ 3.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETCATECH C ₉ H ₁₂ O ₂ WVRWBYUJPWFQO-UHFFFAOYSA-N	4.4 × 10 ³ 2.5 × 10 ³ 4.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:T123CATECH C ₉ H ₁₂ O ₂ DEIKGXRMQHZJD-UHFFFAOYSA-N	2.9 × 10 ³ 4.6 × 10 ³ 5.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:T124CATECH C ₉ H ₁₂ O ₂ NZEZVJPYSAXNTR-UHFFFAOYSA-N	2.9 × 10 ³ 4.9 × 10 ³ 4.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2,3-dihydroxynaphthalene C ₁₀ H ₈ O ₂ [92-44-4] JRNUTKWMBSBIF-UHFFFAOYSA-N	2.0 × 10 ⁵		Ebert et al. (2023)	?	316
hexylresorcinol C ₁₂ H ₁₈ O ₂ [136-77-6] WFJIVOKAWHGBH-UHFFFAOYSA-N	3.8 × 10 ⁴		HSDB (2015)	Q	99
2,6-bis(1,1-dimethylethyl)phenol C ₁₄ H ₂₂ O [128-39-2] DKCCKDPYUFEZCP-UHFFFAOYSA-N	3.1		HSDB (2015)	Q	99
4-(1-methyl-1-phenylethyl)phenol C ₁₅ H ₁₆ O [599-64-4] QBDSZLJBMIMQRS-UHFFFAOYSA-N	1.1 × 10 ²		HSDB (2015)	Q	447
2,2',3,3'-tetrahydro-3,3,3',3'- tetramethyl-1,1'-spirobi(1H- indene)-6,6'-diol C ₂₁ H ₂₄ O ₂ [1568-80-5] SICLLPHPVFCNTJ-UHFFFAOYSA-N	1.5 × 10 ⁶ 1.0 × 10 ⁶ 2.2 × 10 ⁶ 8.2 × 10 ⁵		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A3.3: Polyols (R(OH)_n) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4'-(3,3,5-trimethylcyclohexane-1,1-diyl)diphenol	4.4×10^5		Zhang et al. (2010)	Q	287, 288
C ₂₁ H ₂₆ O ₂ [129188-99-4]	3.2×10^5		Zhang et al. (2010)	Q	287, 289
UMPNGRIGSEMTC-UHFFFAOYSA-N	2.7×10^6		Zhang et al. (2010)	Q	287, 290
	7.9×10^5		Zhang et al. (2010)	Q	287, 291
3,3,3',3'-tetramethyl-1,1'-spirobi(indan)-5,5',6,6'-tetrol	1.4×10^{14}		Zhang et al. (2010)	Q	287, 288
C ₂₁ H ₂₄ O ₄ [77-08-7]	1.6×10^{10}		Zhang et al. (2010)	Q	287, 289
	2.0×10^{11}		Zhang et al. (2010)	Q	287, 290
POFMQEVZKZVAPQ-UHFFFAOYSA-N	2.7×10^{10}		Zhang et al. (2010)	Q	287, 291
9,9-bis(4-hydroxyphenyl)fluorene	8.4×10^8		Zhang et al. (2010)	Q	287, 288
C ₂₅ H ₁₈ O ₂ [3236-71-3]	6.2×10^7		Zhang et al. (2010)	Q	287, 289
	2.1×10^8		Zhang et al. (2010)	Q	287, 290
YWFPGFJLYRKYJZ-UHFFFAOYSA-N	3.1×10^9		Zhang et al. (2010)	Q	287, 291



A3.4 Peroxides (ROOH) and peroxy radicals (ROO)

Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl hydroperoxide	3.0	5300	Burkholder et al. (2019)	L	
CH ₃ OOH	3.0	5300	Burkholder et al. (2015)	L	
(methyl peroxide)	3.0	5200	Brockbank (2013)	L	1
[3031-73-0]	2.9	5200	Warneck and Williams (2012)	L	
MEUKEBNAABNAEX-UHFFFAOYSA-N	3.0	5300	Sander et al. (2011)	L	
	3.0	5300	Sander et al. (2006)	L	
	3.1	5300	Staudinger and Roberts (2001)	L	
	2.5	4400	Li et al. (2004)	M	
	>6.9		Magi et al. (1997)	M	448
	1.2×10 ¹		Sauer (1997)	M	449
	3.1	5200	O'Sullivan et al. (1996)	M	
	3.0	5300	Lind and Kok (1994)	M	52
	1.0×10 ¹		Wang et al. (2017)	Q	80, 238
	1.0×10 ¹		Wang et al. (2017)	Q	80, 239
	6.2		Wang et al. (2017)	Q	80, 240
	4.9		Raventos-Duran et al. (2010)	Q	271, 243
	1.2		Raventos-Duran et al. (2010)	Q	244
	1.6		Raventos-Duran et al. (2010)	Q	245
	9.0×10 ⁻¹		Hilal et al. (2008)	Q	
	1.3×10 ¹		Modarresi et al. (2007)	Q	67
		6200	Kühne et al. (2005)	Q	
		5200	Kühne et al. (2005)	?	
ethyl hydroperoxide	3.3	6000	Burkholder et al. (2019)	L	
C ₂ H ₅ OOH	3.3	6000	Burkholder et al. (2015)	L	
(ethyl peroxide)	3.3	6000	Brockbank (2013)	L	1
[3031-74-1]	3.3	6000	Sander et al. (2011)	L	
ILHIHKRJMKBEE-UHFFFAOYSA-N	1.1×10 ¹		Sauer (1997)	M	449
	3.3	6000	O'Sullivan et al. (1996)	M	
	5.0		Keshavarz et al. (2022)	Q	
	1.0×10 ¹		Duchowicz et al. (2020)	Q	184
	8.1		Wang et al. (2017)	Q	80, 238
	8.0		Wang et al. (2017)	Q	80, 239
	5.5		Wang et al. (2017)	Q	80, 240
	3.9		Raventos-Duran et al. (2010)	Q	271, 243
	9.9×10 ⁻¹		Raventos-Duran et al. (2010)	Q	244
	9.9×10 ⁻¹		Raventos-Duran et al. (2010)	Q	245
	5.8×10 ⁻¹		Hilal et al. (2008)	Q	
		6600	Kühne et al. (2005)	Q	
	3.4		Duchowicz et al. (2020)	?	185, 21
		6000	Kühne et al. (2005)	?	



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hydroxymethyl hydroperoxide HOCH ₂ OOH (HMHP; HMP) [15932-89-5] NEZWFWIACBUQMN-UHFFFAOYSA-N	1.7×10^4 1.7×10^4 1.7×10^4 1.7×10^4 1.6×10^4 1.6×10^4 1.6×10^4 4.7×10^3 1.6×10^4 1.6×10^2 3.9×10^4	9900 9900 9900 9900 10000 9700 10000 1500 1500 1500 8600 10000	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Staudinger and Roberts (2001) O'Sullivan et al. (1996) Staffelbach and Kok (1993) Zhou and Lee (1992) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Kühne et al. (2005) Kühne et al. (2005)	L L L L L M M M Q Q Q Q ?	 242, 243 244 245
bis-(hydroxymethyl)-peroxide HOCH ₂ OOCH ₂ OH (BHMP) [17088-73-2] JLJXMZMKMRQOLN-UHFFFAOYSA-N	$>9.9 \times 10^4$ 4.4×10^3	 8400 9400 8500	Staffelbach and Kok (1993) Zhou and Lee (1992) Kühne et al. (2005) Kühne et al. (2005)	M M Q ?	
<i>tert</i> -butyl hydroperoxide C ₄ H ₁₀ O ₂ [75-91-2] CIHOLLKRGTVIJN-UHFFFAOYSA-N	4.2 1.4 3.6 6.2×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	80, 238 80, 239 80, 240 99
di- <i>tert</i> -butylperoxide C ₈ H ₁₈ O ₂ [110-05-4] LSXWFXONGKSEMY-UHFFFAOYSA-N	8.2×10^{-4} 1.2×10^{-4} 1.6×10^{-2}		HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007)	Q Q Q	99 67
1-methyl-1-phenylethylhydroperoxide C ₉ H ₁₂ O ₂ [80-15-9] YQHLDYVWEZKEOX-UHFFFAOYSA-N	2.1×10^2 2.1×10^2 2.3×10^1 1.3×10^2 2.3×10^1 2.3×10^1 2.3 7.3×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q Q Q Q	186 80, 238 80, 239 80, 240 67
dicumyl peroxide C ₁₈ H ₂₂ O ₂ [80-43-3] XMNIXWIUMCBBBL-UHFFFAOYSA-N	2.2×10^{-1}		HSDB (2015)	Q	99
methylperoxy radical CH ₃ OO [2143-58-0] WTFNSXYULBQCQV-UHFFFAOYSA-N	1.5×10^{-1} 5.9×10^{-2}	3700 5600	Leriche et al. (2000) Lelieveld and Crutzen (1991) Jacob (1986)	E E E	450 451 452



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hydroxymethylperoxy radical HOCH ₂ OO [27828-51-9] OLHGCLQZCFQBGU-UHFFFAOYSA-N	7.9×10^2	8200	Leriche et al. (2000)	E	450
peroxyacetyl radical CH ₃ C(O)O ₂ [36709-10-1] ZBQKPDHUDKSCRS-UHFFFAOYSA-N	$<9.9 \times 10^{-4}$ $<9.9 \times 10^{-4}$ $<9.9 \times 10^{-4}$ $<9.9 \times 10^{-4}$		Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006)	L L L L	
	$<9.9 \times 10^{-4}$		Villalta et al. (1996)	M	
MCM:ACO3H C ₃ H ₄ O ₃ AZIQALWHRUQPHV-UHFFFAOYSA-N	2.7×10^2 1.4×10^1 2.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IC3H7OOH C ₃ H ₈ O ₂ SGJUFIMCHSLMRJ-UHFFFAOYSA-N	7.6 3.9 4.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC3H7OOH C ₃ H ₈ O ₂ TURGQPDWYFJEDY-UHFFFAOYSA-N	6.8 4.7 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PERPROACID C ₃ H ₆ O ₃ CZPZWMPYEINMCF-UHFFFAOYSA-N	9.8×10^1 5.3 6.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3DBC03H C ₄ H ₆ O ₃ TXNBRZBEFMJQMW-UHFFFAOYSA-N	3.2×10^2 1.0×10^1 5.4×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IC4H9OOH C ₄ H ₁₀ O ₂ FUHWWEDRJKHMKK-UHFFFAOYSA-N	6.0 3.6 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MACO3H C ₄ H ₆ O ₃ OELQSSWXRGADDE-UHFFFAOYSA-N	1.8×10^2 8.7 1.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
IEPOX1CO3H C ₄ H ₆ O ₅ DJPWYFXNRMHUNU-UHFFFAOYSA-N	9.0×10^2	14000	Wieser et al. (2023)	Q	437
MCM:NC4H9OOH C ₄ H ₁₀ O ₂ AKUNSTOMHUXJOZ-UHFFFAOYSA-N	5.3 3.4 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PERBUACID C ₄ H ₈ O ₃ LBAYFEDWGHXMSM-UHFFFAOYSA-N	7.8×10^1 2.8 4.1×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PERIBUACID $\text{C}_4\text{H}_8\text{O}_3$ LVQKOPBJHBWELS-UHFFFAOYSA-N	8.9×10^1 3.2 2.4×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:SC4H9OOH $\text{C}_4\text{H}_{10}\text{O}_2$ SPQMVUPFYWDFCB-UHFFFAOYSA-N	6.0 2.4 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUT2CO3H $\text{C}_5\text{H}_{10}\text{O}_3$ LWBFPIVRZGBOFS-UHFFFAOYSA-N	7.3×10^1 2.0 1.8×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3ME3CO3H $\text{C}_5\text{H}_{10}\text{O}_3$ GTLKMKCVRPVGBK-UHFFFAOYSA-N	7.3×10^1 2.3 2.8×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPEAOOH $\text{C}_5\text{H}_{12}\text{O}_2$ HIHRAMNMOMKJDG-UHFFFAOYSA-N	5.5 2.6 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPEBOOH $\text{C}_5\text{H}_{12}\text{O}_2$ VIUWCQFVAFABHL-UHFFFAOYSA-N	5.6 2.1 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPECOOH $\text{C}_5\text{H}_{12}\text{O}_2$ XRXANEMIFVRKLN-UHFFFAOYSA-N	3.4 9.8×10^{-1} 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NEOPOOH $\text{C}_5\text{H}_{12}\text{O}_2$ UEQURRFROJBOLG-UHFFFAOYSA-N	3.4 2.1 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PEAOOH $\text{C}_5\text{H}_{12}\text{O}_2$ KCHNMIKAMRQBHD-UHFFFAOYSA-N	4.7 2.6 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PEBOOH $\text{C}_5\text{H}_{12}\text{O}_2$ XRIRVAYMWUMXBR-UHFFFAOYSA-N	5.5 1.8 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PECOOH $\text{C}_5\text{H}_{12}\text{O}_2$ RLBOWRSRDVXRTJ-UHFFFAOYSA-N	5.5 1.7 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PERPENACID $\text{C}_5\text{H}_{10}\text{O}_3$ UQGPCEVQKLOLLM-UHFFFAOYSA-N	6.0×10^1 1.9 2.8×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TBUTCO3H $\text{C}_5\text{H}_{10}\text{O}_3$ YVAACGXAZGGQSM-UHFFFAOYSA-N	5.0×10^1 1.8 1.6×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
C520OOH $C_5H_{10}O_7$ GRPDYNZWDUILX-UHFFFAOYSA-N	5.3×10^{11}	22000	Wieser et al. (2023)	Q	437
C518OOH $C_5H_8O_4$ PQEISBQMLHJHQ-UHFFFAOYSA-N	4.1×10^4	14000	Wieser et al. (2023)	Q	437
MCM:C54CO3H $C_6H_{12}O_3$ JTSRVXQXWWOTER-UHFFFAOYSA-N	5.6×10^1 1.4 1.4×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5H11CO3H $C_6H_{12}O_3$ NQUPKCJGWCPDR-UHFFFAOYSA-N	5.6×10^1 1.4 2.5×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
ROO6R7OOH $C_6H_{12}O_4$ UPAWKBDHGPWUCG-UHFFFAOYSA-N	3.3×10^7	14000	Wieser et al. (2023)	Q	437
ROO6R6OOH $C_6H_{12}O_5$ QZPUZDFJKAEVLL-UHFFFAOYSA-N	2.6×10^8	14000	Wieser et al. (2023)	Q	437
C624OOH $C_6H_{12}O_6$ FUTSLQULSAKEJA-UHFFFAOYSA-N	1.2×10^{13}	20000	Wieser et al. (2023)	Q	437
MCM:CHEXOOH $C_6H_{12}O_2$ FGGJBCRKSXVGDPO-UHFFFAOYSA-N	1.2×10^1 1.4×10^1 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEXAOOH $C_6H_{14}O_2$ RZICEOJUAFHYFO-UHFFFAOYSA-N	3.8 2.1 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEXBOOH $C_6H_{14}O_2$ XWXUHAUZCICPHE-UHFFFAOYSA-N	9.9×10^{-1} 4.4 1.4 1.8	7300	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:HEXCOOH $C_6H_{14}O_2$ NMNOLZYNVYLRLJ-UHFFFAOYSA-N	4.4 1.4 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M22C3CO3H $C_6H_{12}O_3$ RQLGMECUXRQENU-UHFFFAOYSA-N	4.0×10^1 1.5 2.1×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M22C43OOH $C_6H_{14}O_2$ XDWQBMWWYOVNSC-UHFFFAOYSA-N	3.2 1.4 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:M22C4OOH	3.0		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₄ O ₂	2.0		Wang et al. (2017)	Q	80, 239
VWOCXGIWJLCIT-UHFFFAOYSA-N	3.6		Wang et al. (2017)	Q	80, 240
MCM:M23C43OOH	3.2		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₄ O ₂	1.1		Wang et al. (2017)	Q	80, 239
UPTQBPSUWRBZRD-UHFFFAOYSA-N	1.4		Wang et al. (2017)	Q	80, 240
MCM:M23C4OOH	5.1		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₄ O ₂	2.6		Wang et al. (2017)	Q	80, 239
MCTQHWIBGOKRHO-UHFFFAOYSA-N	1.6		Wang et al. (2017)	Q	80, 240
MCM:M2C43CO3H	6.8×10^1		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₂ O ₃	1.8		Wang et al. (2017)	Q	80, 239
KGAQRBNLHLEGET-UHFFFAOYSA-N	1.9×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:M2PEAOOH	4.4		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₄ O ₂	2.1		Wang et al. (2017)	Q	80, 239
OTKKOLXSCMINFN-UHFFFAOYSA-N	1.3		Wang et al. (2017)	Q	80, 240
MCM:M2PEBOOH	5.1		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₄ O ₂	1.4		Wang et al. (2017)	Q	80, 239
XHHITPKXZQXJIC-UHFFFAOYSA-N	2.2		Wang et al. (2017)	Q	80, 240
MCM:M2PECOOH	5.1		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₄ O ₂	1.5		Wang et al. (2017)	Q	80, 239
JBJSMFBSVBRLAK-UHFFFAOYSA-N	1.0		Wang et al. (2017)	Q	80, 240
MCM:M2PEDOOH	3.0		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₄ O ₂	8.0×10^{-1}		Wang et al. (2017)	Q	80, 239
BZGMEGUFFDTCNP-UHFFFAOYSA-N	1.3		Wang et al. (2017)	Q	80, 240
MCM:M33C3CO3H	4.0×10^1		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₂ O ₃	1.2		Wang et al. (2017)	Q	80, 239
IHLWWYDUPGXTHJ-UHFFFAOYSA-N	8.9×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:M33C4OOH	3.0		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₄ O ₂	1.7		Wang et al. (2017)	Q	80, 239
OUMLJDCULPJYHU-UHFFFAOYSA-N	1.8		Wang et al. (2017)	Q	80, 240
MCM:M33C4CO3H	5.6×10^1		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₂ O ₃	1.7		Wang et al. (2017)	Q	80, 239
CHSVHHKRTQKZCN-UHFFFAOYSA-N	2.3×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:M3PEAOOH	4.4		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₄ O ₂	2.5		Wang et al. (2017)	Q	80, 239
AOZFMIRWQXSLHO-UHFFFAOYSA-N	1.9		Wang et al. (2017)	Q	80, 240
MCM:M3PEBOOH	5.1		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₄ O ₂	1.9		Wang et al. (2017)	Q	80, 239
XCSSHOKPSJZJS-UHFFFAOYSA-N	1.9		Wang et al. (2017)	Q	80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:M3PECOOH $C_6H_{14}O_2$ BWMWVYKWKWYNWMF-UHFFFAOYSA-N	3.0 7.8×10^{-1} 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
ROO6R5OOH $C_7H_{12}O_6$ RAASFOSVQCCDRJ-UHFFFAOYSA-N	4.6×10^7	16000	Wieser et al. (2023)	Q	437
MCM:C6H13CO3H $C_7H_{14}O_3$ GLAYRDYVNSCSPO-UHFFFAOYSA-N	4.4×10^1 1.1 2.2×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEPTOOH $C_7H_{16}O_2$ RCPMMXGHHMBPLI-UHFFFAOYSA-N	3.6 1.1 9.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2HEXAOOH $C_7H_{16}O_2$ MZRXBNCEXTUOSL-UHFFFAOYSA-N	4.1 1.2 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2HEXBOOH $C_7H_{16}O_2$ VERXWXMNIBWXFV-UHFFFAOYSA-N	2.5 6.6×10^{-1} 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M3HEXAOOH $C_7H_{16}O_2$ SLXXGKGKZGKGOKQ-UHFFFAOYSA-N	4.1 1.4 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M3HEXBOOH $C_7H_{16}O_2$ YDBMAIVJCSJSKQ-UHFFFAOYSA-N	2.5 6.8×10^{-1} 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1-methylhexyl hydroperoxide $C_7H_{16}O_2$ (C7H15O2H) [762-46-9] FWELUXZVATZEMI-UHFFFAOYSA-N	7.7×10^{-1}	7600	Wieser et al. (2023)	Q	437
C7OHOOH $C_7H_{16}O_3$ KHWIBANUCNWWGW-UHFFFAOYSA-N	4.1×10^3	12000	Wieser et al. (2023)	Q	437
MCM:C8BCOOH $C_8H_{14}O_2$ TDXDGDALDAWYAQL-UHFFFAOYSA-N	2.7×10^1 7.4 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OCTOOH $C_8H_{18}O_2$ PXUMFRDQKQLDGL-UHFFFAOYSA-N	2.8 9.8×10^{-1} 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methylheptl hydroperoxide $C_8H_{18}O_2$ (C8H17O2H) NAXZMRYIZGEALQ-UHFFFAOYSA-N	5.8×10^{-1}	8000	Wieser et al. (2023)	Q	437
C8OHOOH $C_8H_{18}O_3$ QQTSMKQYSKGCOU-UHFFFAOYSA-N	3.2×10^3	12000	Wieser et al. (2023)	Q	437
MCM:NONOOH $C_9H_{20}O_2$ BXPIMWLPPYUCSQ-UHFFFAOYSA-N	2.6 8.3×10^{-1} 9.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DECOOH $C_{10}H_{22}O_2$ MPMVWDJTKHXCAN-UHFFFAOYSA-N	2.0 7.3×10^{-1} 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
C5H112O2H $C_{10}H_{22}O_4$ AXIHYONNAPPFSO-UHFFFAOYSA-N	1.4	7000	Wieser et al. (2023)	Q	437
LIMAB15OOH2 $C_{10}H_{20}O_6$ IRUZCTPAAZATQM-UHFFFAOYSA-N	2.3×10^{12}	20000	Wieser et al. (2023)	Q	437
RO5R1O2H $C_{10}H_{18}O_4$ NSOHXIGSWKLSHV-UHFFFAOYSA-N	9.9×10^5	17000	Wieser et al. (2023)	Q	437
RO5R2O2H $C_{10}H_{18}O_5$ MFXJOKCSTDMZRM-UHFFFAOYSA-N	1.8×10^7	19000	Wieser et al. (2023)	Q	437
ROO6R1OOH $C_{10}H_{18}O_5$ GBBPAXKBVMQHIG-UHFFFAOYSA-N	6.8×10^4	16000	Wieser et al. (2023)	Q	437
RO5R3O2H $C_{10}H_{18}O_6$ IEPFJXDIWPQIRC-UHFFFAOYSA-N	7.7×10^7	22000	Wieser et al. (2023)	Q	437
MCM:UDECOOH $C_{11}H_{24}O_2$ PPEGYVQDERYKNI-UHFFFAOYSA-N	1.6 6.5×10^{-1} 9.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DDECOOH $C_{12}H_{26}O_2$ ONWAGJMEBPWHEG-UHFFFAOYSA-N	1.5 5.8×10^{-1} 8.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6H5OOH $C_6H_6O_2$ JYINMLPNDRBKKZ-UHFFFAOYSA-N	3.2×10^2 8.9×10^1 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6H5CH2OOH $C_7H_8O_2$ YVJRCWCFDJYONJ-UHFFFAOYSA-N	2.6×10^2 9.1×10^1 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6H5CO3H $C_7H_6O_3$ XCRBXWCUXJNEFX-UHFFFAOYSA-N	3.7×10^3 6.2×10^1 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYL1OOH $C_7H_8O_2$ VCTGBWYTEXZDNM-UHFFFAOYSA-N	1.9×10^2 7.8×10^1 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYL1OOH $C_7H_8O_2$ OCSKWYCRTWOMLG-UHFFFAOYSA-N	1.9×10^2 1.0×10^2 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYL1OOH $C_7H_8O_2$ ZCUUEQJCSBJOR-UHFFFAOYSA-N	1.9×10^2 9.1×10^1 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6H5C2CO3H $C_8H_8O_3$ BXGXGTXWGGOFSP-UHFFFAOYSA-N	3.1×10^3 6.3×10^1 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6H5C2OOH $C_8H_{10}O_2$ VZQOBXPXGQJXYGY-UHFFFAOYSA-N	2.3×10^2 6.9×10^1 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DM123OOH $C_8H_{10}O_2$ FPXURWFXMHYDGM-UHFFFAOYSA-N	1.1×10^2 1.3×10^2 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DM124OOH $C_8H_{10}O_2$ UQJVEYMRRMOLPI-UHFFFAOYSA-N	1.1×10^2 1.0×10^2 3.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMPHOOH $C_8H_{10}O_2$ AGQLZSPEKWKXRP-UHFFFAOYSA-N	1.1×10^2 6.5×10^1 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBENZOOH $C_8H_{10}O_2$ SULLUHFYVRLICT-UHFFFAOYSA-N	1.7×10^2 6.3×10^1 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYL1OOH $C_8H_{10}O_2$ LDNGPDBEDBLXJS-UHFFFAOYSA-N	1.1×10^2 1.1×10^2 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYLCO3H $C_8H_8O_3$ INFFZTZRGNVBOC-UHFFFAOYSA-N	2.2×10^3 5.0×10^1 2.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MXILOOH $\text{C}_8\text{H}_{10}\text{O}_2$ UTKFWOZXPFBPQ-UHFFFAOYSA-N	1.7×10^2 8.3×10^1 7.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYLCO3H $\text{C}_8\text{H}_8\text{O}_3$ DNEXRQSSNZPAJJ-UHFFFAOYSA-N	2.2×10^3 6.2×10^1 2.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYLOOH $\text{C}_8\text{H}_{10}\text{O}_2$ JTJQZHCMBJMMV-UHFFFAOYSA-N	1.7×10^2 9.3×10^1 6.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYLOOH $\text{C}_8\text{H}_{10}\text{O}_2$ QBGVYVNGBYXOUAG-UHFFFAOYSA-N	1.1×10^2 1.1×10^2 2.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYLCO3H $\text{C}_8\text{H}_8\text{O}_3$ IFDPVSBDNAQBQR-UHFFFAOYSA-N	2.2×10^3 5.6×10^1 7.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYLOOH $\text{C}_8\text{H}_{10}\text{O}_2$ VCEHMDXCOGIOJJ-UHFFFAOYSA-N	1.7×10^2 9.8×10^1 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EMPHOOH $\text{C}_9\text{H}_{12}\text{O}_2$ MKWUSWBHCPKVBI-UHFFFAOYSA-N	1.0×10^2 4.0×10^1 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETOLOOH $\text{C}_9\text{H}_{12}\text{O}_2$ DWPOLKIWKGPAM-UHFFFAOYSA-N	1.6×10^2 5.0×10^1 4.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBENZOOH $\text{C}_9\text{H}_{12}\text{O}_2$ CZNIJWCDRJWKLK-UHFFFAOYSA-N	1.6×10^2 5.0×10^1 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLOOH $\text{C}_9\text{H}_{12}\text{O}_2$ HUAUUDZXRNWOSS-UHFFFAOYSA-N	1.0×10^2 6.5×10^1 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLOOH $\text{C}_9\text{H}_{12}\text{O}_2$ KVZSMDLRNLVTLK-UHFFFAOYSA-N	1.0×10^2 7.4×10^1 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBENZOOH $\text{C}_9\text{H}_{12}\text{O}_2$ BFUPNGCSYHWOOH-UHFFFAOYSA-N	1.4×10^2 4.9×10^1 1.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLOOH $\text{C}_9\text{H}_{12}\text{O}_2$ IKLGQZOVXYBNEV-UHFFFAOYSA-N	1.0×10^2 6.6×10^1 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PHC3OOH $\text{C}_9\text{H}_{12}\text{O}_2$ JYLUDNGUBXOJPX-UHFFFAOYSA-N	2.1×10^2 3.6×10^1 5.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123BCO3H $\text{C}_9\text{H}_{10}\text{O}_3$ NQSDUJYDMWXHMR-UHFFFAOYSA-N	1.4×10^3 7.3×10^1 3.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123BOOH $\text{C}_9\text{H}_{12}\text{O}_2$ HSKYDUVZGAHSEO-UHFFFAOYSA-N	1.0×10^2 1.2×10^2 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123OOH $\text{C}_9\text{H}_{12}\text{O}_2$ QIIZMGNSXSJCNA-UHFFFAOYSA-N	6.5×10^1 1.6×10^2 5.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124BCO3H $\text{C}_9\text{H}_{10}\text{O}_3$ HPLBJCPAWPQKDU-UHFFFAOYSA-N	1.4×10^3 6.0×10^1 4.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124BOOH $\text{C}_9\text{H}_{12}\text{O}_2$ ZUEBLWOBXMLPMV-UHFFFAOYSA-N	1.0×10^2 1.1×10^2 7.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124OOH $\text{C}_9\text{H}_{12}\text{O}_2$ DSGKIBNJTLHQCN-UHFFFAOYSA-N	6.5×10^1 1.3×10^2 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TMBCO3H $\text{C}_9\text{H}_{10}\text{O}_3$ APDYULOMODUXLL-UHFFFAOYSA-N	1.4×10^3 3.9×10^1 2.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TMBOOH $\text{C}_9\text{H}_{12}\text{O}_2$ GOKTXPLVCSLYGI-UHFFFAOYSA-N	1.0×10^2 6.9×10^1 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DM35EBOOH $\text{C}_{10}\text{H}_{14}\text{O}_2$ NSJZLSFVHPJVDL-UHFFFAOYSA-N	9.1×10^1 3.6×10^1 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EMPHCO3H $\text{C}_{10}\text{H}_{12}\text{O}_3$ GYXFVTDASBFNQD-UHFFFAOYSA-N	1.0×10^3 2.3×10^1 2.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DE35TOOH $\text{C}_{11}\text{H}_{16}\text{O}_2$ HPTJZRKCFIXEOP-UHFFFAOYSA-N	7.6×10^1 2.4×10^1 3.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOCH2CO3H $\text{C}_2\text{H}_4\text{O}_4$ IUEZWLCUORJBDZ-UHFFFAOYSA-N	1.6×10^4 1.9×10^2 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HYETHO2H $\text{C}_2\text{H}_6\text{O}_3$ FKPAKAOEHCFKLE-UHFFFAOYSA-N	2.8×10^4 2.9×10^3 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C2OHOCO2H $\text{C}_3\text{H}_6\text{O}_5$ GTTVGDRVLZEEEW-UHFFFAOYSA-N	1.8×10^7 2.2×10^5 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3DIOLOOH $\text{C}_3\text{H}_8\text{O}_4$ XSLBWJPPWWFTQY-UHFFFAOYSA-N	2.8×10^7 1.1×10^6 3.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO1C3OOH $\text{C}_3\text{H}_8\text{O}_3$ LTKFKDLZMYUGKU-UHFFFAOYSA-N	2.0×10^4 2.1×10^3 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOC2H4CO3H $\text{C}_3\text{H}_6\text{O}_4$ HPIZQAHLZDXVRM-UHFFFAOYSA-N	2.6×10^5 8.9×10^4 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HYPPO2H $\text{C}_3\text{H}_8\text{O}_3$ CGHALRGHFEMJB-UHFFFAOYSA-N	2.6×10^4 3.0×10^3 4.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPROPOLO2H $\text{C}_3\text{H}_8\text{O}_3$ LGTUXDWECPSIQO-UHFFFAOYSA-N	2.6×10^4 2.1×10^3 4.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPROPOLPER $\text{C}_3\text{H}_6\text{O}_4$ LLWVBKQPPRNEX-UHFFFAOYSA-N	1.4×10^4 1.5×10^2 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUT2OLOOH $\text{C}_4\text{H}_{10}\text{O}_3$ VRQPOZSYDWHVQK-UHFFFAOYSA-N	2.5×10^4 1.5×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUTDAO2H $\text{C}_4\text{H}_8\text{O}_3$ ATNKTSVDMCPWQK-UHFFFAOYSA-N	6.5×10^4 2.5×10^5 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUTD2OOH $\text{C}_4\text{H}_8\text{O}_3$ VQGAWAMXULZCZ-UHFFFAOYSA-N	5.9×10^4 2.3×10^3 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUTDCOOH $\text{C}_4\text{H}_8\text{O}_3$ TVUDLONEIXNOQY-UHFFFAOYSA-N	5.9×10^4 1.9×10^3 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HC3CCO3H $\text{C}_4\text{H}_6\text{O}_4$ ZSVMRAYUVFDTKB-UHFFFAOYSA-N	3.3×10^4 2.2×10^2 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HC3CO3H $\text{C}_4\text{H}_6\text{O}_4$ AVVVUWGQXKTDKD-UHFFFAOYSA-N	9.6×10^5 1.9×10^5 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HMACO3H $\text{C}_4\text{H}_6\text{O}_4$ IZGOVIKWSGSSGB-UHFFFAOYSA-N	4.9×10^5 2.0×10^4 9.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO13C3CO3H $\text{C}_4\text{H}_8\text{O}_5$ SAVJJQFYFVKTL-UHFFFAOYSA-N	3.6×10^7 9.8×10^5 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO13C4OOH $\text{C}_4\text{H}_{10}\text{O}_4$ WTIWPVYZJGYFOG-UHFFFAOYSA-N	5.9×10^7 7.3×10^6 1.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO1C4OOH $\text{C}_4\text{H}_{10}\text{O}_3$ RCPPCOTVBKCGJX-UHFFFAOYSA-N	1.6×10^4 6.9×10^4 3.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2C3CO3H $\text{C}_4\text{H}_8\text{O}_4$ WSXMRWGMXYEOT-UHFFFAOYSA-N	2.5×10^5 1.0×10^5 4.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2C4OOH $\text{C}_4\text{H}_{10}\text{O}_3$ VJLLYXNZUMWUFH-UHFFFAOYSA-N	1.9×10^4 9.1×10^2 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C3CO3H $\text{C}_4\text{H}_8\text{O}_4$ BPXTXQLLUZFFNC-UHFFFAOYSA-N	1.2×10^4 8.9×10^1 1.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C4OOH $\text{C}_4\text{H}_{10}\text{O}_3$ RMYCTZOJULYKEL-UHFFFAOYSA-N	2.1×10^4 1.4×10^3 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOC3H6CO3H $\text{C}_4\text{H}_8\text{O}_4$ CAGKPIQTEWLESW-UHFFFAOYSA-N	2.3×10^5 8.9×10^4 3.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOIPRCO3H $\text{C}_4\text{H}_8\text{O}_4$ XMJMNOOSJCSST-UHFFFAOYSA-N	2.5×10^5 9.8×10^4 6.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IBUTOLBO2H $\text{C}_4\text{H}_{10}\text{O}_3$ NCECNUIKMRITTTQ-UHFFFAOYSA-N	1.4×10^4 1.3×10^3 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IBUTOLCO2H $\text{C}_4\text{H}_{10}\text{O}_3$ IYIYQILWOLBTBM-UHFFFAOYSA-N	1.9×10^4 1.5×10^3 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IPRHOCO3H $C_4H_8O_4$ VAHIZEUROSQIMC-UHFFFAOYSA-N	8.1×10^3 3.2×10^1 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUTLOAOOH $C_4H_{10}O_3$ KPUGJKMFRKADT-UHFFFAOYSA-N	2.1×10^4 2.1×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUTOLBOOH $C_4H_{10}O_3$ UKXKMFPUVLQYHV-UHFFFAOYSA-N	1.9×10^4 1.4×10^3 2.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TBUTOLOOH $C_4H_{10}O_3$ OLMJQPVVWPTBW-UHFFFAOYSA-N	1.4×10^4 8.0×10^2 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3M3OHCO3H $C_5H_{10}O_4$ OPXDDGDNASPZKO-UHFFFAOYSA-N	1.1×10^4 7.6×10^1 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C42CO3H $C_5H_{10}O_5$ ZMIMRJOKAFWNST-UHFFFAOYSA-N	3.3×10^7 1.2×10^6 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C46CO3H $C_5H_8O_4$ VWNMYJVYTYSNQP-UHFFFAOYSA-N	4.5×10^5 1.4×10^5 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4OH2CO3H $C_5H_{10}O_5$ WQUIEUQOLAPHC-UHFFFAOYSA-N	9.1×10^6 2.0×10^5 9.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4OHCO3H $C_5H_{10}O_4$ OQVSVCDIVLTQNI-UHFFFAOYSA-N	1.0×10^4 5.5×10^1 6.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C51OH2OOH $C_5H_{12}O_3$ YEVLRKKUVOPQLT-UHFFFAOYSA-N	1.9×10^4 1.7×10^3 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C524OOH $C_5H_{10}O_4$ CMYVSBWTXHBCDK-UHFFFAOYSA-N	1.1×10^8 1.2×10^7 8.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C52OH1OOH $C_5H_{12}O_3$ UCQFCLCUMHUGLJ-UHFFFAOYSA-N	1.9×10^4 1.0×10^3 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C52OH3OOH $C_5H_{12}O_3$ HJJMDLGAJYCSL-UHFFFAOYSA-N	1.9×10^4 1.7×10^3 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C52OOH $\text{C}_5\text{H}_{12}\text{O}_3$ ZPHQYWRKWRKNS-UHFFFAOYSA-N	1.5×10^4 5.1×10^4 3.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C53OH2OOH $\text{C}_5\text{H}_{12}\text{O}_3$ AJVYEIIRONFKES-UHFFFAOYSA-N	1.9×10^4 1.0×10^3 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C54OOH $\text{C}_5\text{H}_{12}\text{O}_4$ YUSGXJKDHCBGQE-UHFFFAOYSA-N	3.2×10^7 5.9×10^6 6.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C56OOH $\text{C}_5\text{H}_{12}\text{O}_4$ ZJCLGCDNIJGCW-UHFFFAOYSA-N	5.6×10^7 7.6×10^6 7.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H13C43CO3H $\text{C}_5\text{H}_{10}\text{O}_5$ AHAADFOLDXPWKJ-UHFFFAOYSA-N	1.9×10^7 4.1×10^5 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M2C3CO3H $\text{C}_5\text{H}_{10}\text{O}_4$ WNBWRWGLXVYJADJ-UHFFFAOYSA-N	1.4×10^5 5.9×10^4 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M3C4OOH $\text{C}_5\text{H}_{12}\text{O}_3$ ZUPZYIDTDLVJQO-UHFFFAOYSA-N	1.7×10^4 8.5×10^2 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HC4ACO3H $\text{C}_5\text{H}_8\text{O}_4$ RKJIARBOZVRICG-UHFFFAOYSA-N	6.5×10^5 2.0×10^5 8.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HC4CCO3H $\text{C}_5\text{H}_8\text{O}_4$ BKBSBVFBLVOVGK-UHFFFAOYSA-N	6.5×10^5 1.9×10^5 7.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM22C3OOH $\text{C}_5\text{H}_{12}\text{O}_3$ YTVLHPDOOITGNI-UHFFFAOYSA-N	1.0×10^4 9.8×10^2 2.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM22CO3H $\text{C}_5\text{H}_{10}\text{O}_4$ JLDURWTXWMLEQQ-UHFFFAOYSA-N	1.4×10^5 5.4×10^4 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM2C43OOH $\text{C}_5\text{H}_{12}\text{O}_3$ HSLVQIVCJSWUOZ-UHFFFAOYSA-N	1.7×10^4 1.6×10^3 8.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM33C3OOH $\text{C}_5\text{H}_{12}\text{O}_3$ WHBWUNCJQHRHKD-UHFFFAOYSA-N	1.0×10^4 7.3×10^2 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO13C5OOH	5.6×10^7		Wang et al. (2017)	Q	80, 238
$C_5H_{12}O_4$	7.6×10^6		Wang et al. (2017)	Q	80, 239
MPQCFHWMIVYQV-UHFFFAOYSA-N	1.3×10^6		Wang et al. (2017)	Q	80, 240
MCM:HO1C5OOH	1.5×10^4		Wang et al. (2017)	Q	80, 238
$C_5H_{12}O_3$	4.8×10^4		Wang et al. (2017)	Q	80, 239
NOIFGIKGVCIDM-UHFFFAOYSA-N	2.9×10^3		Wang et al. (2017)	Q	80, 240
MCM:HO24C4CO3H	3.3×10^7		Wang et al. (2017)	Q	80, 238
$C_5H_{10}O_5$	7.6×10^5		Wang et al. (2017)	Q	80, 239
BPXJXZFDALRNCD-UHFFFAOYSA-N	1.8×10^4		Wang et al. (2017)	Q	80, 240
MCM:HO24C5OOH	5.6×10^7		Wang et al. (2017)	Q	80, 238
$C_5H_{12}O_4$	3.4×10^6		Wang et al. (2017)	Q	80, 239
LXCUFKDAZLTFBK-UHFFFAOYSA-N	7.6×10^5		Wang et al. (2017)	Q	80, 240
MCM:HO2C43CO3H	2.3×10^5		Wang et al. (2017)	Q	80, 238
$C_5H_{10}O_4$	7.3×10^4		Wang et al. (2017)	Q	80, 239
JJSNUFSNLCXQDD-UHFFFAOYSA-N	3.8×10^1		Wang et al. (2017)	Q	80, 240
MCM:HO2C4CO3H	2.2×10^5		Wang et al. (2017)	Q	80, 238
$C_5H_{10}O_4$	6.3×10^4		Wang et al. (2017)	Q	80, 239
WEYKGBTAJHRDZ-UHFFFAOYSA-N	1.1×10^2		Wang et al. (2017)	Q	80, 240
MCM:HO2C54OOH	1.7×10^4		Wang et al. (2017)	Q	80, 238
$C_5H_{12}O_3$	5.4×10^2		Wang et al. (2017)	Q	80, 239
NQEGDBNDYHCERX-UHFFFAOYSA-N	6.2×10^3		Wang et al. (2017)	Q	80, 240
MCM:HO2C5OOH	7.1×10^3	11000	Wieser et al. (2023)	Q	437
$C_5H_{12}O_3$	1.5×10^4		Wang et al. (2017)	Q	80, 238
GSRFGQMXWRCOMF-UHFFFAOYSA-N	5.4×10^4		Wang et al. (2017)	Q	80, 239
	1.4×10^3		Wang et al. (2017)	Q	80, 240
MCM:HO2M2C4OOH	1.0×10^4		Wang et al. (2017)	Q	80, 238
$C_5H_{12}O_3$	5.4×10^2		Wang et al. (2017)	Q	80, 239
BPHNXEOBBWBBGO-UHFFFAOYSA-N	4.3×10^3		Wang et al. (2017)	Q	80, 240
MCM:HO3C4CO3H	2.2×10^5		Wang et al. (2017)	Q	80, 238
$C_5H_{10}O_4$	5.6×10^4		Wang et al. (2017)	Q	80, 239
OFXAQZFPQOWEPU-UHFFFAOYSA-N	1.7×10^1		Wang et al. (2017)	Q	80, 240
MCM:HO3C5OOH	1.5×10^4		Wang et al. (2017)	Q	80, 238
$C_5H_{12}O_3$	6.9×10^2		Wang et al. (2017)	Q	80, 239
AMTQAQGRUCFWLQ-UHFFFAOYSA-N	5.1×10^3		Wang et al. (2017)	Q	80, 240
MCM:HOBUT2CO3H	2.2×10^5		Wang et al. (2017)	Q	80, 238
$C_5H_{10}O_4$	5.8×10^4		Wang et al. (2017)	Q	80, 239
HHXRGEWJUDFIW-UHFFFAOYSA-N	1.9×10^2		Wang et al. (2017)	Q	80, 240
MCM:HOIBUTCO3H	2.2×10^5		Wang et al. (2017)	Q	80, 238
$C_5H_{10}O_4$	5.6×10^4		Wang et al. (2017)	Q	80, 239
JVGUWDNKCJEDLO-UHFFFAOYSA-N	1.4×10^2		Wang et al. (2017)	Q	80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ISOPAOOH $C_5H_{10}O_3$ PEJOQVDRQFVMLE-UHFFFAOYSA-N	4.4×10^4 1.7×10^5 8.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ISOPBOOH $C_5H_{10}O_3$ QTGGFXPTAQEODO-UHFFFAOYSA-N	1.2×10^3 9.9×10^2 1.3×10^4	9900	Rivera-Rios (2018) Rivera-Rios (2018) Rivera-Rios (2018)	M Q Q	 453 454
	3.3×10^4 1.4×10^3 4.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ISOPCOOH $C_5H_{10}O_3$ FCLDANRCFPUKED-UHFFFAOYSA-N	4.4×10^4 2.0×10^5 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ISOPDOOH $C_5H_{10}O_3$ HYHMYONEYJINON-UHFFFAOYSA-N	1.2×10^2 2.6×10^4 1.3×10^4	7500	Rivera-Rios (2018) Rivera-Rios (2018) Rivera-Rios (2018)	M Q Q	 453 454
	4.0×10^4 1.8×10^3 8.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2BU2OLOOH $C_5H_{12}O_3$ YWZMEYHQKXHRJF-UHFFFAOYSA-N	1.4×10^4 1.1×10^3 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2BUOL2OOH $C_5H_{12}O_3$ KLOVYRXVQOACLZ-UHFFFAOYSA-N	1.2×10^4 1.1×10^3 6.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M3BU2OLOOH $C_5H_{12}O_3$ AFEDOYRLNKBWPZ-UHFFFAOYSA-N	1.9×10^4 1.1×10^3 8.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MBOAOOH $C_5H_{12}O_4$ VJEOLZUQMDEVMO-UHFFFAOYSA-N	4.1×10^7 4.5×10^6 6.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MBOBOOH $C_5H_{12}O_4$ GXJWPCHTRDIVHR-UHFFFAOYSA-N	1.4×10^7 6.3×10^5 5.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ME2BUOLOOH $C_5H_{12}O_3$ SAXHQAUHEBEDAO-UHFFFAOYSA-N	1.4×10^4 6.9×10^2 9.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ME3BUOLOOH $C_5H_{12}O_3$ MUYQYONVNPJGI-UHFFFAOYSA-N	1.9×10^4 2.3×10^3 9.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PROL11MOOH $C_5H_{12}O_3$ UVDGWSPEOVCOFS-UHFFFAOYSA-N	1.2×10^4 5.6×10^2 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PROL1MCO3H $C_5H_{10}O_4$ KTQROZYFUGXCXA-UHFFFAOYSA-N	6.3×10^3 2.1×10^1 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZBIPER2OH $C_6H_8O_4$ BVNIDXNYDXJAFS-UHFFFAOYSA-N	3.0×10^7 1.9×10^6 8.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZBIPEROOH $C_6H_8O_5$ MXPMOVDECINDPN-UHFFFAOYSA-N	7.1×10^8 9.3×10^6 2.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4ME2OHOOH $C_6H_{14}O_3$ HOGFDWYRBLIMGU-UHFFFAOYSA-N	7.6×10^3 3.8×10^2 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C518CO3H $C_6H_{10}O_4$ HLKDNMTMYLJUNIF-UHFFFAOYSA-N	4.3×10^5 5.6×10^4 5.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C622OOH $C_6H_{12}O_3$ GWTGWFHICNOSTQ-UHFFFAOYSA-N	1.3×10^4 2.9×10^4 1.3×10^3 1.6×10^3	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C624OOH $C_6H_{12}O_3$ DDEGWYHJCSBWJSM-UHFFFAOYSA-N	2.9×10^4 1.3×10^3 8.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C64OH5OOH $C_6H_{14}O_3$ ZEOCDIHFKNFYIT-UHFFFAOYSA-N	1.8×10^4 7.8×10^2 6.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C65OH4OOH $C_6H_{14}O_3$ PVVIDEIOKNUTFV-UHFFFAOYSA-N	1.8×10^4 1.4×10^3 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6OH5OOH $C_6H_{14}O_3$ HRDCBAWVKIWIOZ-UHFFFAOYSA-N	1.5×10^4 1.3×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CYHXOLAOOH $C_6H_{12}O_3$ UBIBQRDHLFTCKX-UHFFFAOYSA-N	5.0×10^4 8.5×10^4 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H13M3C5OOH $C_6H_{14}O_4$ KEIPMCKLLYLETP-UHFFFAOYSA-N	3.0×10^7 7.3×10^6 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:H1MC5OOH $\text{C}_6\text{H}_{14}\text{O}_3$ NRUVZELSEXOEO-UHFFFAOYSA-N	1.4×10^4 5.5×10^4 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M2C4CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ NRXKHRBCIJLLIW-UHFFFAOYSA-N	1.3×10^5 4.6×10^4 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M3C4CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ BSSSRXSGDLZQTD-UHFFFAOYSA-N	2.0×10^5 5.0×10^4 6.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2MC5OOH $\text{C}_6\text{H}_{14}\text{O}_3$ VFABJBQUVDJMTS-UHFFFAOYSA-N	1.4×10^4 4.9×10^4 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3M2C4CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ BXUACBWFNFVFRM-UHFFFAOYSA-N	2.0×10^5 4.6×10^4 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3M3C4CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ QREFYDOYWEEBY-UHFFFAOYSA-N	1.3×10^5 4.1×10^4 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3M3C5OOH $\text{C}_6\text{H}_{14}\text{O}_3$ SFWIETIRFCBPV-UHFFFAOYSA-N	8.1×10^3 4.6×10^2 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM22C3CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ CFTUKLJUHJMT-UHFFFAOYSA-N	1.3×10^5 3.5×10^4 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM22C4OOH $\text{C}_6\text{H}_{14}\text{O}_3$ RBKQZGUZSABUAQ-UHFFFAOYSA-N	8.1×10^3 3.2×10^4 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM23C4OOH $\text{C}_6\text{H}_{14}\text{O}_3$ OEDZXCCMDSIVQE-UHFFFAOYSA-N	1.4×10^4 6.9×10^4 1.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM2C43CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ AAGWOGOWVBCOC-UHFFFAOYSA-N	2.0×10^5 5.5×10^4 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM33C3CO3H $\text{C}_6\text{H}_{12}\text{O}_4$ CJLFHOYFCBYSAF-UHFFFAOYSA-N	1.3×10^5 3.8×10^4 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM33C4OOH $\text{C}_6\text{H}_{14}\text{O}_3$ IRDKGYBPQHNSI-UHFFFAOYSA-N	8.1×10^3 4.5×10^4 6.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO1C6OOH $C_6H_{14}O_3$ AODLLEVTDATZKZ-UHFFFAOYSA-N	1.2×10^4 3.7×10^4 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO1MC5OOH $C_6H_{14}O_3$ XFJAYUAZOYAZNW-UHFFFAOYSA-N	1.4×10^4 2.5×10^4 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2C54CO3H $C_6H_{12}O_4$ HFXNQHIGYFOTHL-UHFFFAOYSA-N	2.0×10^5 4.3×10^4 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2C6OOH $C_6H_{14}O_3$ BVOYWPYSMMRPX-UHFFFAOYSA-N	5.4×10^3 1.4×10^4 2.4×10^4 1.8×10^3	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:HO2M2C5OOH $C_6H_{14}O_3$ XDJWSJNLVSIJHD-UHFFFAOYSA-N	8.1×10^3 4.1×10^4 5.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2MC5OOH $C_6H_{14}O_3$ AGNBGPUCVJMPGZ-UHFFFAOYSA-N	1.4×10^4 4.8×10^4 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C5CO3H $C_6H_{12}O_4$ NIDIDJCFEJYKBD-UHFFFAOYSA-N	1.8×10^5 4.5×10^4 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C6OOH $C_6H_{14}O_3$ WSWZWPBQPMRENX-UHFFFAOYSA-N	1.2×10^4 4.0×10^4 8.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO4C5CO3H $C_6H_{12}O_4$ YRMQNGAQYQCFBS-UHFFFAOYSA-N	1.8×10^5 4.2×10^4 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO5C5CO3H $C_6H_{12}O_4$ ZOLITBGWKBFVQG-UHFFFAOYSA-N	8.5×10^3 4.0×10^1 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO5C6OOH $C_6H_{14}O_3$ VKWHJFIJUJODAG-UHFFFAOYSA-N	1.5×10^4 7.6×10^2 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PHENOH $C_6H_8O_5$ JRROYJLQPIXCRD-UHFFFAOYSA-N	5.5×10^{10} 4.5×10^8 1.2×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PHENOOH $C_6H_8O_6$ WQYYMQUZFKHHO-UHFFFAOYSA-N	1.4×10^{12} 2.0×10^8 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C622CO3H $C_7H_{12}O_4$ JSEAPEOJJJOJEL-UHFFFAOYSA-N	3.3×10^5 3.5×10^4 9.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C624CO3H $C_7H_{12}O_4$ VELNAHZLHYPPPOS-UHFFFAOYSA-N	3.3×10^5 3.9×10^4 2.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C720OOH $C_7H_{12}O_3$ LPMHECUYQWFTDP-UHFFFAOYSA-N	1.2×10^5 2.9×10^5 2.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CRESOH $C_7H_{10}O_5$ UMHUAUCNJCQCRC-UHFFFAOYSA-N	3.0×10^{10} 1.7×10^8 1.6×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CRESOOH $C_7H_{10}O_6$ POYQJFWARUGMBT-UHFFFAOYSA-N	7.8×10^{11} 7.6×10^7 2.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M2C65OOH $C_7H_{16}O_3$ MDRLNEUVCFZYIZ-UHFFFAOYSA-N	7.6×10^3 2.9×10^4 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M4C65OOH $C_7H_{16}O_3$ HGFYTCXFDJYCQF-UHFFFAOYSA-N	1.3×10^4 3.9×10^4 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M5C65OOH $C_7H_{16}O_3$ NIKXNAUPHRWTEG-UHFFFAOYSA-N	7.6×10^3 1.0×10^4 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3M3C5CO3H $C_7H_{14}O_4$ DTTYTHTMWEWDN-UHFFFAOYSA-N	9.8×10^4 3.8×10^4 4.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3M3C6OOH $C_7H_{16}O_3$ IWLJNMJTMGLQI-UHFFFAOYSA-N	6.6×10^3 3.3×10^4 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C76OOH $C_7H_{16}O_3$ YDKPOQVDDHNRNK-UHFFFAOYSA-N	1.1×10^4 2.0×10^4 9.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO5C6CO3H $C_7H_{14}O_4$ KSOZMYOJLUVTBj-UHFFFAOYSA-N	1.4×10^5 3.3×10^4 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO6C7OOH $C_7H_{16}O_3$ YGTQIECBHSKCOV-UHFFFAOYSA-N	1.2×10^4 5.9×10^2 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TLBIPER2OH $C_7H_{10}O_4$ CXEVRKZODGVABW-UHFFFAOYSA-N	1.7×10^7 9.6×10^5 2.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLBIPEROOH $C_7H_{10}O_5$ JAKOWCUSWIMTAF-UHFFFAOYSA-N	3.9×10^8 3.8×10^6 9.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBENZOLOH $C_8H_{12}O_5$ BUWSXDLGJSAPEF-UHFFFAOYSA-N	2.5×10^{10} 1.0×10^8 6.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBENZOLOOH $C_8H_{12}O_6$ RHHRXIXEXUGSZ-UHFFFAOYSA-N	6.3×10^{11} 4.8×10^7 3.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZBPER2OH $C_8H_{12}O_4$ AUMASFBINMOOAH-UHFFFAOYSA-N	1.4×10^7 6.3×10^5 3.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZBPEROOH $C_8H_{12}O_5$ SCDRKAWXSVOIOT-UHFFFAOYSA-N	3.2×10^8 2.5×10^6 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C86OOH $C_8H_{18}O_3$ SPJZDLLIJATZHB-UHFFFAOYSA-N	1.0×10^4 1.4×10^4 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO6C7CO3H $C_8H_{16}O_4$ UKHVIUJOBBSNIJ-UHFFFAOYSA-N	1.3×10^5 2.9×10^4 9.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO7C8OOH $C_8H_{18}O_3$ NDXYTTLTSMWWGD-UHFFFAOYSA-N	1.1×10^4 4.7×10^2 7.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYBPER2OH $C_8H_{12}O_4$ HJWPGRMMUKJUOW-UHFFFAOYSA-N	9.3×10^6 4.0×10^5 1.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYBPEROOH $C_8H_{12}O_5$ JLBHNTWNBASURB-UHFFFAOYSA-N	2.2×10^8 1.5×10^6 1.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYOLOH $C_8H_{12}O_5$ HYWULKMMJLAVGS-UHFFFAOYSA-N	1.7×10^{10} 7.4×10^7 1.5×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYOLOOH $C_8H_{12}O_6$ GRFXDNYNQVBVKX-UHFFFAOYSA-N	4.4×10^{11} 3.2×10^7 3.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:OXYBPER2OH $\text{C}_8\text{H}_{12}\text{O}_4$ VCLGCGXSIRZEA-UHFFFAOYSA-N	9.3×10^6 5.0×10^5 4.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYBPEROOH $\text{C}_8\text{H}_{12}\text{O}_5$ AMPOFIFBYJNSOH-UHFFFAOYSA-N	2.2×10^8 1.5×10^6 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYOLOH $\text{C}_8\text{H}_{12}\text{O}_5$ CAIZPBLFMULAI-UHFFFAOYSA-N	2.0×10^{10} 1.2×10^8 4.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYOLOOH $\text{C}_8\text{H}_{12}\text{O}_6$ QYYRJAPHRBSJOE-UHFFFAOYSA-N	5.3×10^{11} 5.5×10^7 8.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYBPER2OH $\text{C}_8\text{H}_{12}\text{O}_4$ IOEDFCIBQPWSMP-UHFFFAOYSA-N	9.3×10^6 5.0×10^5 4.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYBPEROOH $\text{C}_8\text{H}_{12}\text{O}_5$ LZVOCZWDZPUJRQ-UHFFFAOYSA-N	2.2×10^8 1.6×10^6 5.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYOLOH $\text{C}_8\text{H}_{12}\text{O}_5$ YSBIHFSZRPVTOU-UHFFFAOYSA-N	2.0×10^{10} 1.6×10^8 9.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYOLOOH $\text{C}_8\text{H}_{12}\text{O}_6$ ROOFTVJQSDLVOJ-UHFFFAOYSA-N	5.3×10^{11} 6.8×10^7 4.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C96OOH $\text{C}_9\text{H}_{20}\text{O}_3$ GGTTUTGCXALAOI-UHFFFAOYSA-N	8.0×10^3 1.9×10^4 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO7C8CO3H $\text{C}_9\text{H}_{18}\text{O}_4$ LZPDGAGYXQEGIA-UHFFFAOYSA-N	1.0×10^5 2.6×10^4 9.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO8C9OOH $\text{C}_9\text{H}_{20}\text{O}_3$ DDKPTZKAQLYQQK-UHFFFAOYSA-N	8.9×10^3 3.8×10^2 6.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBENZOLOH $\text{C}_9\text{H}_{14}\text{O}_5$ MXOPSFWTSRHHQGT-UHFFFAOYSA-N	2.6×10^{10} 1.0×10^8 1.5×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBZBPR2OH $\text{C}_9\text{H}_{14}\text{O}_4$ ZYFWWFFTFWUTQU-UHFFFAOYSA-N	1.3×10^7 6.8×10^5 8.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IPZBPROOH $\text{C}_9\text{H}_{14}\text{O}_5$ PFZQQVVUSVRBJH-UHFFFAOYSA-N	2.8×10^8 2.6×10^6 2.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBZOLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ CHCZSTHNGRHXBM-UHFFFAOYSA-N	5.9×10^{11} 4.9×10^7 3.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLBPR2OH $\text{C}_9\text{H}_{14}\text{O}_4$ WBMKIPDFTCRXQQ-UHFFFAOYSA-N	7.4×10^6 2.8×10^5 5.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLBPROOH $\text{C}_9\text{H}_{14}\text{O}_5$ JDOROKVPYHJTEM-UHFFFAOYSA-N	1.7×10^8 1.0×10^6 4.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METOLOH $\text{C}_9\text{H}_{14}\text{O}_5$ JGSZPUTWQXTPGZ-UHFFFAOYSA-N	1.3×10^{10} 5.0×10^7 5.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METOLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ WHWNZVSDBMWGPT-UHFFFAOYSA-N	3.5×10^{11} 2.3×10^7 2.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLBPR2OH $\text{C}_9\text{H}_{14}\text{O}_4$ HUTNYAIOWRBWAA-UHFFFAOYSA-N	7.4×10^6 3.6×10^5 7.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLBPROOH $\text{C}_9\text{H}_{14}\text{O}_5$ JWHYGBDQJAPXFD-UHFFFAOYSA-N	1.7×10^8 1.1×10^6 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETOLOH $\text{C}_9\text{H}_{14}\text{O}_5$ RKSMHAQFVDQZCV-UHFFFAOYSA-N	1.7×10^{10} 7.6×10^7 5.1×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETOLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ HMIPOFAAVJMIHR-UHFFFAOYSA-N	4.4×10^{11} 3.1×10^7 4.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBENZOLOH $\text{C}_9\text{H}_{14}\text{O}_5$ PPOCUJGGLIXAB-UHFFFAOYSA-N	2.1×10^{10} 7.8×10^7 2.8×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBENZOLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ YYEAFIOCCPRRF-UHFFFAOYSA-N	5.6×10^{11} 3.7×10^7 9.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZBPER2OH $\text{C}_9\text{H}_{14}\text{O}_4$ NXHGWQBANLWNAY-UHFFFAOYSA-N	1.1×10^7 5.0×10^5 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PBZBPEROOH $\text{C}_9\text{H}_{14}\text{O}_5$ BDTBCPZZIFVKES-UHFFFAOYSA-N	2.8×10^8 2.0×10^6 2.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLBPR2OH $\text{C}_9\text{H}_{14}\text{O}_4$ ZJSMOJBPXMKGO-UHFFFAOYSA-N	7.4×10^6 3.6×10^5 2.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLBPROOH $\text{C}_9\text{H}_{14}\text{O}_5$ HYHORQQVDRWXSH-UHFFFAOYSA-N	1.7×10^8 1.1×10^6 8.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETOLOH $\text{C}_9\text{H}_{14}\text{O}_5$ WWWQWQMHQOYSCPT-UHFFFAOYSA-N	1.7×10^{10} 8.5×10^7 1.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETOLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ NWKQTACFFZGMV-UHFFFAOYSA-N	4.4×10^{11} 3.6×10^7 6.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123BP2OH $\text{C}_9\text{H}_{14}\text{O}_4$ XELNTWYHIBVYRB-UHFFFAOYSA-N	4.6×10^6 2.3×10^5 1.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123BPOOH $\text{C}_9\text{H}_{14}\text{O}_5$ VYRKWTIFXGFOKI-UHFFFAOYSA-N	1.2×10^8 8.7×10^5 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123OLOH $\text{C}_9\text{H}_{14}\text{O}_5$ CUPCKHHMKYENPF-UHFFFAOYSA-N	1.4×10^{10} 8.5×10^7 7.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123OLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ QKUAZMPWBBDUFL-UHFFFAOYSA-N	3.6×10^{11} 3.8×10^7 3.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124BP2OH $\text{C}_9\text{H}_{14}\text{O}_4$ ALTMQDHYGSUKTA-UHFFFAOYSA-N	4.6×10^6 2.3×10^5 1.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124BPOOH $\text{C}_9\text{H}_{14}\text{O}_5$ WAGRVRZIKOHUQN-UHFFFAOYSA-N	1.2×10^8 7.1×10^5 2.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124OLOH $\text{C}_9\text{H}_{14}\text{O}_5$ BDZMWRIFUJLAS-UHFFFAOYSA-N	1.4×10^{10} 1.2×10^8 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124OLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ BWEFFYCDYKJVMY-UHFFFAOYSA-N	3.6×10^{11} 5.4×10^7 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TM135BP2OH $\text{C}_9\text{H}_{14}\text{O}_4$ UOFFRVMQLZQOAS-UHFFFAOYSA-N	5.6×10^6 2.8×10^5 1.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135BPOOH $\text{C}_9\text{H}_{14}\text{O}_5$ JMJJTOHEWPZJQK-UHFFFAOYSA-N	1.4×10^8 7.3×10^5 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135OLOH $\text{C}_9\text{H}_{14}\text{O}_5$ QLKJHZCZIQIKHZ-UHFFFAOYSA-N	1.1×10^{10} 5.4×10^7 2.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135OLOOH $\text{C}_9\text{H}_{14}\text{O}_6$ BLJZZZVPECPSDH-UHFFFAOYSA-N	2.9×10^{11} 2.1×10^7 6.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:APINAOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ RYIWEMFTAFVTLU-UHFFFAOYSA-N	4.7×10^4 1.5×10^4 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:APINBOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ USRGRUOHOFDFID-UHFFFAOYSA-N	4.7×10^4 1.8×10^4 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:APINCOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ PONCTWLYBMTTOF-UHFFFAOYSA-N	4.9×10^4 1.6×10^5 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BPINAOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ YIWAKBLZYMRLPO-UHFFFAOYSA-N	4.1×10^4 1.6×10^3 4.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BPINBOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ LNOABRBKZGHYLB-UHFFFAOYSA-N	4.1×10^4 1.2×10^3 5.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BPINCOOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ ONJNLKNHLLSXIR-UHFFFAOYSA-N	4.6×10^4 2.7×10^5 3.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C918CO3H $\text{C}_{10}\text{H}_{16}\text{O}_4$ NCSYYALRPIRWRM-UHFFFAOYSA-N	2.2×10^4 5.9×10^1 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMEBPR2OH $\text{C}_{10}\text{H}_{16}\text{O}_4$ JNPNKLHEXQFLDW-UHFFFAOYSA-N	5.0×10^6 2.0×10^5 4.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMEBPROOH $\text{C}_{10}\text{H}_{16}\text{O}_5$ FGEXZPMCUOXGAY-UHFFFAOYSA-N	1.2×10^8 7.4×10^5 3.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DMEPHOLOH $C_{10}H_{16}O_5$	8.9×10^9 3.7×10^7		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 238 80, 239
KIALIUUKUYONFN-UHFFFAOYSA-N	4.9×10^5		Wang et al. (2017)	Q	80, 240
MCM:DMEPHOLOOH $C_{10}H_{16}O_6$	2.3×10^{11} 1.4×10^7		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 238 80, 239
NQWKUASPEMANIL-UHFFFAOYSA-N	3.2×10^5		Wang et al. (2017)	Q	80, 240
MCM:HO3C106OOH $C_{10}H_{22}O_3$	6.5×10^3 1.6×10^4		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 238 80, 239
FUGKCLXVXWNPDC-UHFFFAOYSA-N	1.1×10^3		Wang et al. (2017)	Q	80, 240
MCM:HO8C9CO3H $C_{10}H_{20}O_4$	8.1×10^4 2.5×10^4		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 238 80, 239
UIPJRQQFQSAZPI-UHFFFAOYSA-N	7.3		Wang et al. (2017)	Q	80, 240
MCM:LIMAOOH $C_{10}H_{18}O_3$	3.6×10^4 4.4×10^4	13000	Wieser et al. (2023) Wang et al. (2017)	Q Q	437 80, 238
FPMDSGWWEURSNO-UHFFFAOYSA-N	2.7×10^4 7.1×10^3		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 239 80, 240
MCM:LIMBOOH $C_{10}H_{18}O_3$	4.4×10^4 2.9×10^4		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 238 80, 239
KUZZIHAARVNWSI-UHFFFAOYSA-N	2.0×10^4		Wang et al. (2017)	Q	80, 240
MCM:LIMCOOH $C_{10}H_{18}O_3$	3.6×10^4 5.3×10^4	13000	Wieser et al. (2023) Wang et al. (2017)	Q Q	437 80, 238
VVHMRXSQYKNLK-UHFFFAOYSA-N	1.0×10^4 4.5×10^3		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 239 80, 240
MCM:DEMPHOLOH $C_{11}H_{18}O_5$	8.0×10^9 2.3×10^7		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 238 80, 239
ZTCJTCVANLQKAR-UHFFFAOYSA-N	1.4×10^5		Wang et al. (2017)	Q	80, 240
MCM:DEMPHOLOOH $C_{11}H_{18}O_6$	2.1×10^{11} 1.1×10^7		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 238 80, 239
MGZZNFQXGVYJN-UHFFFAOYSA-N	1.4×10^5		Wang et al. (2017)	Q	80, 240
MCM:DETLBPR2OH $C_{11}H_{18}O_4$	4.2×10^6 1.7×10^5		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 238 80, 239
DLRWBBGTDDBDMY-UHFFFAOYSA-N	8.5×10^5		Wang et al. (2017)	Q	80, 240
MCM:DETLBPROOH $C_{11}H_{18}O_5$	1.0×10^8 4.2×10^5		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 238 80, 239
XWTOJCWARUYVPA-UHFFFAOYSA-N	1.1×10^6		Wang et al. (2017)	Q	80, 240
MCM:HO3C116OOH $C_{11}H_{24}O_3$	5.8×10^3 1.3×10^4		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 238 80, 239
XCBVDNPGCYSIMS-UHFFFAOYSA-N	1.5×10^2		Wang et al. (2017)	Q	80, 240
MCM:HO3C126OOH $C_{12}H_{26}O_3$	4.8×10^3 1.0×10^4		Wang et al. (2017) Wang et al. (2017)	Q Q	80, 238 80, 239
FENUAUYSPLQZDX-UHFFFAOYSA-N	4.7×10^2		Wang et al. (2017)	Q	80, 240



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Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BCAOOH $C_{15}H_{26}O_3$ UHQMVBPMTQRFN-UHFFFAOYSA-N	4.0×10^4 3.6×10^3 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCBOOH $C_{15}H_{26}O_3$ LZWWDZWHHIWFFS-UHFFFAOYSA-N	4.0×10^4 1.0×10^4 6.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCCOOH $C_{15}H_{26}O_3$ LYZHLRDUTRINQK-UHFFFAOYSA-N	5.8×10^4 3.7×10^4 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CATEC1OOH $C_6H_6O_3$ GQLFYNLDCVYDKN-UHFFFAOYSA-N	7.4×10^4 1.4×10^3 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MCATEC1OOH $C_7H_8O_3$ XVDDPRZRYAGIKB-UHFFFAOYSA-N	4.6×10^4 1.6×10^3 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ECATEC1OOH $C_8H_{10}O_3$ WXEIAPLGSOOSMJ-UHFFFAOYSA-N	4.0×10^4 8.3×10^2 5.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXCTEC1OOH $C_8H_{10}O_3$ OTSRNDWSIFNBXP-UHFFFAOYSA-N	3.0×10^4 1.6×10^3 8.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OCATEC1OOH $C_8H_{10}O_3$ FFFASTPMSYAWLR-UHFFFAOYSA-N	3.0×10^4 1.7×10^3 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PCATEC1OOH $C_8H_{10}O_3$ XEPXMQBZYFNBF-UHFFFAOYSA-N	3.0×10^4 3.1×10^3 5.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:STYRENOOH $C_8H_{10}O_3$ PRSNAGJNCSLPW-UHFFFAOYSA-N	3.2×10^6 2.1×10^4 4.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPCATC1OOH $C_9H_{12}O_3$ LUGXJULPVOELPW-UHFFFAOYSA-N	3.8×10^4 6.0×10^2 5.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTCTEC1OOH $C_9H_{12}O_3$ RXVYKZMASOKYNM-UHFFFAOYSA-N	2.3×10^4 7.6×10^2 6.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OTCTEC1OOH $C_9H_{12}O_3$ BNYRTZAXTAHDLR-UHFFFAOYSA-N	2.3×10^4 8.9×10^2 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.4: Peroxides (ROOH) and peroxy radicals (ROO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PRCATC1OOH $\text{C}_9\text{H}_{12}\text{O}_3$ WDHGVTVSFNORIO-UHFFFAOYSA-N	3.2×10^4 5.9×10^2 6.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PTCTEC1OOH $\text{C}_9\text{H}_{12}\text{O}_3$ SXYSFXQBZYNKPP-UHFFFAOYSA-N	2.3×10^4 1.6×10^3 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:T123CT1OOH $\text{C}_9\text{H}_{12}\text{O}_3$ XFULZEJTRUOVEV-UHFFFAOYSA-N	1.7×10^4 2.0×10^3 7.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:T124CT1OOH $\text{C}_9\text{H}_{12}\text{O}_3$ XVSFIBYJDMNABQ-UHFFFAOYSA-N	1.7×10^4 3.2×10^3 2.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HCOCH2OOH $\text{C}_2\text{H}_4\text{O}_3$ TUJPSEFVDYHSJJ-UHFFFAOYSA-N	7.4×10^3 1.4×10^2 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HCOCO3H $\text{C}_2\text{H}_2\text{O}_4$ JOALXJIWVKUVBR-UHFFFAOYSA-N	9.8×10^4 3.9×10^2 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3DIALOOH $\text{C}_3\text{H}_4\text{O}_4$ VUPDPJIDXKCVGY-UHFFFAOYSA-N	5.6×10^6 1.7×10^4 4.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOC2H4OOH $\text{C}_3\text{H}_6\text{O}_3$ XSASRUDDFFBDDK-UHFFFAOYSA-N	5.8×10^3 5.3×10^3 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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A3.5 Aldehydes (RCHO)

Table A3.5: Aldehydes (RCHO)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
methanal	3.2×10^1	7100	Burkholder et al. (2019)	L	455	
HCHO	3.2×10^1	7100	Burkholder et al. (2015)	L	455	
(formaldehyde)	3.2×10^1	6800	Warneck and Williams (2012)	L	455	
[50-00-0]	3.2×10^1	7100	Sander et al. (2011)	L	455	
WSFSSNUMVMOOMR-UHFFFAOYSA-N	3.2×10^1	7100	Sander et al. (2006)	L	455	
	3.2×10^1	6800	Staudinger and Roberts (2001)	L	455	
	3.2×10^1	6800	Staudinger and Roberts (1996)	L	455	
	3.5×10^1	5700	Liu et al. (2015)	M	455	
	3.4×10^1	6400	Allou et al. (2011)	M	455	
	5.3×10^1	1600	Seyfioglu and Odabasi (2007)	M	455	
	9.9×10^1		Kim et al. (2000)	M	87, 455	
	3.1×10^1	6500	Zhou and Mopper (1990)	M	456, 455	
	3.1×10^1	7200	Betterton and Hoffmann (1988)	M	455	
			Dong and Dasgupta (1986)	M	457	
			Ledbury and Blair (1925)	M	458	
			Blair and Ledbury (1925)	M	458	
		3.0×10^1		Lide and Frederikse (1995)	V	455
		2.3		Hwang et al. (1992)	V	455
		6.9×10^1	6400	Chameides (1984)	T	455
		2.9×10^1	7200	Bell (1966)	X	459, 455
		5.9×10^1		Gaffney and Senum (1984)	X	455, 389
		4.5×10^1		Lee and Zhou (1993)	C	87, 455
				Hough (1991)	C	458
		1.4×10^2		Warneck (1988)	C	455
		7.8×10^{-2}		Wang et al. (2017)	Q	80, 238
		4.9×10^{-2}		Wang et al. (2017)	Q	80, 239
		1.0×10^{-2}		Wang et al. (2017)	Q	80, 240
		2.8×10^{-2}		Hilal et al. (2008)	Q	
		7.5×10^{-2}		Modarresi et al. (2007)	Q	67
		4.3×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	9.0×10^{-2}		English and Carroll (2001)	Q	230, 231	
	6.2×10^{-2}		Katritzky et al. (1998)	Q		
	1.8×10^{-1}		Nirmalakhandan et al. (1997)	Q		
	1.0×10^2		Meylan and Howard (1991)	Q	455	
	4.2×10^{-2}		Abraham et al. (1990)	?		
	6.2×10^1		Seinfeld (1986)	?	21, 455	
			Lelieveld and Crutzen (1991)	W	458	
			Pandis and Seinfeld (1989)	W	458	



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethanal	1.3×10^{-1}	5900	Burkholder et al. (2019)	L	460
CH ₃ CHO	1.3×10^{-1}	5900	Burkholder et al. (2015)	L	460
(acetaldehyde)	1.5×10^{-1}	5600	Brockbank (2013)	L	1
[75-07-0]	1.3×10^{-1}	5900	Sander et al. (2011)	L	
IKHGUXGNUITLKF-UHFFFAOYSA-N	1.3×10^{-1}	5900	Sander et al. (2006)	L	
	1.3×10^{-1}	5700	Staudinger and Roberts (2001)	L	
	1.4×10^{-1}	5600	Staudinger and Roberts (1996)	L	
	1.7×10^{-1}	5600	Wieland et al. (2015)	M	461
	1.5×10^{-1}	6400	Ji and Evans (2007)	M	
	1.1×10^{-1}		Straver and de Loos (2005)	M	
	1.5×10^{-1}		Marin et al. (1999)	M	
	1.3×10^{-1}	5700	Benkelberg et al. (1995)	M	
	1.7×10^{-1}	5000	Zhou and Mopper (1990)	M	456
	7.1×10^{-2}		Guitart et al. (1989)	M	14
	1.2×10^{-1}	6300	Betterton and Hoffmann (1988)	M	460
	1.2×10^{-1}	5800	Snider and Dawson (1985)	M	
	8.3×10^{-2}		Richon et al. (1985)	M	38
	1.6×10^{-1}		Mazza (1980)	M	
	2.5×10^{-1}		Vitenberg et al. (1974)	M	373
	1.5×10^{-1}		Buttery et al. (1969)	M	
	1.2×10^{-1}		Marin et al. (1999)	V	
	1.2×10^{-1}		Hwang et al. (1992)	V	
	7.8×10^{-2}		Yaws (2003)	X	258
	1.7×10^{-2}	4500	Janini and Quaddora (1986)	X	298
	1.7×10^{-1}	4700	Goldstein (1982)	X	298
	1.5×10^{-1}		Gaffney and Senum (1984)	X	389
	1.5×10^{-1}		Pierotti et al. (1959)	X	462
	1.8×10^{-1}		Dupeux et al. (2022)	Q	259
	9.0×10^{-2}		Keshavarz et al. (2022)	Q	
	9.8×10^{-2}		Duchowicz et al. (2020)	Q	
	9.8×10^{-2}		Wang et al. (2017)	Q	80, 238
	3.4×10^{-1}		Wang et al. (2017)	Q	80, 239
	1.3×10^{-1}		Wang et al. (2017)	Q	80, 240
	1.5×10^{-1}		Li et al. (2014)	Q	241
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.1×10^{-1}		Hilal et al. (2008)	Q	
	1.0×10^{-1}		Modarresi et al. (2007)	Q	67
		5200	Kühne et al. (2005)	Q	
	1.5×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	6.6×10^{-2}		Yao et al. (2002)	Q	229
	1.4×10^{-1}		English and Carroll (2001)	Q	230, 231
	1.4×10^{-1}		Marin et al. (1999)	Q	
	7.7×10^{-2}		Katritzky et al. (1998)	Q	
	1.5×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.3×10^{-1}		Suzuki et al. (1992)	Q	232



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	1.5×10^{-1}		Mackay et al. (2006c)	?	21
		5800	Kühne et al. (2005)	?	
	1.0×10^{-1}		Yaws (1999)	?	21
	9.8×10^{-2}		Yaws and Yang (1992)	?	21
	1.5×10^{-1}		Abraham et al. (1990)	?	
ethanedial	4.1×10^3	7500	Burkholder et al. (2019)	L	460
OHCCHO	4.1×10^3	7500	Burkholder et al. (2015)	L	460
(glyoxal)	4.1×10^3	7500	Sander et al. (2011)	L	460
[107-22-2]	4.9×10^5		Kampf et al. (2013)	M	460, 463
LEQAOMBKQFMDFZ-UHFFFAOYSA-N	4.1×10^3	7500	Ip et al. (2009)	M	460
			Volkamer et al. (2009)	M	464
	2.6×10^5		Kroll et al. (2005)	M	460, 465
	3.6×10^3		Zhou and Mopper (1990)	M	460, 70
	$>3.0 \times 10^3$		Betterton and Hoffmann (1988)	M	460
	1.4×10^4		Lee and Zhou (1993)	C	87, 460
	2.0×10^2		Keshavarz et al. (2022)	Q	
	1.6×10^1		Duchowicz et al. (2020)	Q	299
	8.9×10^1		Wang et al. (2017)	Q	80, 238
	9.6		Wang et al. (2017)	Q	80, 239
	1.2×10^{-2}		Wang et al. (2017)	Q	80, 240
	3.1×10^4		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^3		Raventos-Duran et al. (2010)	Q	244
	2.5×10^1		Raventos-Duran et al. (2010)	Q	245
	3.0×10^3		Duchowicz et al. (2020)	?	185, 21
	2.7×10^5		Woo and McNeill (2015)	?	466
propanal	9.9×10^{-2}	4300	Burkholder et al. (2019)	L	
C_2H_5CHO	9.9×10^{-2}	4300	Burkholder et al. (2015)	L	
(propionaldehyde)	1.3×10^{-1}	5500	Brockbank (2013)	L	1
[123-38-6]	9.9×10^{-2}	4300	Sander et al. (2011)	L	
NBBJYMSMWIIGGU-UHFFFAOYSA-N	9.9×10^{-2}	4300	Sander et al. (2006)	L	
	1.3×10^{-1}		Liu et al. (2015)	M	72
	9.1×10^{-2}		Kim and Kim (2014)	M	
	1.3×10^{-1}	5800	Ji and Evans (2007)	M	
	1.3×10^{-1}	5700	Zhou and Mopper (1990)	M	456
	6.1×10^{-2}		Richon et al. (1985)	M	38
	1.2×10^{-1}		Mazza (1980)	M	
	1.3×10^{-1}		Buttery et al. (1969)	M	
	7.5×10^{-2}		Buttery et al. (1965)	M	
	1.3×10^{-1}		Mackay et al. (2006c)	V	
	1.3×10^{-2}		Mackay et al. (1995)	V	
	3.2×10^{-2}	3200	Djerki and Laub (1988)	V	
	1.6×10^{-1}		Amoore and Buttery (1978)	V	
	4.3×10^{-2}		Yaws (2003)	X	258
	5.2×10^{-2}	5600	Schaffer and Daubert (1969)	X	298
	2.7×10^{-2}	2400	Janini and Quaddora (1986)	X	298



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.8×10^{-2}		Dupeux et al. (2022)	Q	259
	1.2×10^{-1}		Keshavarz et al. (2022)	Q	
	9.9×10^{-2}		Duchowicz et al. (2020)	Q	184
	8.0×10^{-2}		Wang et al. (2017)	Q	80, 238
	2.4×10^{-1}		Wang et al. (2017)	Q	80, 239
	8.0×10^{-2}		Wang et al. (2017)	Q	80, 240
	1.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	67
		5500	Kühne et al. (2005)	Q	
	1.4×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	1.1×10^{-1}		English and Carroll (2001)	Q	230, 231
	5.8×10^{-2}		Katritzky et al. (1998)	Q	
	1.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	7.3×10^{-2}		Russell et al. (1992)	Q	279
	1.0×10^{-1}		Suzuki et al. (1992)	Q	232
	1.3×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	1.3×10^{-1}		Mackay et al. (2006c)	?	21
		5000	Kühne et al. (2005)	?	
	2.3×10^{-1}		Yaws (1999)	?	21
	1.3×10^{-1}		Abraham et al. (1990)	?	
propanedial $\text{C}_3\text{H}_4\text{O}_2$ (malonaldehyde) [542-78-9] WSMYVTOQOOLQHP-UHFFFAOYSA-N	7.3×10^1		Wang et al. (2017)	Q	80, 238
	6.0×10^1		Wang et al. (2017)	Q	80, 239
	4.1		Wang et al. (2017)	Q	80, 240
MCM:C32OH13CO $\text{C}_3\text{H}_4\text{O}_3$ NVXLIZQNSVLKPO-UHFFFAOYSA-N	2.3×10^3		Wang et al. (2017)	Q	80, 238
	5.5×10^3		Wang et al. (2017)	Q	80, 239
	8.7		Wang et al. (2017)	Q	80, 240
MCM:CH3CHOHCHO $\text{C}_3\text{H}_6\text{O}_2$ BSABBBMNWQWLLU-UHFFFAOYSA-N	1.1×10^1		Wang et al. (2017)	Q	80, 238
	1.1×10^2		Wang et al. (2017)	Q	80, 239
	3.1		Wang et al. (2017)	Q	80, 240
MCM:HOC2H4CHO $\text{C}_3\text{H}_6\text{O}_2$ AKXKFZDCRYJKTF-UHFFFAOYSA-N	3.6×10^1	9900	Wieser et al. (2023)	Q	437
	2.2×10^2		Wang et al. (2017)	Q	80, 238
	8.3×10^2		Wang et al. (2017)	Q	80, 239
	6.6×10^1		Wang et al. (2017)	Q	80, 240



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butanal	9.5×10^{-2}	6200	Burkholder et al. (2019)	L	
C_3H_7CHO	9.5×10^{-2}	6200	Burkholder et al. (2015)	L	
(butyraldehyde)	9.1×10^{-2}	6000	Brockbank (2013)	L	1
[123-72-8]	9.5×10^{-2}	6200	Sander et al. (2011)	L	
ZTQSAGDEMFDKMZ-UHFFFAOYSA-N	9.5×10^{-2}	6200	Sander et al. (2006)	L	
	6.1×10^{-2}		Kim and Kim (2014)	M	
	8.9×10^{-2}	6200	Ji and Evans (2007)	M	
	9.5×10^{-2}	6200	Zhou and Mopper (1990)	M	456
	8.6×10^{-2}		Buttery et al. (1969)	M	
	6.4×10^{-2}		Buttery et al. (1965)	M	
	6.5×10^{-2}		Mackay et al. (2006c)	V	
	6.5×10^{-2}		Mackay et al. (1995)	V	
	1.0×10^{-1}		Hwang et al. (1992)	V	
	8.7×10^{-2}	3500	Djerki and Laub (1988)	V	
	6.7×10^{-2}		Amoore and Buttery (1978)	V	
	8.4×10^{-2}		Yaws (2003)	X	258
	8.3×10^{-2}		Yaws (2003)	X	237
	5.4×10^{-2}	4000	Janini and Quaddora (1986)	X	298
	6.8×10^{-2}		Dupeux et al. (2022)	Q	259
	1.6×10^{-1}		Keshavarz et al. (2022)	Q	
	9.9×10^{-2}		Duchowicz et al. (2020)	Q	
	6.3×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.4×10^{-1}		Wang et al. (2017)	Q	80, 239
	6.3×10^{-2}		Wang et al. (2017)	Q	80, 240
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	5.8×10^{-2}		Gharagheizi et al. (2010)	Q	246
	9.0×10^{-2}		Hilal et al. (2008)	Q	
	1.1×10^{-1}		Modarresi et al. (2007)	Q	67
		5900	Kühne et al. (2005)	Q	
	6.7×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	5.3×10^{-2}		Yao et al. (2002)	Q	229
	8.6×10^{-2}		English and Carroll (2001)	Q	230, 231
	5.4×10^{-2}		Katritzky et al. (1998)	Q	
	9.5×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	8.6×10^{-2}		Russell et al. (1992)	Q	279
	7.9×10^{-2}		Suzuki et al. (1992)	Q	232
	8.6×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	8.6×10^{-2}		Mackay et al. (2006c)	?	21
		6400	Kühne et al. (2005)	?	
	8.4×10^{-2}		Yaws (1999)	?	21
	8.6×10^{-2}		Abraham et al. (1990)	?	



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylpropanal C_4H_8O (isobutyraldehyde) [78-84-2] AMIMRNSIRUDHCM-UHFFFAOYSA-N	5.1×10^{-2}		Burkholder et al. (2019)	L	
	5.1×10^{-2}		Brockbank (2013)	L	
	3.2×10^{-2}	7600	Bruneel et al. (2016)	M	
	5.9×10^{-3}	4500	Strekowski and George (2005)	M	
	3.3×10^{-2}		Karl et al. (2003)	M	
	3.4×10^{-2}		Pollien et al. (2003)	M	
	5.0×10^{-2}		Amoore and Buttery (1978)	M	
	5.5×10^{-2}		Duchowicz et al. (2020)	V	186
	5.5×10^{-2}		HSDB (2015)	V	
	6.7×10^{-2}		Amoore and Buttery (1978)	V	
	5.8×10^{-2}		Yaws (2003)	X	258
	4.5×10^{-2}		Dupeux et al. (2022)	Q	259
	3.8×10^{-2}		Duchowicz et al. (2020)	Q	
	7.4×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.1×10^{-1}		Wang et al. (2017)	Q	80, 239
	4.3×10^{-2}		Wang et al. (2017)	Q	80, 240
	7.0×10^{-2}		Hilal et al. (2008)	Q	
		5000	Kühne et al. (2005)	Q	
	5.2×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	3.7×10^{-2}		Yao et al. (2002)	Q	229, 267
	5.2×10^{-2}		English and Carroll (2001)	Q	230, 274
	5.4×10^{-2}		Katritzky et al. (1998)	Q	
	8.2×10^{-2}		Nirmalakhandan et al. (1997)	Q	
		5100	Kühne et al. (2005)	?	
	5.7×10^{-2}		Yaws (1999)	?	21
	5.1×10^{-2}		Abraham et al. (1990)	?	
2-methylpropanedial $C_4H_6O_2$ [16002-19-0] VXYSFSCSQAYJV-UHFFFAOYSA-N	6.5×10^1		Wang et al. (2017)	Q	80, 238
	1.2×10^1		Wang et al. (2017)	Q	80, 239
	1.9		Wang et al. (2017)	Q	80, 240
MCM:MALDIAL $C_4H_4O_2$ JGEMYUOFGVHXKV-UHFFFAOYSA-N	2.3×10^2		Wang et al. (2017)	Q	80, 238
	4.6×10^2		Wang et al. (2017)	Q	80, 239
	6.5		Wang et al. (2017)	Q	80, 240
MCM:C3MDIALOH $C_4H_6O_3$ SQHUBVCIVAIUAB-UHFFFAOYSA-N	1.4×10^3		Wang et al. (2017)	Q	80, 238
	2.0×10^3		Wang et al. (2017)	Q	80, 239
	2.0		Wang et al. (2017)	Q	80, 240
MCM:C41OH $C_4H_8O_4$ YTBSYETUWUMLBZ-UHFFFAOYSA-N	2.5×10^7		Wang et al. (2017)	Q	80, 238
	3.7×10^7		Wang et al. (2017)	Q	80, 239
	1.2×10^4		Wang et al. (2017)	Q	80, 240
MCM:C41OOH $C_4H_8O_5$ ROHPNOOQDXFHZ-UHFFFAOYSA-N	3.3×10^9		Wang et al. (2017)	Q	80, 238
	3.6×10^8		Wang et al. (2017)	Q	80, 239
	1.4×10^6		Wang et al. (2017)	Q	80, 240



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4OCCOHC	1.4×10^4		Wang et al. (2017)	Q	80, 238
$C_4H_8O_3$	5.0×10^4		Wang et al. (2017)	Q	80, 239
DFFAMJFPVBTBX-UHFFFAOYSA-N	3.5×10^2		Wang et al. (2017)	Q	80, 240
MCM:CHOC3DIOL	2.6×10^5		Wang et al. (2017)	Q	80, 238
$C_4H_8O_3$	2.2×10^5		Wang et al. (2017)	Q	80, 239
CQSYGAZTCJHVFE-UHFFFAOYSA-N	3.6×10^3		Wang et al. (2017)	Q	80, 240
MCM:HC3CCHO	3.0×10^1		Wang et al. (2017)	Q	80, 238
$C_4H_6O_2$	8.7×10^1		Wang et al. (2017)	Q	80, 239
PPNVQCFSPKIRK-UHFFFAOYSA-N	1.7		Wang et al. (2017)	Q	80, 240
MCM:HC3CHO	7.1×10^2		Wang et al. (2017)	Q	80, 238
$C_4H_6O_2$	3.7×10^3		Wang et al. (2017)	Q	80, 239
FXCMZPXXCRHRNK-UHFFFAOYSA-N	2.5×10^4		Wang et al. (2017)	Q	80, 240
MCM:HMACROH	1.5×10^7		Wang et al. (2017)	Q	80, 238
$C_4H_8O_4$	8.5×10^7		Wang et al. (2017)	Q	80, 239
OUEKYUKJSLEOIU-UHFFFAOYSA-N	1.3×10^4		Wang et al. (2017)	Q	80, 240
MCM:HMACR	4.1×10^2		Wang et al. (2017)	Q	80, 238
$C_4H_6O_2$	2.0×10^2		Wang et al. (2017)	Q	80, 239
QVBICLJJAQXLSA-UHFFFAOYSA-N	1.1×10^2		Wang et al. (2017)	Q	80, 240
MCM:HO13C3CHO	2.6×10^4		Wang et al. (2017)	Q	80, 238
$C_4H_8O_3$	2.3×10^5		Wang et al. (2017)	Q	80, 239
NKVLMMFFGYHDNE-UHFFFAOYSA-N	3.2×10^3		Wang et al. (2017)	Q	80, 240
MCM:HO2C3CHO	2.1×10^2		Wang et al. (2017)	Q	80, 238
$C_4H_8O_2$	1.4×10^3		Wang et al. (2017)	Q	80, 239
HSJKGGMUJITCBW-UHFFFAOYSA-N	3.6×10^1		Wang et al. (2017)	Q	80, 240
MCM:HO3C3CHO	1.1×10^1		Wang et al. (2017)	Q	80, 238
$C_4H_8O_2$	8.9×10^1		Wang et al. (2017)	Q	80, 239
UIKQNMXWCYQNCU-UHFFFAOYSA-N	1.5		Wang et al. (2017)	Q	80, 240
MCM:HOC3H6CHO	1.7×10^2		Wang et al. (2017)	Q	80, 238
$C_4H_8O_2$	2.8×10^3		Wang et al. (2017)	Q	80, 239
PIAOXUVIBAKVSP-UHFFFAOYSA-N	6.5×10^2		Wang et al. (2017)	Q	80, 240
MCM:HOHOC4DIAL	6.3×10^5		Wang et al. (2017)	Q	80, 238
$C_4H_6O_4$	3.0×10^6		Wang et al. (2017)	Q	80, 239
UUUVJXLZLAWQBU-UHFFFAOYSA-N	2.8×10^2		Wang et al. (2017)	Q	80, 240
MCM:HOIPRCHO	2.1×10^2		Wang et al. (2017)	Q	80, 238
$C_4H_8O_2$	6.8×10^2		Wang et al. (2017)	Q	80, 239
JTMCAHGCWBGWRV-UHFFFAOYSA-N	2.5×10^1		Wang et al. (2017)	Q	80, 240
MCM:IBUTALOH	6.6		Wang et al. (2017)	Q	80, 238
$C_4H_8O_2$	4.4×10^1		Wang et al. (2017)	Q	80, 239
HNVAGBIANFAIL-UHFFFAOYSA-N	1.5		Wang et al. (2017)	Q	80, 240



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MACROH	8.0×10^3		Wang et al. (2017)	Q	80, 238
$\text{C}_4\text{H}_8\text{O}_3$	3.6×10^4		Wang et al. (2017)	Q	80, 239
JBCPUXACCOZWZEB-UHFFFAOYSA-N	1.7×10^2		Wang et al. (2017)	Q	80, 240
pentanal	6.6×10^{-2}	6500	Brockbank (2013)	L	1
$\text{C}_4\text{H}_9\text{CHO}$	6.8×10^{-2}		Liu et al. (2015)	M	72
(valeraldehyde)	3.9×10^{-2}		Kim and Kim (2014)	M	
[110-62-3]	7.1×10^{-2}	6100	Ji and Evans (2007)	M	
HGBOYTHUEUWSSQ-UHFFFAOYSA-N	6.3×10^{-2}	6300	Zhou and Mopper (1990)	M	456
	6.7×10^{-2}		Buttery et al. (1969)	M	
	5.8×10^{-2}		Buttery et al. (1965)	M	
	2.4×10^{-1}	3800	Djerki and Laub (1988)	V	
	6.4×10^{-2}		Amoore and Buttery (1978)	V	
	3.0×10^{-2}		Yaws (2003)	X	258
	3.0×10^{-2}		Yaws (2003)	X	237
	6.1×10^{-2}		Dupeux et al. (2022)	Q	259
	2.2×10^{-1}		Keshavarz et al. (2022)	Q	
	9.8×10^{-2}		Duchowicz et al. (2020)	Q	299
	5.8×10^{-2}		Wang et al. (2017)	Q	80, 238
	8.9×10^{-2}		Wang et al. (2017)	Q	80, 239
	3.2×10^{-2}		Wang et al. (2017)	Q	80, 240
	5.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
	7.2×10^{-2}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	67
		6200	Kühne et al. (2005)	Q	
	6.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.9×10^{-2}		Yao et al. (2002)	Q	229, 267
	6.7×10^{-2}		English and Carroll (2001)	Q	230, 231
	7.3×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	6.1×10^{-2}		Suzuki et al. (1992)	Q	232
	6.2×10^{-2}		Meylan and Howard (1991)	Q	
	6.7×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	6.7×10^{-2}		Mackay et al. (2006c)	?	21
		5500	Kühne et al. (2005)	?	
	3.0×10^{-2}		Yaws (1999)	?	21
	4.4×10^{-2}		Yaws and Yang (1992)	?	21, 38
	6.7×10^{-2}		Abraham et al. (1990)	?	
2-methylbutanal	2.5×10^{-2}	5600	Brockbank (2013)	L	1
$\text{C}_5\text{H}_{10}\text{O}$	2.3×10^{-2}		Pollien et al. (2003)	M	
[96-17-3]	5.9×10^{-2}		Wang et al. (2017)	Q	80, 238
BYGQBDHUGHBGMD-UHFFFAOYSA-N	8.7×10^{-2}		Wang et al. (2017)	Q	80, 239
	3.9×10^{-2}		Wang et al. (2017)	Q	80, 240
	9.5×10^{-3}		Hertel et al. (2007)	Q	467



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methylbutanal $C_5H_{10}O$	1.1×10^{-2}	10000	Bruneel et al. (2016)	M	33
(isovaleraldehyde) [590-86-3] YGHRJJRRZDOVPD-UHFFFAOYSA-N	2.4×10^{-2} 2.1×10^{-2} 2.6×10^{-2} 2.0×10^{-2}	6100	Wieland et al. (2015) Kim and Kim (2014) Pollien et al. (2003) Nelson and Hoff (1968)	M M M M	468
	2.4×10^{-2} 2.5×10^{-2} 5.2×10^{-2} 3.8×10^{-2} 5.9×10^{-2} 1.1×10^{-1} 4.5×10^{-2} 5.5×10^{-2} 7.3×10^{-2} 9.1×10^{-2} 9.8×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Hertel et al. (2007)	V V X Q Q Q Q Q Q Q	186 237 80, 238 80, 239 80, 240 246 67 467
MCM:C4MDIAL $C_5H_6O_2$ USBJWIKCHJDWPF-UHFFFAOYSA-N	1.6×10^2 6.5×10^2 2.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO1M22CHO $C_5H_8O_2$ WNBFTLCNQKQVHC-UHFFFAOYSA-N	3.7×10^1 8.9 3.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2,2-dimethylpropanal $C_5H_{10}O$ (pivaldehyde) [630-19-3] FJJYHTVHBVXEEQ-UHFFFAOYSA-N	4.1×10^{-2} 5.6×10^{-2} 2.8×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3EDIALOH $C_5H_8O_3$ QTDYRJFEJDMBDI-UHFFFAOYSA-N	1.0×10^3 2.6×10^3 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3M3OH2CHO $C_5H_{10}O_2$ VKYKDJZVZBURQF-UHFFFAOYSA-N	1.0×10^1 6.5×10^1 6.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C42CHO $C_5H_{10}O_3$ NGVSTUGOBBIBC-UHFFFAOYSA-N	2.5×10^4 3.2×10^5 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4M2AL2OH $C_5H_8O_4$ NUHRTSFMSDZSTE-UHFFFAOYSA-N	3.5×10^5 5.0×10^6 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4OHCHO $C_5H_{10}O_2$ SUTLBTHMXYSMSZ-UHFFFAOYSA-N	8.3 5.6×10^1 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C514OH $\text{C}_5\text{H}_8\text{O}_3$ UIVALZXFWDKRKE-UHFFFAOYSA-N	1.5×10^5 8.7×10^5 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C57OH $\text{C}_5\text{H}_{10}\text{O}_4$ ZKDSJDSEVDWBAC-UHFFFAOYSA-N	1.4×10^7 6.8×10^7 1.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C58OH $\text{C}_5\text{H}_{10}\text{O}_4$ HTPZSALIZDTBIL-UHFFFAOYSA-N	1.4×10^7 1.4×10^8 2.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5DIALOH $\text{C}_5\text{H}_6\text{O}_3$ KBKQEUDBRUGUIQ-UHFFFAOYSA-N	3.1×10^4 5.8×10^4 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H13C43CHO $\text{C}_5\text{H}_{10}\text{O}_3$ KJLUUOCNALPNM-UHFFFAOYSA-N	1.4×10^4 1.7×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M2C3CHO $\text{C}_5\text{H}_{10}\text{O}_2$ FXFBPKDQLDIRG-UHFFFAOYSA-N	1.1×10^2 6.2×10^2 2.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HC4ACHO $\text{C}_5\text{H}_8\text{O}_2$ BSHDRMLUCYMQOP-UHFFFAOYSA-N	4.8×10^2 4.6×10^3 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HC4CCHO $\text{C}_5\text{H}_8\text{O}_2$ GCHJBJOADXJFT-UHFFFAOYSA-N	1.2×10^3 4.8×10^2 4.1×10^3 5.6×10^3	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:HM22CHO $\text{C}_5\text{H}_{10}\text{O}_2$ JMMOMMLADQPZNY-UHFFFAOYSA-N	1.1×10^2 3.7×10^2 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO24C4CHO $\text{C}_5\text{H}_{10}\text{O}_3$ WDKLWOBHKQJSU-UHFFFAOYSA-N	2.5×10^4 3.6×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2C43CHO $\text{C}_5\text{H}_{10}\text{O}_2$ ZURZPPULRFVLF-UHFFFAOYSA-N	2.0×10^2 6.9×10^2 3.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2C4CHO $\text{C}_5\text{H}_{10}\text{O}_2$ HFZMJAMTNAAZQE-UHFFFAOYSA-N	1.6×10^2 2.1×10^3 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C4CHO $\text{C}_5\text{H}_{10}\text{O}_2$ WRWLNLBWBJEUI-UHFFFAOYSA-N	1.6×10^2 7.8×10^2 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HOBUT2CHO	1.6×10^2		Wang et al. (2017)	Q	80, 238
$C_5H_{10}O_2$	1.6×10^3		Wang et al. (2017)	Q	80, 239
PLBZJQQQFIOXRU-UHFFFAOYSA-N	2.4×10^2		Wang et al. (2017)	Q	80, 240
MCM:HOIBUTCHO	1.6×10^2		Wang et al. (2017)	Q	80, 238
$C_5H_{10}O_2$	2.0×10^3		Wang et al. (2017)	Q	80, 239
RWXBAXNFTXQJAY-UHFFFAOYSA-N	4.8×10^2		Wang et al. (2017)	Q	80, 240
MCM:MBOBCO	7.4×10^3		Wang et al. (2017)	Q	80, 238
$C_5H_{10}O_3$	4.4×10^4		Wang et al. (2017)	Q	80, 239
YDXYBJRJCQQSF-UHFFFAOYSA-N	1.5×10^2		Wang et al. (2017)	Q	80, 240
MCM:PROL1MCHO	5.8		Wang et al. (2017)	Q	80, 238
$C_5H_{10}O_2$	4.2×10^1		Wang et al. (2017)	Q	80, 239
MEHIGMLPKIJWEA-UHFFFAOYSA-N	7.4×10^{-1}		Wang et al. (2017)	Q	80, 240
hexanal	4.5×10^{-2}	6400	Brockbank (2013)	L	1
$C_5H_{11}CHO$	2.3×10^{-2}	5200	Kutsuna and Kaneyasu (2021)	M	
[66-25-1]	2.9×10^{-2}	8900	Bruneel et al. (2016)	M	
JARKCYVAAOWBJS-UHFFFAOYSA-N	4.7×10^{-2}		Souchon et al. (2004)	M	
	3.2×10^{-2}		Karl et al. (2003)	M	
	1.6×10^{-1}	4900	Meynier et al. (2003)	M	38
	2.7×10^{-2}		van Ruth et al. (2002)	M	14
	2.2×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 361
	1.6×10^{-2}		van Ruth et al. (2001)	M	14
	4.9×10^{-2}	6500	Zhou and Mopper (1990)	M	456
	4.6×10^{-2}		Buttery et al. (1969)	M	
	5.8×10^{-2}		Buttery et al. (1965)	M	
	3.5×10^{-2}		Amoore and Buttery (1978)	V	
	2.8×10^{-2}		Yaws (2003)	X	258
	2.8×10^{-2}		Yaws (2003)	X	237, 38
	4.8×10^{-2}		Sieg et al. (2008)	C	
	4.6×10^{-2}		Meynier et al. (2003)	C	
	3.1×10^{-2}		Nahon et al. (2000)	C	14
	4.2×10^{-2}		Dupeux et al. (2022)	Q	259
	3.0×10^{-1}		Keshavarz et al. (2022)	Q	
	9.8×10^{-2}		Duchowicz et al. (2020)	Q	299
	4.6×10^{-2}		Wang et al. (2017)	Q	80, 238
	5.8×10^{-2}		Wang et al. (2017)	Q	80, 239
	5.5×10^{-2}		Wang et al. (2017)	Q	80, 240
	4.6×10^{-2}		Li et al. (2014)	Q	241
	4.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.9×10^{-2}		Gharagheizi et al. (2010)	Q	246
	5.8×10^{-2}		Hilal et al. (2008)	Q	
	9.8×10^{-2}		Modarresi et al. (2007)	Q	67
	1.1×10^{-2}		Hertel et al. (2007)	Q	467



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.6×10^{-2}	6600	Kühne et al. (2005)	Q	
	2.6×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	5.2×10^{-2}		Yao et al. (2002)	Q	229
	4.8×10^{-2}		English and Carroll (2001)	Q	230, 260
	5.8×10^{-2}		Katritzky et al. (1998)	Q	
	4.6×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	4.6×10^{-2}		Suzuki et al. (1992)	Q	232
	4.6×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	4.6×10^{-2}		Mackay et al. (2006c)	?	21
	3.8×10^{-2}	6900	Kühne et al. (2005)	?	
	1.9×10^{-2}		Yaws (1999)	?	21, 38
	4.6×10^{-2}		Yaws and Yang (1992)	?	21, 38
	4.6×10^{-2}		Abraham et al. (1990)	?	
pentanedial OHC(CH ₂) ₃ CHO (glutaraldehyde) [111-30-8] SXRSQZLOMIGNAQ-UHFFFAOYSA-N	3.0×10^2 4.1×10^2	9200	Olson (1998) HSDB (2015)	M Q	 99
		8800	Kühne et al. (2005)	Q	
		9100	Kühne et al. (2005)	?	
2-methylpentanal C ₆ H ₁₂ O (2-methylvaleraldehyde) [123-15-9] FTZILAQGHINQQR-UHFFFAOYSA-N	5.3×10^{-2} 5.6×10^{-2} 3.5×10^{-2} 2.7×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	80, 238 80, 239 80, 240 99
		5700	Kühne et al. (2005)	Q	
		5300	Kühne et al. (2005)	?	
hexanedial C ₆ H ₁₀ O ₂ (adipaldehyde) [1072-21-5] UMHJEEQLYBKSN-UHFFFAOYSA-N	4.2×10^1 1.7×10^2 3.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M22C3CHO C ₆ H ₁₂ O LTNUSYNQZJZUSY-UHFFFAOYSA-N	3.2×10^{-2} 6.5×10^{-2} 3.1×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2C43CHO C ₆ H ₁₂ O AKUUEDVRXOZTBF-UHFFFAOYSA-N	6.2×10^{-2} 6.0×10^{-2} 3.7×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M33C3CHO C ₆ H ₁₂ O QYPLKDUOPJZROX-UHFFFAOYSA-N	3.2×10^{-2} 5.0×10^{-2} 2.6×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
3-methylpentanal C ₆ H ₁₂ O [15877-57-3] YJWJGLQYQJGEEP-UHFFFAOYSA-N	3.8×10^{-2} 5.3×10^{-2} 7.8×10^{-2} 4.5×10^{-2} 3.8×10^{-2}		Yaws (2003) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2010)	X Q Q Q Q	237 80, 238 80, 239 80, 240 246



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methylpentanal $C_6H_{12}O$ [1119-16-0] JGEGJYXHCUFUMJF-UHFFFAOYSA-N	3.8×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2-ethylbutanal $C_6H_{12}O$ [97-96-1] UNNGUFMZYQJGTD-UHFFFAOYSA-N	4.0×10^{-2} 3.7×10^{-2}		Yaws (2003) Dupeux et al. (2022)	X Q	258 259
MCM:C518CHO $C_6H_{10}O_2$ XEAYIEUKFACAKS-UHFFFAOYSA-N	3.2×10^2 5.3×10^2 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C615OH $C_6H_{10}O_3$ LOUHJSYYTNSRBN-UHFFFAOYSA-N	4.9×10^3 4.4×10^4 3.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C623OH $C_6H_{12}O_4$ ASGSKBSLHTVURJ-UHFFFAOYSA-N	3.2×10^8 6.2×10^8 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C67OH $C_6H_{12}O_3$ SIBVVDHXFPINCX-UHFFFAOYSA-N	1.3×10^5 3.5×10^5 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C68OH $C_6H_{12}O_3$ RJKLRJTWLKKQSE-UHFFFAOYSA-N	1.3×10^5 3.6×10^5 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6DIALOH $C_6H_{10}O_3$ GATFIJYWERJMGU-UHFFFAOYSA-N	1.2×10^5 4.7×10^5 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO1C6OH $C_6H_{12}O_2$ FPFTWHJPEMPAGE-UHFFFAOYSA-N	1.3×10^2 1.9×10^3 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO1H63OH $C_6H_{12}O_3$ TWSXDPXQZVBPJU-UHFFFAOYSA-N	4.1×10^5 2.5×10^6 2.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M2C4CHO $C_6H_{12}O_2$ NEJZWIVQOAKZHY-UHFFFAOYSA-N	9.3×10^1 1.3×10^3 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M3C4CHO $C_6H_{12}O_2$ GUXDGBBNSMURMG-UHFFFAOYSA-N	1.5×10^2 1.8×10^3 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3M3C4CHO $C_6H_{12}O_2$ HKXRCBUXVFAKDA-UHFFFAOYSA-N	9.3×10^1 5.5×10^2 1.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		6900	Kühne et al. (2005)	Q	
	3.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.2×10^{-2}		Yao et al. (2002)	Q	229
	3.9×10^{-2}		English and Carroll (2001)	Q	230, 274
	4.7×10^{-2}		Katritzky et al. (1998)	Q	
	4.5×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.6×10^{-2}		Suzuki et al. (1992)	Q	232
	3.7×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		7100	Kühne et al. (2005)	?	
	2.8×10^{-2}		Yaws (1999)	?	21, 38
	2.3×10^{-2}		Yaws and Yang (1992)	?	21, 38
	3.7×10^{-2}		Abraham et al. (1990)	?	
MCM:C622CHO	5.8×10^3	11000	Wieser et al. (2023)	Q	437
C ₇ H ₁₂ O ₂	2.5×10^2		Wang et al. (2017)	Q	80, 238
JWVBPJJIHELFFZ-UHFFFAOYSA-N	1.6×10^3		Wang et al. (2017)	Q	80, 239
	7.6×10^1		Wang et al. (2017)	Q	80, 240
MCM:C624CHO	5.8×10^3	11000	Wieser et al. (2023)	Q	437
C ₇ H ₁₂ O ₂	2.5×10^2		Wang et al. (2017)	Q	80, 238
AIMYSSDKEKDSEU-UHFFFAOYSA-N	1.2×10^3		Wang et al. (2017)	Q	80, 239
	2.7×10^2		Wang et al. (2017)	Q	80, 240
MCM:C728OH	2.9×10^8		Wang et al. (2017)	Q	80, 238
C ₇ H ₁₄ O ₄	1.2×10^9		Wang et al. (2017)	Q	80, 239
RQDWEXZQVQBWC-UHFFFAOYSA-N	2.2×10^6		Wang et al. (2017)	Q	80, 240
MCM:C730OH	2.9×10^8		Wang et al. (2017)	Q	80, 238
C ₇ H ₁₄ O ₄	3.4×10^9		Wang et al. (2017)	Q	80, 239
ROYLBPWMPALPRM-UHFFFAOYSA-N	1.3×10^6		Wang et al. (2017)	Q	80, 240
MCM:H3M3C5CHO	7.3×10^1		Wang et al. (2017)	Q	80, 238
C ₇ H ₁₄ O ₂	1.1×10^3		Wang et al. (2017)	Q	80, 239
PUMVOOYIPAYIQQ-UHFFFAOYSA-N	5.6×10^1		Wang et al. (2017)	Q	80, 240
octanal	2.0×10^{-2}	7300	Brockbank (2013)	L	1
C ₇ H ₁₅ CHO	2.1×10^{-2}		van Ruth et al. (2002)	M	14
[124-13-0]	1.9×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 361
NUJGJRNETVAIRJ-UHFFFAOYSA-N	8.8×10^{-3}		van Ruth et al. (2001)	M	14
	2.1×10^{-2}		Li and Carr (1993)	M	
	2.1×10^{-2}	7400	Zhou and Mopper (1990)	M	456
	1.9×10^{-2}		Buttery et al. (1969)	M	
	7.5×10^{-2}		Buttery et al. (1965)	M	
	2.9×10^{-2}		Amoore and Buttery (1978)	V	
	1.3×10^{-2}		Yaws (2003)	X	258
	1.3×10^{-2}		Yaws (2003)	X	237, 38
	1.9×10^{-2}		Sieg et al. (2008)	C	
	1.9×10^{-2}		Nahon et al. (2000)	C	14
	2.8×10^{-2}		Dupeux et al. (2022)	Q	259
	7.1×10^{-2}		Keshavarz et al. (2022)	Q	



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.7×10^{-2}		Duchowicz et al. (2020)	Q	
	2.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.5×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.9×10^{-2}		Hilal et al. (2008)	Q	
	7.0×10^{-2}		Modarresi et al. (2007)	Q	67
		7300	Kühne et al. (2005)	Q	
	5.2×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	2.0×10^{-2}		Yao et al. (2002)	Q	229
	3.1×10^{-2}		English and Carroll (2001)	Q	230, 231
	4.5×10^{-2}		Katritzky et al. (1998)	Q	
	3.6×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.8×10^{-2}		Suzuki et al. (1992)	Q	232
	1.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		6200	Kühne et al. (2005)	?	
	1.8×10^{-2}		Yaws (1999)	?	21, 38
	2.0		Yaws and Yang (1992)	?	21, 38
	1.9×10^{-2}		Abraham et al. (1990)	?	
2-ethylhexanal $C_8H_{16}O$ [123-05-7] LGYNIFWIKSEESD-UHFFFAOYSA-N	1.2×10^{-2}	5400	Brockbank (2013)	L	1
	1.3×10^{-2}		Duchowicz et al. (2020)	V	186
	1.2×10^{-2}		HSDB (2015)	V	
	2.4×10^{-2}		Yaws (2003)	X	258
	2.4×10^{-2}		Yaws (2003)	X	237
	2.1×10^{-2}		Dupeux et al. (2022)	Q	259
	3.8×10^{-2}		Duchowicz et al. (2020)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.7×10^{-2}		Hilal et al. (2008)	Q	
	2.4×10^{-2}		Modarresi et al. (2007)	Q	67
MCM:C729CHO $C_8H_{12}O_2$ MEGRLTONSLAOOM-UHFFFAOYSA-N	8.0×10^2	10000	Wieser et al. (2023)	Q	437
	7.1×10^1		Wang et al. (2017)	Q	80, 238
	1.0×10^2		Wang et al. (2017)	Q	80, 239
	6.2×10^1		Wang et al. (2017)	Q	80, 240
MCM:C810OH $C_8H_{14}O_3$ WBGXLUPQADVOIR-UHFFFAOYSA-N	6.2×10^4		Wang et al. (2017)	Q	80, 238
	1.7×10^5		Wang et al. (2017)	Q	80, 239
	2.2×10^4		Wang et al. (2017)	Q	80, 240
MCM:C822OH $C_8H_{14}O_2$ CCTLWIOCAVSPLW-UHFFFAOYSA-N	2.3×10^2		Wang et al. (2017)	Q	80, 238
	1.8×10^3		Wang et al. (2017)	Q	80, 239
	2.8×10^2		Wang et al. (2017)	Q	80, 240



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C824OH	3.3×10^4		Wang et al. (2017)	Q	80, 238
$\text{C}_8\text{H}_{14}\text{O}_3$	1.9×10^5		Wang et al. (2017)	Q	80, 239
RBBQERVBTKJTLF-UHFFFAOYSA-N	1.2×10^3		Wang et al. (2017)	Q	80, 240
MCM:C826OH	7.4×10^7		Wang et al. (2017)	Q	80, 238
$\text{C}_8\text{H}_{14}\text{O}_4$	3.0×10^8		Wang et al. (2017)	Q	80, 239
LLAUXDLXTPQIPI-UHFFFAOYSA-N	2.6×10^5		Wang et al. (2017)	Q	80, 240
MCM:C830OH	2.5×10^2		Wang et al. (2017)	Q	80, 238
$\text{C}_8\text{H}_{14}\text{O}_2$	1.6×10^3		Wang et al. (2017)	Q	80, 239
KODLEZWYEGWLGU-UHFFFAOYSA-N	6.8×10^1		Wang et al. (2017)	Q	80, 240
MCM:C831OH	6.2×10^4		Wang et al. (2017)	Q	80, 238
$\text{C}_8\text{H}_{14}\text{O}_3$	2.1×10^5		Wang et al. (2017)	Q	80, 239
YTDFRLZFCPFBH-UHFFFAOYSA-N	2.3×10^3		Wang et al. (2017)	Q	80, 240
MCM:C89OH	2.5×10^2		Wang et al. (2017)	Q	80, 238
$\text{C}_8\text{H}_{14}\text{O}_2$	2.3×10^3		Wang et al. (2017)	Q	80, 239
KMZPPEYMMZMCIQ-UHFFFAOYSA-N	2.2×10^3		Wang et al. (2017)	Q	80, 240
nonanal	1.1×10^{-2}	6800	Brockbank (2013)	L	1
$\text{C}_8\text{H}_{17}\text{CHO}$	1.0×10^{-2}	6700	Zhou and Mopper (1990)	M	456
[124-19-6]	1.3×10^{-2}		Buttery et al. (1969)	M	
GYHFUZHODSMOHU-UHFFFAOYSA-N	7.1×10^{-2}		Buttery et al. (1965)	M	
	1.3×10^{-2}		Amoore and Buttery (1978)	V	
	1.0×10^{-2}		Yaws (2003)	X	258
	1.0×10^{-2}		Yaws (2003)	X	237, 38
	1.4×10^{-2}		Sieg et al. (2008)	C	
	1.8×10^{-2}		Dupeux et al. (2022)	Q	259
	9.6×10^{-2}		Keshavarz et al. (2022)	Q	
	9.7×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.4×10^{-2}		Hilal et al. (2008)	Q	
	5.9×10^{-2}		Modarresi et al. (2007)	Q	67
	1.3×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.8×10^{-2}		Yao et al. (2002)	Q	229
	2.3×10^{-2}		English and Carroll (2001)	Q	230, 231
	2.8×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.1×10^{-2}		Suzuki et al. (1992)	Q	232
	2.0×10^{-2}		Meylan and Howard (1991)	Q	
	1.3×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	1.5×10^{-2}		Yaws (1999)	?	21, 38
	6.9×10^{-3}		Yaws and Yang (1992)	?	21, 38
	1.3×10^{-2}		Abraham et al. (1990)	?	



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dodecanal $C_{12}H_{24}O$ [112-54-9] HFJRKMMYBMWEAD-UHFFFAOYSA-N	5.2×10^{-3} 5.2×10^{-3} 1.2×10^{-2} 2.3×10^{-3} 6.1×10^{-3}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X X Q Q Q	258 237 259 246
1-tridecanal $C_{13}H_{26}O$ [10486-19-8] BGEHHAVMRVXCGR-UHFFFAOYSA-N	5.8×10^{-3} 5.8×10^{-3} 9.6×10^{-3} 2.4×10^{-3} 5.9×10^{-3}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X X Q Q Q	258 237 259 246
1-tetradecanal $C_{14}H_{28}O$ [124-25-4] UHUFTBALEZWWIH-UHFFFAOYSA-N	8.0×10^{-4} 6.2×10^{-3} 2.6×10^{-3}		Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012)	X Q Q	258 259
aquaflora $C_{12}H_{18}O$ [1339119-15-1] BFTAXJRKNXWMMX-UHFFFAOYSA-N	5.2×10^{-1}		Dupeux et al. (2022)	Q	259
starfleur $C_{13}H_{24}O$ (3-(4-isobutylcyclohexyl)propanal) [1254940-85-6] XUTZHXNXAOHUTM-UHFFFAOYSA-N	1.4×10^{-1}		Dupeux et al. (2022)	Q	259
MCM:C126CO $C_{12}H_{18}O_2$ IWMJDJFLMSAAES-UHFFFAOYSA-N	8.5×10^1 1.7×10^2 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C126OH $C_{12}H_{20}O_2$ PQYIYBUHROKIY-UHFFFAOYSA-N	2.7×10^2 2.1×10^3 4.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C127OH $C_{12}H_{20}O_3$ QHKXYVNBHFONML-UHFFFAOYSA-N	5.0×10^5 7.1×10^6 3.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C126CHO $C_{13}H_{20}O_2$ ZDIXDRBTLRZYNM-UHFFFAOYSA-N	6.9×10^1 1.1×10^2 4.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1311OH $C_{13}H_{22}O_3$ CBUCUSJJCJUTML-UHFFFAOYSA-N	4.0×10^5 8.3×10^6 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1313OH $C_{13}H_{22}O_4$ XIWFBNXBOAYHAJ-UHFFFAOYSA-N	7.3×10^7 4.3×10^8 8.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C136OH	2.1×10^2		Wang et al. (2017)	Q	80, 238
$C_{13}H_{22}O_2$	2.0×10^3		Wang et al. (2017)	Q	80, 239
GEHGNVSPJQGFG-UHFFFAOYSA-N	1.0×10^3		Wang et al. (2017)	Q	80, 240
propanal	1.3×10^{-1}	5500	Burkholder et al. (2019)	L	469
CH_2CHCHO	7.2×10^{-2}	5100	Brockbank (2013)	L	1
(acrolein)	7.2×10^{-2}	5100	Snider and Dawson (1985)	M	
[107-02-8]	1.0×10^{-1}		Mackay et al. (2006c)	V	
HGINCPLSRVDWNT-UHFFFAOYSA-N	2.3		Lide and Frederikse (1995)	V	
	1.0×10^{-2}		Mackay et al. (1995)	V	
	7.0×10^{-2}		Hwang et al. (1992)	V	
	1.3×10^{-1}		Suntio et al. (1988)	V	12
	1.0×10^{-1}	3800	Goldstein (1982)	X	298
	2.2		Howard (1989)	X	412
	8.1×10^{-2}		Gaffney and Senum (1984)	X	389
	1.8×10^{-1}		Suntio et al. (1988)	C	12
	1.4×10^{-1}		Ryan et al. (1988)	C	
	1.2×10^{-1}		Keshavarz et al. (2022)	Q	
	3.5×10^{-1}		Duchowicz et al. (2020)	Q	
	2.2×10^{-1}		Wang et al. (2017)	Q	80, 238
	1.9×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.1×10^{-1}		Wang et al. (2017)	Q	80, 240
	5.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	9.5×10^{-2}		Hilal et al. (2008)	Q	
	6.3×10^{-1}		Modarresi et al. (2007)	Q	67
		4600	Kühne et al. (2005)	Q	
	8.1×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	7.5×10^{-2}		Mackay et al. (2006c)	?	21
		3800	Kühne et al. (2005)	?	
	1.2×10^{-1}		Yaws (1999)	?	21, 12
2-methylpropenal	4.5×10^{-2}	4600	Burkholder et al. (2019)	L	
C_4H_6O	6.4×10^{-2}		Burkholder et al. (2015)	L	
(methacrolein)	4.5×10^{-2}	4600	Brockbank (2013)	L	1
[78-85-3]	4.8×10^{-2}	4300	Ji and Evans (2007)	M	
STNJBCKSHOAVAJ-UHFFFAOYSA-N	6.4×10^{-2}		Iraci et al. (1999)	M	
	4.2×10^{-2}	5300	Allen et al. (1998)	M	
	5.2×10^{-2}		HSDB (2015)	V	
	4.7×10^{-2}		Yaws (2003)	X	258
	4.7×10^{-2}		Yaws (2003)	X	237
	7.3×10^{-2}		Dupeux et al. (2022)	Q	259
	1.6×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	184
	1.5×10^{-1}		Wang et al. (2017)	Q	80, 238
	1.4×10^{-1}		Wang et al. (2017)	Q	80, 239



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.3×10^{-2}		Wang et al. (2017)	Q	80, 240
	1.6×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	4.7×10^{-2}		Gharagheizi et al. (2010)	Q	246
	9.5×10^{-2}		Hilal et al. (2008)	Q	
	1.1×10^{-1}		Modarresi et al. (2007)	Q	67
	4.3×10^{-2}	4000	Kühne et al. (2005)	Q	
			Duchowicz et al. (2020)	?	185, 21
	4.8×10^{-2}	4800	Kühne et al. (2005)	?	
			Yaws (1999)	?	21
2-butenal C_4H_6O [4170-30-3] MLUCVPSAIODCQM-UHFFFAOYSA-N	2.9×10^{-1}		Wang et al. (2017)	Q	80, 238
	1.6×10^{-1}		Wang et al. (2017)	Q	80, 239
	1.6		Wang et al. (2017)	Q	80, 240
	9.7×10^{-2}		Hilal et al. (2008)	Q	
	3.9×10^{-1}		Modarresi et al. (2007)	Q	67
	2.7×10^{-1}		Nirmalakhandan et al. (1997) Burkholder et al. (2019)	Q W	470
<i>(E)</i> -2-butenal $CH_3CHCHCHO$ (crotonaldehyde) [123-73-9] MLUCVPSAIODCQM-NSCUHMNNSA-N	5.4×10^{-1}	5300	Brockbank (2013)	L	1
	5.0×10^{-1}		Buttery et al. (1971)	M	
	4.4×10^{-2}		Mackay et al. (2006c)	V	
	4.4×10^{-2}		Mackay et al. (1995)	V	
	7.6×10^{-1}		Yaws (2003)	X	258
	5.9×10^{-1}	3600	Goldstein (1982)	X	298
	5.0×10^{-1}		Gaffney and Senum (1984)	X	389
	1.5		Dupeux et al. (2022)	Q	259
	1.6×10^{-1}		Keshavarz et al. (2022)	Q	
	1.2×10^{-1}		Duchowicz et al. (2020)	Q	299
	3.9×10^{-1}		Modarresi et al. (2007)	Q	67
		5000	Kühne et al. (2005)	Q	
	5.2×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	3.1×10^{-1}		Suzuki et al. (1992)	Q	232
5.1×10^{-1}		Duchowicz et al. (2020)	?	185, 21	
	4300	Kühne et al. (2005)	?		
		Yaws (1999)	?	21, 12	
		Abraham et al. (1990)	?		
2-hexenal $C_6H_{10}O$ [505-57-7] MBDOYVRWFFCFHM-UHFFFAOYSA-N	3.0×10^{-1}		Keshavarz et al. (2022)	Q	
	1.2×10^{-1}		Duchowicz et al. (2020)	Q	
	6.2×10^{-2}		Hilal et al. (2008)	Q	
	2.5×10^{-1}		Modarresi et al. (2007)	Q	67
	8.6×10^{-2}		English and Carroll (2001)	Q	230, 260
	1.7×10^{-1}		Nirmalakhandan et al. (1997)	Q	
2.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21	



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>E</i>)-2-hexenal $\text{C}_3\text{H}_7\text{CHCHCHO}$	1.4×10^{-1} 9.0×10^{-1}	5700	Karl et al. (2003)	M	38
(<i>trans</i> -2-hexenal) [6728-26-3] MBDOYVRWFFCFHM-SNAWJCMRSA-N	2.0×10^{-1} 2.0×10^{-1} 2.1×10^{-1} 1.8×10^{-1}		Buttery et al. (1971) Meynier et al. (2003) Yaffe et al. (2003) Suzuki et al. (1992)	M M C Q Q	
(<i>E,E</i>)-2,4-hexadienal $\text{CH}_3\text{CHCHCHCHO}$	1.0 3.0×10^{-1}		Buttery et al. (1971)	M	184
(<i>trans-trans</i> -2,4-hexadienal) [142-83-6] BATOPAZDIZEVQF-MQQKCMAXSA-N	1.4×10^{-1} 3.9×10^{-1} 4.7×10^{-1} 1.5 1.0		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Suzuki et al. (1992) Duchowicz et al. (2020)	Q Q Q Q Q ?	
2-heptenal $\text{C}_7\text{H}_{12}\text{O}$ [2463-63-0] NDFKTBCGKNOHPJ-UHFFFAOYSA-N	5.0×10^{-2}		Hilal et al. (2008)	Q	
<i>trans</i> -2-heptenal $\text{C}_7\text{H}_{12}\text{O}$ [18829-55-5] NDFKTBCGKNOHPJ-AATRIKPKSA-N	1.3		Abney (2021)	Q	399
(<i>Z</i>)-4-heptenal $\text{C}_7\text{H}_{12}\text{O}$ (<i>cis</i> -4-heptenal) [6728-31-0] VVGOCOMZRGWHPI-ARJAWSKDSA-N	8.8×10^{-2}		Straver and de Loos (2005)	M	
2-octenal $\text{C}_8\text{H}_{14}\text{O}$ [2363-89-5] LVBXEMGDVWVTGY-UHFFFAOYSA-N	7.1×10^{-2} 1.2×10^{-1} 4.1×10^{-2} 1.9×10^{-1} 5.2×10^{-2} 1.0×10^{-1} 1.3×10^{-1}		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	Q Q Q Q Q Q ?	299 230, 231 67 185, 21
(<i>E</i>)-2-octenal $\text{C}_8\text{H}_{14}\text{O}$ (<i>trans</i> -2-octenal) [2548-87-0] LVBXEMGDVWVTGY-VOTSOKGWSA-N	1.3×10^{-1} 1.4×10^{-1} 1.1×10^{-1}		Buttery et al. (1971) Yaffe et al. (2003) Suzuki et al. (1992) Betterson (1992)	M Q Q W	248, 249 232 471
2-ethyl-2-hexenal $\text{C}_8\text{H}_{14}\text{O}$ [645-62-5] PYLMCYQHBRSDND-UHFFFAOYSA-N	5.2×10^{-2}	5800	Brockbank (2013)	L	1



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>E</i>)-2-nonenal $C_9H_{16}O$ (<i>trans</i> -2-nonenal) [18829-56-6] BSAIUMLZVGUGKX-BQYQJAHWSA-N	5.8×10^{-2}		Roberts and Pollien (1997)	M	
<i>trans</i> -2, <i>cis</i> -6-nonadienal $C_9H_{14}O$ [557-48-2] HZYHMHBBBSGHB-ODYTWBPASA-N	8.2×10^{-2}	7100	Ömür-Özbek and Dietrich (2005)	M	
3,7-dimethyl-6-octenal $C_{10}H_{18}O$ (citronellal) [106-23-0] NEHNMFOYXAPHSD-UHFFFAOYSA-N	2.5×10^{-2} 3.8×10^{-2}	4500	van Roon et al. (2005) HSDB (2015)	V Q	99
3,7-dimethyl-2,6-octadienal $C_{10}H_{16}O$ (citral) [5392-40-5] WTEVQBCEXWBHNA-UHFFFAOYSA-N	2.9×10^{-1} 5.2 2.3×10^{-1}	6700	Wu et al. (2022b) Dupeux et al. (2022) HSDB (2015)	M Q Q	259 99
tillenal $C_{11}H_{18}O$ (3-(4,4-dimethyl-1-cyclohexen-1-yl)propanal) [850997-10-3] IHMKBWBJKOWYASH-UHFFFAOYSA-N	3.4×10^{-1}		Dupeux et al. (2022)	Q	259
lilybelle $C_{12}H_{20}O$ [1378867-81-2] VZZSYXAVGYODQG-UHFFFAOYSA-N	4.5×10^{-1}		Dupeux et al. (2022)	Q	259
mugoxal $C_{13}H_{22}O$ (3-(4- <i>tert</i> -butylcyclohexen-1-yl)propanal) WGWWNPFQPHLSIM-UHFFFAOYSA-N	6.7×10^{-1}		Dupeux et al. (2022)	Q	259
orange oil $C_{15}H_{22}O$ [8028-48-6] NOPLRNXXKHZRXHT-UHFFFAOYSA-N	6.3×10^{-4}		Maniere et al. (2011)	?	241, 165



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzaldehyde	4.0×10^{-1}	5200	Brockbank (2013)	L	1, 472
$\text{C}_6\text{H}_5\text{CHO}$	3.8×10^{-1}	5500	Staudinger and Roberts (2001)	L	
[100-52-7]	3.9×10^{-1}	4800	Staudinger and Roberts (1996)	L	
HUMNYLRZRPJDN-UHFFFAOYSA-N	3.2×10^{-1}	6300	Allou et al. (2011)	M	
	3.4×10^{-1}		Souchon et al. (2004)	M	
	3.5×10^{-1}	7000	Allen et al. (1998)	M	
	4.2×10^{-1}	4600	Zhou and Mopper (1990)	M	456
	3.7×10^{-1}	5100	Betterton and Hoffmann (1988)	M	460
	1.6×10^{-1}		Mackay et al. (2006c)	V	
	1.6×10^{-1}		Mackay et al. (1995)	V	
	3.6×10^{-1}		Hine and Mookerjee (1975)	V	
	3.5×10^{-1}	5400	Bagno et al. (1991)	T	473
	3.9×10^{-1}		Yaws (2003)	X	258
	3.6×10^{-1}		Gaffney and Senum (1984)	X	389
	3.7×10^{-1}		Schüürmann (2000)	C	21
	8.4×10^{-1}		Dupeux et al. (2022)	Q	259
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	6.6×10^{-1}		Duchowicz et al. (2020)	Q	184
	3.0		Wang et al. (2017)	Q	80, 238
	1.3		Wang et al. (2017)	Q	80, 239
	1.6		Wang et al. (2017)	Q	80, 240
	3.6×10^{-1}		Li et al. (2014)	Q	241
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.7×10^{-1}		Hilal et al. (2008)	Q	
	1.2		Modarresi et al. (2007)	Q	67
	2.6×10^{-2}		Emel'yanenko et al. (2007)	Q	415
	2.6×10^{-2}		Hertel and Sommer (2006)	Q	415
		5800	Kühne et al. (2005)	Q	
	3.7×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	5.4×10^{-1}		English and Carroll (2001)	Q	230, 274
	2.4×10^{-1}		Katritzky et al. (1998)	Q	
	7.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	3.6×10^{-1}		Suzuki et al. (1992)	Q	232
	3.7×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	4.4×10^{-1}		Mackay et al. (2006c)	?	21
		5400	Kühne et al. (2005)	?	
	4.0×10^{-1}		Yaws (1999)	?	21
	3.6×10^{-1}		Abraham et al. (1990)	?	
phenylacetaldehyde	1.6		Dupeux et al. (2022)	Q	259
$\text{C}_6\text{H}_5\text{CH}_2\text{CHO}$	2.8		Wang et al. (2017)	Q	80, 238
[122-78-1]	3.6		Wang et al. (2017)	Q	80, 239
DTUQWGWMIHKBKE-UHFFFAOYSA-N	3.6		Wang et al. (2017)	Q	80, 240
	1.0×10^{-1}		Emel'yanenko et al. (2007)	Q	415
	1.0×10^{-1}		Hertel and Sommer (2005)	Q	415



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylbenzaldehyde C_8H_8O (<i>o</i> -tolualdehyde) [529-20-4] BTFQKIATRPGRBS-UHFFFAOYSA-N	3.1×10^{-1} 1.9 1.7 8.7×10^{-1} 3.3×10^{-1}	6900	Ji et al. (2008) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	M Q Q Q Q	 80, 238 80, 239 80, 240 99
3-methylbenzaldehyde C_8H_8O (<i>m</i> -tolualdehyde) [620-23-5] OVWYEQOVUDKZNU-UHFFFAOYSA-N	3.5×10^{-1} 3.0×10^{-1} 3.5×10^{-1} 1.9 1.1 1.7 3.3×10^{-1}	7200 5800 7200	Brockbank (2013) Wu et al. (2022b) Ji et al. (2008) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	L M M Q Q Q Q	1 80, 238 80, 239 80, 240 99
4-methylbenzaldehyde C_8H_8O (<i>p</i> -tolualdehyde) [104-87-0] FXLOVSHXALFLKQ-UHFFFAOYSA-N	5.3×10^{-1} 4.6×10^{-1} 5.3×10^{-1} 5.7×10^{-1} 5.8×10^{-1} 5.4×10^{-1} 3.3×10^{-1} 1.9 1.3 3.0 7.9×10^{-1} 5.3×10^{-1} 4.8×10^{-1} 6.5×10^{-1} 5.2×10^{-1} 5.6×10^{-1}	7200 6400 7200	Brockbank (2013) Wu et al. (2022b) Ji et al. (2008) Duchowicz et al. (2020) HSDB (2015) Abraham et al. (1994a) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Yaws (1999)	L M M V V R Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	1 186 80, 238 80, 239 80, 240 67 230, 231 21
terephthaldialdehyde $C_8H_6O_2$ [623-27-8] KUCOHFSKRZZVRO-UHFFFAOYSA-N	1.6×10^1		Abraham et al. (2019)	Q	
2-hydroxybenzaldehyde $C_6H_4(OH)CHO$ (2-formylphenol; salicylaldehyde) [90-02-8] SMQUZDBALVYZAC-UHFFFAOYSA-N	1.1 1.8 4.6 4.0×10^3 6.2 9.9 6.2 1.6×10^1 1.8	6200	Ji et al. (2008) Duchowicz et al. (2020) Duchowicz et al. (2020) McFall et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Yaws (1999)	M V Q Q Q Q Q Q Q ?	 186 474 271, 243 244 245 21, 475



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-hydroxybenzaldehyde $\text{C}_6\text{H}_4(\text{OH})\text{CHO}$ (3-formylphenol) [100-83-4] IAVREABSGIHHMO-UHFFFAOYSA-N	3.9×10^3		Gaffney and Senum (1984)	X	389
	9.6×10^3		Keshavarz et al. (2022)	Q	
	1.8×10^4		Duchowicz et al. (2020)	Q	299
	1.2×10^3		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^4		Raventos-Duran et al. (2010)	Q	244
	6.2×10^3		Raventos-Duran et al. (2010)	Q	245
	5.3×10^3		Hilal et al. (2008)	Q	
	7.9×10^2		Modarresi et al. (2007)	Q	67
	1.2×10^3		Katritzky et al. (1998)	Q	
	3.0×10^4		Nirmalakhandan et al. (1997)	Q	
3.9×10^3		Duchowicz et al. (2020)	?	185, 21	
3.8×10^3		Abraham et al. (1990)	?		
4-hydroxybenzaldehyde $\text{C}_6\text{H}_4(\text{OH})\text{CHO}$ (4-formylphenol) [123-08-0] RGHHSNMVTDWUBI-UHFFFAOYSA-N	1.9×10^4	8600	Parsons et al. (1971)	T	417
	9.6×10^3		Keshavarz et al. (2022)	Q	
	2.1×10^4		Duchowicz et al. (2020)	Q	
	1.2×10^3		Gharagheizi et al. (2012)	Q	
	1.2×10^3		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^3		Raventos-Duran et al. (2010)	Q	244
	6.2×10^3		Raventos-Duran et al. (2010)	Q	245
	8.8×10^2		Hilal et al. (2008)	Q	
	1.6×10^3		Modarresi et al. (2007)	Q	67
	3.0×10^4		Nirmalakhandan et al. (1997)	Q	
1.9×10^4		Duchowicz et al. (2020)	?	185, 21	
1.9×10^4		Abraham et al. (1990)	?		
2-methoxybenzaldehyde $\text{C}_8\text{H}_8\text{O}_2$ [135-02-4] PKZJLOCLABXVMC-UHFFFAOYSA-N	1.0×10^1	8900	Ji et al. (2008)	M	
3-methoxybenzaldehyde $\text{C}_8\text{H}_8\text{O}_2$ [591-31-1] WMPDAIZRQDCGFH-UHFFFAOYSA-N	5.1	8800	Ji et al. (2008)	M	
4-methoxybenzaldehyde $\text{C}_8\text{H}_8\text{O}_2$ [123-11-5] ZRSNZINYAWTAHE-UHFFFAOYSA-N	2.4×10^1	8700	Ji et al. (2008)	M	
3-phenyl-2-propenal $\text{C}_9\text{H}_8\text{O}$ (cinnamaldehyde) [104-55-2] KJPRLNWUNMBNZ-QPJXVBHSA-N	2.8 1.4	6300	HSDB (2015) van Roon et al. (2005)	V V	



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dimethylbenzaldehyde $C_9H_{10}O$ [5779-93-1] UIFVCPMLQXKEEU-UHFFFAOYSA-N	1.2 2.1 7.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
3,4-dimethylbenzaldehyde $C_9H_{10}O$ [5973-71-7] POQJHLBMLVTHAU-UHFFFAOYSA-N	1.2 1.5 3.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
3,5-dimethylbenzaldehyde $C_9H_{10}O$ [5779-95-3] NBEFMISJJNGCIZ-UHFFFAOYSA-N	1.2 9.6×10^{-1} 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-naphthaldehyde $C_{11}H_8O$ [66-99-9] PJKVFARRVXDAD-UHFFFAOYSA-N	6.0×10^1		Abraham et al. (2019)	Q	
cyclemax $C_{12}H_{16}O$ (4-(1-methylethyl)- benzenepropanal) [7775-00-0] RLEFOSDUWZYGOS-UHFFFAOYSA-N	7.8×10^{-1}		Dupeux et al. (2022)	Q	259
bourgeonal $C_{13}H_{18}O$ [18127-01-0] FZJUFJKVIYFBSY-UHFFFAOYSA-N	1.1		Dupeux et al. (2022)	Q	259
florhydral $C_{13}H_{18}O$ [125109-85-5] OHRBQTOZYGEWCJ-UHFFFAOYSA-N	4.9×10^{-1}		Dupeux et al. (2022)	Q	259
cyclamen aldehyde $C_{13}H_{18}O$ [103-95-7] ZFNVDHOSLNRHNN-UHFFFAOYSA-N	2.3×10^{-1}		Dupeux et al. (2022)	Q	259
mimosal $C_{13}H_{16}O$ (4-methyl-5-(4-methylphenyl)pent- 4-enal) [1226911-69-8] LBKHGAIELUNYML-ZRDIBKRKSA-N	4.9		Dupeux et al. (2022)	Q	259



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
lilial $C_{14}H_{20}O$ [80-54-6] SDQFDHOLCGWZPU-UHFFFAOYSA-N	5.7×10^{-1}		Dupeux et al. (2022)	Q	259
hivernal $C_{14}H_{18}O$ [300371-33-9] GEPDOWRWODJEY-UHFFFAOYSA-N	2.2		Dupeux et al. (2022)	Q	259
silvial $C_{14}H_{20}O$ [6658-48-6] YLIXVKUWWOQREC-UHFFFAOYSA-N	2.9×10^{-1}		Dupeux et al. (2022)	Q	259
mefloral $C_{14}H_{20}O$ [62518-65-4] GLZRHVTZLDNUQP-UHFFFAOYSA-N	3.2×10^{-1}		Dupeux et al. (2022)	Q	259
nymphéal $C_{14}H_{20}O$ (3-(4-isobutyl-2-methylphenyl)propanal) [1637294-12-2] UKZXPOJABTXLMK-UHFFFAOYSA-N	8.2×10^{-1}		Dupeux et al. (2022)	Q	259
hexyl cinnamic aldehyde $C_{15}H_{20}O$ [101-86-0] GUUHFMMWKWLOQMM-UHFFFAOYSA-N	1.0		Dupeux et al. (2022)	Q	259
α -amyl cinnamaldehyde $C_{14}H_{18}O$ [122-40-7] HMKKIXGYKWDQSV-KAMYIIQDSA-N	1.3		HSDB (2015)	Q	447
MCM:HCOCH2CO3H $C_3H_4O_4$ CFPRXLWZTODTLN-UHFFFAOYSA-N	8.0×10^4 3.6×10^3 3.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PROPALOOH $C_3H_6O_3$ UTLVMFCPERHVKU-UHFFFAOYSA-N	6.9×10^3 8.7×10^1 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUTALAOOH $C_4H_8O_3$ UBMPIIYSSVMXGT-UHFFFAOYSA-N	5.5×10^3 4.6×10^1 1.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUTALO2H $C_4H_8O_3$ HFNSAVKBHMZYBR-UHFFFAOYSA-N	5.5×10^3 2.7×10^3 8.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C3MDIALOOH $C_4H_6O_4$ WJWKLOFSCXWKQD-UHFFFAOYSA-N	3.0×10^6 4.7×10^3 7.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOC2CO3H $C_4H_6O_4$ ZCKJJZIUUFVHIST-UHFFFAOYSA-N	7.1×10^4 1.1×10^4 1.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IBUTALBO2H $C_4H_8O_3$ OSYMKIVGDGNGKG-UHFFFAOYSA-N	5.5×10^3 3.6×10^3 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IBUTALO2H $C_4H_8O_3$ UINKREZTGVFLAU-UHFFFAOYSA-N	3.8×10^3 1.8×10^1 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MALDALCO3H $C_4H_4O_4$ QFBRACYMKXGFRM-UHFFFAOYSA-N	2.9×10^5 3.5×10^4 3.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRPAL2CO3H $C_4H_6O_4$ IGHWWGZEWMXWCB-UHFFFAOYSA-N	7.1×10^4 2.3×10^3 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3EDIALOOH $C_5H_8O_4$ IOKXWRCVKGGMQG-UHFFFAOYSA-N	2.7×10^6 2.1×10^3 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3M3CHOOOH $C_5H_{10}O_3$ FJYKIGXUSFRBER-UHFFFAOYSA-N	3.1×10^3 8.7×10^2 3.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4CHOA00H $C_5H_{10}O_3$ ZCMMOPXACREGKB-UHFFFAOYSA-N	4.5×10^3 3.0×10^1 6.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4CHOBOOH $C_5H_{10}O_3$ JELNOURJXPXUYRE-UHFFFAOYSA-N	4.5×10^3 1.5×10^3 3.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4CODBCO3H $C_5H_6O_4$ JLZDPUBRDSTHL-UHFFFAOYSA-N	2.0×10^5 4.2×10^4 6.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C514OOH $C_5H_8O_4$ PUFIIBDSTKVRQR-UHFFFAOYSA-N	4.1×10^6 2.0×10^6 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5DIALOOH $C_5H_6O_4$ MJFLAVCETRHPDB-UHFFFAOYSA-N	1.6×10^7 7.3×10^4 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CHOC4OOH $\text{C}_5\text{H}_{10}\text{O}_3$ CTZAXNMAMSERLK-UHFFFAOYSA-N	4.3×10^3 5.3×10^3 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO1M22CO3H $\text{C}_5\text{H}_8\text{O}_4$ HHOOHNHNSGMLRV-UHFFFAOYSA-N	4.1×10^4 8.0×10^2 8.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IC4CHOOOH $\text{C}_5\text{H}_{10}\text{O}_3$ MEJCTHPUJKQILI-UHFFFAOYSA-N	5.1×10^3 3.8×10^1 8.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC3ODBCO3H $\text{C}_5\text{H}_6\text{O}_4$ UTZOYJZISPOIDM-UHFFFAOYSA-N	2.0×10^5 3.9×10^4 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C522CO3H $\text{C}_6\text{H}_8\text{O}_4$ NCACXMVSAKPDND-UHFFFAOYSA-N	1.1×10^5 8.0×10^3 1.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C615OOH $\text{C}_6\text{H}_{10}\text{O}_4$ XHCYBISQWAKVQU-UHFFFAOYSA-N	2.5×10^6 2.2×10^4 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6DIALOOH $\text{C}_6\text{H}_{10}\text{O}_4$ UGGYJIUZOSPDSD-UHFFFAOYSA-N	3.2×10^6 1.5×10^6 5.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOC4CO3H $\text{C}_6\text{H}_{10}\text{O}_4$ RHHSYYPMFOTTRH-UHFFFAOYSA-N	4.6×10^4 3.7×10^3 6.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO1C6OOH $\text{C}_6\text{H}_{12}\text{O}_3$ HEPNQRDDKATRCQ-UHFFFAOYSA-N	3.5×10^3 3.4×10^3 8.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C615CO3H $\text{C}_7\text{H}_{10}\text{O}_5$ DXQLRIPGQOCBO-UHFFFAOYSA-N	3.0×10^7 3.4×10^5 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C729OOH $\text{C}_7\text{H}_{12}\text{O}_3$ PQESPNYRBTXFKD-UHFFFAOYSA-N	7.6×10^3 2.6×10^3 4.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C729CO3H $\text{C}_8\text{H}_{12}\text{O}_4$ MJXLYBJUYDBXAC-UHFFFAOYSA-N	7.8×10^4 1.6×10^3 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C810OOH $\text{C}_8\text{H}_{14}\text{O}_4$ YJCLQCSGAKCWEJ-UHFFFAOYSA-N	1.6×10^6 5.5×10^5 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C822OOH $\text{C}_8\text{H}_{14}\text{O}_3$ XWYULULFGKWPMU-UHFFFAOYSA-N	8.8×10^3 6.0×10^3 2.8×10^3	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017)	Q Q Q	437 80, 238 80, 239
MCM:C830OOH $\text{C}_8\text{H}_{14}\text{O}_3$ QPQAMUJVCDDVQB-UHFFFAOYSA-N	6.5×10^3 4.4×10^3 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C831OOH $\text{C}_8\text{H}_{14}\text{O}_4$ IGXVNESWPQHYP-UHFFFAOYSA-N	1.6×10^6 3.0×10^5 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C89OOH $\text{C}_8\text{H}_{14}\text{O}_3$ TYPKFPBYWMWINI-UHFFFAOYSA-N	6.5×10^3 4.4×10^3 8.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C822CO3H $\text{C}_9\text{H}_{14}\text{O}_4$ DRDXOQWGPQFG-UHFFFAOYSA-N	1.7×10^4 7.3×10^4 1.1×10^3	14000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017)	Q Q Q	437 80, 238 80, 239
MCM:C830CO3H $\text{C}_9\text{H}_{14}\text{O}_4$ YIGLTTQERBPX-UHFFFAOYSA-N	7.8×10^4 2.8×10^3 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C89CO3H $\text{C}_9\text{H}_{14}\text{O}_4$ QJRQWHYQDGSSTJ-UHFFFAOYSA-N	7.8×10^4 2.9×10^3 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C126OOH $\text{C}_{12}\text{H}_{20}\text{O}_3$ KEVCPNVRIXMZTI-UHFFFAOYSA-N	7.1×10^3 4.9×10^3 1.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C126CO3H $\text{C}_{13}\text{H}_{20}\text{O}_4$ OZAZBNTYEOZXRC-UHFFFAOYSA-N	8.5×10^4 1.9×10^3 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C136OOH $\text{C}_{13}\text{H}_{22}\text{O}_3$ MAMVWZJYPZZMSJ-UHFFFAOYSA-N	5.8×10^3 4.3×10^3 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C136CO3H $\text{C}_{14}\text{H}_{22}\text{O}_4$ JKRMUSIUVAEPW-UHFFFAOYSA-N	6.8×10^4 1.4×10^3 7.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HCOCOHC3H $\text{C}_3\text{H}_4\text{O}_5$ DIZMXPJJIWKAJT-UHFFFAOYSA-N	2.9×10^6 1.3×10^4 6.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOCHOCOOH $\text{C}_3\text{H}_6\text{O}_4$ GWWSSJVARZQKFN-UHFFFAOYSA-N	2.4×10^7 1.3×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:OCCOHCOOH $\text{C}_3\text{H}_6\text{O}_4$ UFAXCNDNIIDPQE-UHFFFAOYSA-N	1.2×10^6 5.9×10^4 2.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4OCCOHOOH $\text{C}_4\text{H}_8\text{O}_4$ JJIHBDXOHFOUDV-UHFFFAOYSA-N	1.1×10^6 1.2×10^5 7.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:COCCOHCOOH $\text{C}_4\text{H}_8\text{O}_4$ XTEYRSCVGRLIOG-UHFFFAOYSA-N	2.2×10^7 2.0×10^5 8.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:COHM2CO3H $\text{C}_4\text{H}_6\text{O}_5$ AEAZUHMXXWJBPBW-UHFFFAOYSA-N	1.7×10^6 4.6×10^3 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HMACROOH $\text{C}_4\text{H}_8\text{O}_5$ AWITZWJPGUOCMB-UHFFFAOYSA-N	3.9×10^{10} 2.4×10^8 4.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MACROHOOH $\text{C}_4\text{H}_8\text{O}_4$ HWQXXVVDNRNBQYB-UHFFFAOYSA-N	6.6×10^5 7.1×10^4 6.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MACROOH $\text{C}_4\text{H}_8\text{O}_4$ MOSGWXPXTZVSII-UHFFFAOYSA-N	1.3×10^7 7.6×10^4 5.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MALDIALOOH $\text{C}_4\text{H}_6\text{O}_5$ MNYHDFHZEDLP-UHFFFAOYSA-N	1.0×10^9 6.2×10^6 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ALC4DOLOOH $\text{C}_5\text{H}_{10}\text{O}_5$ BTJWWKUWEVGVGA-UHFFFAOYSA-N	1.6×10^{10} 3.8×10^8 5.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4MALOHOOH $\text{C}_5\text{H}_8\text{O}_5$ NJMKFLHNNBFYIH-UHFFFAOYSA-N	5.6×10^8 6.6×10^6 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C57OOH $\text{C}_5\text{H}_{10}\text{O}_5$ VJGRRPOTERJGF-UHFFFAOYSA-N	1.3×10^{10} 8.5×10^7 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C58OOH $\text{C}_5\text{H}_{10}\text{O}_5$ MTCQYLXAFMKVMT-UHFFFAOYSA-N	1.9×10^9 3.7×10^8 3.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOC4OHOOH $\text{C}_5\text{H}_{10}\text{O}_4$ LTZYUHWRSINRM-UHFFFAOYSA-N	1.5×10^7 1.4×10^6 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HIEB1OOH $C_5H_{10}O_6$ COFCBVJXHDFSHS-UHFFFAOYSA-N	3.7×10^{13} 1.6×10^{11} 6.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HIEB2OOH $C_5H_{10}O_6$ PKIUCWJPHHVKPZ-UHFFFAOYSA-N	2.4×10^{13} 1.0×10^{11} 1.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOC4CHOOH $C_5H_{10}O_4$ LRYOXTYJQCQGVIC-UHFFFAOYSA-N	1.4×10^7 6.9×10^5 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IEB2OOH $C_5H_{10}O_5$ MCOKLECUTPXNOW-UHFFFAOYSA-N	1.3×10^{10} 3.7×10^8 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1H4C5CO3H $C_6H_{10}O_5$ DOEHHSPPDHWTCTR-UHFFFAOYSA-N	1.6×10^8 5.9×10^7 2.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C623OOH $C_6H_{12}O_5$ OGBKQGQRAMSXTF-UHFFFAOYSA-N	2.8×10^{10} 7.4×10^8 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C67OOH $C_6H_{12}O_4$ ONTGLCVTLGTTQS-UHFFFAOYSA-N	1.0×10^7 4.2×10^5 9.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C68OOH $C_6H_{12}O_4$ ITDKDNQPTMKBIM-UHFFFAOYSA-N	1.0×10^7 4.6×10^5 3.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO1H63OOH $C_6H_{12}O_4$ KJWILEAANBSBHN-UHFFFAOYSA-N	1.1×10^7 1.8×10^7 3.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C728OOH $C_7H_{14}O_5$ WJYXJQPIZCIBJO-UHFFFAOYSA-N	5.3×10^{10} 2.1×10^{10} 1.7×10^9 1.4×10^7	18000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C730OOH $C_7H_{14}O_5$ YXKHJQXHKYJCPJ-UHFFFAOYSA-N	6.1×10^{10} 2.1×10^{10} 1.1×10^{10} 2.6×10^6	18000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C824OOH $C_8H_{14}O_4$ FGEKWAMEWUMQIL-UHFFFAOYSA-N	8.4×10^6 1.9×10^7 6.3×10^5 6.3×10^3	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240



Table A3.5: Aldehydes (RCHO) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C826OOH $\text{C}_8\text{H}_{14}\text{O}_5$	6.3×10^9		Wang et al. (2017)	Q	80, 238
MATCTRFTDTXPPPO-UHFFFAOYSA-N	5.1×10^8		Wang et al. (2017)	Q	80, 239
	1.7×10^5		Wang et al. (2017)	Q	80, 240
MCM:C127OOH $\text{C}_{12}\text{H}_{20}\text{O}_4$	1.3×10^7		Wang et al. (2017)	Q	80, 238
CZSOPCQUOGQYQQ-UHFFFAOYSA-N	1.9×10^7		Wang et al. (2017)	Q	80, 239
	2.3×10^5		Wang et al. (2017)	Q	80, 240
MCM:C1311OOH $\text{C}_{13}\text{H}_{22}\text{O}_4$	1.2×10^7		Wang et al. (2017)	Q	80, 238
GNGYVQPBCVXCXTM-UHFFFAOYSA-N	1.6×10^7		Wang et al. (2017)	Q	80, 239
	1.2×10^6		Wang et al. (2017)	Q	80, 240
MCM:C1313OOH $\text{C}_{13}\text{H}_{22}\text{O}_5$	6.0×10^9		Wang et al. (2017)	Q	80, 238
ALNYAIDMJTUDIF-UHFFFAOYSA-N	9.1×10^8		Wang et al. (2017)	Q	80, 239
	1.9×10^6		Wang et al. (2017)	Q	80, 240



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A3.6 Ketones (RCOR)

Table A3.6: Ketones (RCOR)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propanone	2.7×10^{-1}	5500	Burkholder et al. (2019)	L	
CH ₃ COCH ₃	2.7×10^{-1}	5500	Burkholder et al. (2015)	L	
(acetone)	2.9×10^{-1}	5300	Brockbank (2013)	L	1, 476
[67-64-1]	2.7×10^{-1}	5500	Sander et al. (2011)	L	
CSCPPACGZOOOGX-UHFFFAOYSA-N	3.3×10^{-1}	5300	Poulain et al. (2010)	L	
	2.8×10^{-1}	5100	Sander et al. (2006)	L	
	2.6×10^{-1}	5700	Fogg and Sangster (2003)	L	
	2.8×10^{-1}	4800	Staudinger and Roberts (2001)	L	
	2.7×10^{-1}	5000	Plyasunov and Shock (2001)	L	
	3.0×10^{-1}	4600	Staudinger and Roberts (1996)	L	
	2.9×10^{-1}	5100	Poulain et al. (2010)	M	
	3.3×10^{-1}	4500	O'Farrell and Waghorne (2010)	M	
	2.6×10^{-1}	5400	Ji and Evans (2007)	M	
	2.4×10^{-1}	4200	Falabella et al. (2006)	M	11, 338
	2.6×10^{-1}	6400	Strekowski and George (2005)	M	
	2.4×10^{-1}		Straver and de Loos (2005)	M	
	2.4×10^{-1}	4300	Chai et al. (2005)	M	11
	2.7×10^{-1}		Nozière and Riemer (2003)	M	79
	1.0×10^{-1}		Ayuttaya et al. (2001)	M	340
	9.4×10^{-4}		Ayuttaya et al. (2001)	M	341
	5.3×10^{-1}		Ayuttaya et al. (2001)	M	342
	9.6×10^{-2}		Welke et al. (1998)	M	
	2.7×10^{-1}	5300	Benkelberg et al. (1995)	M	
	2.7×10^{-1}		Hoff et al. (1993)	M	
	1.7×10^{-1}		Yu (1992)	M	12
	3.2×10^{-1}	5800	Betterton (1991)	M	
	3.5×10^{-1}	3800	Zhou and Mopper (1990)	M	456
	1.2×10^{-1}		Guitart et al. (1989)	M	14
	1.4×10^{-1}		Hellmann (1987)	M	87
	2.5×10^{-1}	4800	Snider and Dawson (1985)	M	
	3.2×10^{-1}	5400	Schoene and Steinhanses (1985)	M	
	1.9×10^{-1}		Richon et al. (1985)	M	38
	2.6×10^{-1}	5100	Lichtenbelt and Schram (1985)	M	477
	2.0×10^{-1}	7800	Ioffe et al. (1984)	M	
	1.5×10^{-1}		Sato and Nakajima (1979a)	M	14
	2.5×10^{-1}		Vitenberg et al. (1975)	M	
	2.5×10^{-1}		Vitenberg et al. (1974)	M	
	3.2×10^{-1}		Vitenberg et al. (1974)	M	
	2.5×10^{-1}		Buttery et al. (1969)	M	
	3.1×10^{-1}		Nelson and Hoff (1968)	M	297
	2.8×10^{-1}		Burnett (1963)	M	
	1.8×10^{-2}		Abraham and Acree (2007)	V	
	2.6×10^{-1}		Hwang et al. (1992)	V	
	3.1×10^{-2}	3100	Djerki and Laub (1988)	V	
	2.4×10^{-1}		Rathbun and Tai (1982)	V	



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1×10^{-2}		Hine and Weimar (1965)	R	
	3.0×10^{-1}		Butler and Ramchandani (1935)	R	
	2.5×10^{-1}	4900	Bagno et al. (1991)	T	473
	2.1×10^{-1}		Yaws (2003)	X	258
	2.2×10^{-1}	5000	Schaffer and Daubert (1969)	X	298
	3.0×10^{-2}	3300	Janini and Quaddora (1986)	X	298
	3.0×10^{-1}		Gaffney and Senum (1984)	X	389
	2.7×10^{-1}		Cabani et al. (1981)	C	
	6.1×10^{-1}		Dupeux et al. (2022)	Q	259
	2.6×10^{-1}		Hayer et al. (2022)	Q	20
	1.2×10^{-1}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	6.6×10^{-2}		Wang et al. (2017)	Q	80, 238
	4.3×10^{-1}		Wang et al. (2017)	Q	80, 239
	7.1×10^{-1}		Wang et al. (2017)	Q	80, 240
	2.5×10^{-1}		Li et al. (2014)	Q	241
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.4×10^{-1}		Hilal et al. (2008)	Q	
	4.0×10^{-1}		Modarresi et al. (2007)	Q	67
		5500	Kühne et al. (2005)	Q	
	2.5×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.5×10^{-1}		English and Carroll (2001)	Q	230, 231
	2.4×10^{-2}		Katritzky et al. (1998)	Q	
	2.1×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.9×10^{-1}		Suzuki et al. (1992)	Q	232
	2.5×10^{-1}		Taft et al. (1985)	Q	
	2.8×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	2.5×10^{-1}		Mackay et al. (2006c)	?	21
		5100	Kühne et al. (2005)	?	
	1.5×10^{-1}		Yaws (1999)	?	21
	1.8×10^{-1}		Yaws et al. (1998)	?	
	1.6×10^{-1}		Abraham and Weathersby (1994)	?	21
	2.3×10^{-1}		Yaws and Yang (1992)	?	21
	2.5×10^{-1}		Abraham et al. (1990)	?	
propanone-2-13C CH ₃ COCH ₃ (acetone-2-13C) [3881-06-9] CSCPPACGZOOOGX-LBPDFUHNSA-N	3.1×10^{-1}	5300	Hiatt (2013)	M	
1-hydroxypropanone CH ₃ COCH ₂ OH (hydroxyacetone) [116-09-6] XLSMFKSTNGKWQX-UHFFFAOYSA-N	7.7×10^1		Lee and Zhou (1993)	C	87
	8.3		Wang et al. (2017)	Q	80, 238
	1.4×10^2		Wang et al. (2017)	Q	80, 239
	1.9×10^1		Wang et al. (2017)	Q	80, 240



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Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) [$\frac{\text{mol}}{\text{m}^3 \text{ Pa}}$]	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butanone	1.8×10^{-1}	5700	Burkholder et al. (2019)	L	
$\text{C}_2\text{H}_5\text{COCH}_3$	1.8×10^{-1}	5700	Burkholder et al. (2015)	L	
(methyl ethyl ketone; MEK)	1.8×10^{-1}	5600	Brockbank (2013)	L	1
[78-93-3]	1.8×10^{-1}	5700	Sander et al. (2011)	L	
ZWEHNKRNPOVVGH-UHFFFAOYSA-N	1.8×10^{-1}	5700	Sander et al. (2006)	L	
	1.9×10^{-1}	4600	Fogg and Sangster (2003)	L	
	1.8×10^{-1}	5400	Staudinger and Roberts (2001)	L	
	1.8×10^{-1}	5500	Plyasunov and Shock (2001)	L	
	2.0×10^{-1}	5000	Staudinger and Roberts (1996)	L	
	1.0×10^{-1}		Kim and Kim (2014)	M	
	9.5×10^{-2}		Helburn et al. (2008)	M	
	2.1×10^{-1}	5200	Ji and Evans (2007)	M	
	1.5×10^{-1}	4400	Falabella et al. (2006)	M	11, 338
	2.7×10^{-2}	12000	Strekowski and George (2005)	M	
	1.7×10^{-1}		Straver and de Loos (2005)	M	
	1.5×10^{-1}	4500	Chai et al. (2005)	M	11
			Cheng et al. (2004)	M	328
			Cheng et al. (2003)	M	328
	1.1×10^{-1}		Karl et al. (2003)	M	
	1.3×10^{-1}	4300	Hovorka et al. (2002)	M	11
	9.9×10^{-2}		van Ruth et al. (2002)	M	14
	1.0×10^{-1}		van Ruth and Villeneuve (2002)	M	14, 361
	9.0×10^{-2}		van Ruth et al. (2001)	M	14
	1.6×10^{-1}		Kim et al. (2000)	M	
	1.6×10^{-1}		Welke et al. (1998)	M	
	1.9×10^{-1}		Chaintreau et al. (1995)	M	
	1.4×10^{-1}	4700	Ettre et al. (1993)	M	11
	1.9×10^{-1}	5000	Zhou and Mopper (1990)	M	456
	6.8×10^{-2}	-5100	Ashworth et al. (1988)	M	33, 278
	1.3×10^{-1}		Hellmann (1987)	M	87
	1.8×10^{-1}		Park et al. (1987)	M	
	1.7×10^{-1}	5700	Snider and Dawson (1985)	M	
	1.4×10^{-1}		Hawthorne et al. (1985)	M	
	1.2×10^{-1}		Richon et al. (1985)	M	38
	3.2×10^{-1}		Ioffe et al. (1984)	M	80
	1.0×10^{-1}		Friant and Suffet (1979)	M	38
	9.8×10^{-2}		Sato and Nakajima (1979a)	M	14
	1.8×10^{-1}		Vitenberg et al. (1975)	M	
	1.1×10^{-1}		Vitenberg et al. (1974)	M	
	1.9×10^{-1}		Rohrschneider (1973)	M	
	2.1×10^{-1}		Buttery et al. (1969)	M	
	1.1×10^{-2}		Abraham and Acree (2007)	V	
	2.8×10^{-1}		Mackay et al. (2006c)	V	
	2.8×10^{-1}		Mackay et al. (1995)	V	
	2.6×10^{-1}		Hwang et al. (1992)	V	
	8.6×10^{-2}	3700	Djerki and Laub (1988)	V	
	1.6×10^{-1}		Rathbun and Tai (1982)	V	



Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.1×10^{-2}		Hine and Weimar (1965)	R	
	2.1×10^{-1}	5500	Bagno et al. (1991)	T	473
		5500	Della Gatta et al. (1981)	T	
	7.6×10^{-2}		Yaws (2003)	X	258
	7.6×10^{-2}		Yaws (2003)	X	237
	7.1×10^{-2}	5800	Janini and Quaddora (1986)	X	298
	2.3×10^{-1}		Mackay et al. (1995)	C	
	4.1×10^{-1}		Harrison et al. (1993)	C	
	1.9×10^{-1}		Cabani et al. (1981)	C	
	2.3×10^{-1}		Dupeux et al. (2022)	Q	259
	1.8×10^{-1}		Hayer et al. (2022)	Q	20
	1.6×10^{-1}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	5.1×10^{-2}		Wang et al. (2017)	Q	80, 238
	2.5×10^{-1}		Wang et al. (2017)	Q	80, 239
	3.6×10^{-1}		Wang et al. (2017)	Q	80, 240
	2.1×10^{-1}		Li et al. (2014)	Q	241
	2.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	8.4×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-1}		Hilal et al. (2008)	Q	
	3.0×10^{-1}		Modarresi et al. (2007)	Q	67
		5900	Kühne et al. (2005)	Q	
	1.7×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	1.4×10^{-1}		English and Carroll (2001)	Q	230, 231
	3.0×10^{-2}		Katritzky et al. (1998)	Q	
	1.6×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.5×10^{-1}		Suzuki et al. (1992)	Q	232
	1.7×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	1.0×10^{-1}		Mackay et al. (2006c)	?	21
		5300	Kühne et al. (2005)	?	
	3.3×10^{-1}		Yaws (1999)	?	21
	1.5×10^{-1}		Yaws et al. (1998)	?	
	1.0×10^{-1}		Abraham and Weathersby (1994)	?	21
	3.1×10^{-1}		Betterton (1991)	?	
	2.1×10^{-1}		Abraham et al. (1990)	?	
butanone-1,1,1,3,3-d5 <chem>C2H5COCH3</chem> (methyl ethyl ketone-d5; MEK-d5) [24313-50-6] ZWEHNKRNPVVGH-PDWRLMEDSA-N	3.7×10^{-1}	8200	Hiatt (2013)	M	



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-pentanone	1.3×10^{-1}	6000	Brockbank (2013)	L	1
$\text{C}_3\text{H}_7\text{COCH}_3$	1.3×10^{-1}	5900	Plyasunov and Shock (2001)	L	
[107-87-9]	1.3×10^{-1}	5900	Hovorka et al. (2019)	M	
XNLICIUVMYPYHGG-UHFFFAOYSA-N	1.6×10^{-1}	5700	Ji and Evans (2007)	M	
	1.0×10^{-1}	4600	Falabella et al. (2006)	M	11, 338
	8.6×10^{-2}		Straver and de Loos (2005)	M	
	1.0×10^{-1}	4800	Chai et al. (2005)	M	11
	1.1×10^{-1}		Kim et al. (2000)	M	
	1.2×10^{-1}		Shiu and Mackay (1997)	M	
	9.0×10^{-2}		Hawthorne et al. (1985)	M	
	6.4×10^{-2}		Sato and Nakajima (1979a)	M	14
	1.7×10^{-1}		Vitenberg et al. (1974)	M	
	1.1×10^{-1}		Vitenberg et al. (1974)	M	478
	1.6×10^{-1}		Buttery et al. (1969)	M	
	9.2×10^{-2}		Nelson and Hoff (1968)	M	297
	1.5×10^{-1}		Mackay et al. (2006c)	V	
	5.9×10^{-2}		Philippe et al. (2003)	V	14
	1.5×10^{-1}		Shiu and Mackay (1997)	V	
	1.5×10^{-1}		Mackay et al. (1995)	V	
	2.4×10^{-1}	4300	Djerki and Laub (1988)	V	
	2.6×10^{-1}		Rathbun and Tai (1982)	V	
	3.1×10^{-1}		Amoore and Buttery (1978)	V	
		5900	Della Gatta et al. (1981)	T	
	1.4×10^{-1}		Yaws (2003)	X	258
	9.1×10^{-2}	4600	Janini and Quaddora (1986)	X	298
	1.7×10^{-1}		Mackay et al. (1995)	C	
	2.5×10^{-1}		Dupeux et al. (2022)	Q	259
	8.7×10^{-2}		Hayer et al. (2022)	Q	20
	2.2×10^{-1}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	299
	4.3×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.6×10^{-1}		Wang et al. (2017)	Q	80, 239
	1.8×10^{-1}		Wang et al. (2017)	Q	80, 240
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.0×10^{-1}		Hilal et al. (2008)	Q	
	1.7×10^{-1}		Modarresi et al. (2007)	Q	67
		6200	Kühne et al. (2005)	Q	
	1.4×10^{-1}		Yaffe et al. (2003)	Q	248, 272
	1.9×10^{-2}		Katritzky et al. (1998)	Q	
	1.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.2×10^{-1}		Russell et al. (1992)	Q	279
	1.2×10^{-1}		Suzuki et al. (1992)	Q	232
	1.2×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	1.6×10^{-1}		Mackay et al. (2006c)	?	21
		6500	Kühne et al. (2005)	?	



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-1}		Yaws (1999)	?	21
	1.3×10^{-1}		Yaws et al. (1998)	?	
	6.7×10^{-2}		Abraham and Weathersby (1994)	?	21
	1.5×10^{-1}		Abraham et al. (1990)	?	
	3.1×10^{-1}		Mackay and Yeun (1983)	?	
3-pentanone $\text{C}_2\text{H}_5\text{COC}_2\text{H}_5$ (diethyl ketone) [96-22-0] FDPIMTJIUBPUKL-UHFFFAOYSA-N	8.9×10^{-2}	5800	Brockbank (2013)	L	1, 479
	1.1×10^{-1}	6000	Plyasunov and Shock (2001)	L	
	1.1×10^{-1}	5900	Hovorka et al. (2019)	M	
	2.1×10^{-1}		O'Farrell and Waghorne (2010)	M	
	1.6×10^{-1}	5600	Ji and Evans (2007)	M	
	7.0×10^{-2}		Sato and Nakajima (1979a)	M	14
	9.7×10^{-5}		Saylor et al. (1938)	M	38
	8.4×10^{-2}		Mackay et al. (2006c)	V	
	1.2×10^{-1}		Mackay et al. (1995)	V	
	8.4×10^{-2}		Mackay et al. (1995)	V	
	2.8×10^{-1}		Rathbun and Tai (1982)	V	
	1.3×10^{-1}	6000	Bagno et al. (1991)	T	473
		6000	Della Gatta et al. (1981)	T	
	8.2×10^{-2}		Yaws (2003)	X	258
	8.2×10^{-2}		Yaws (2003)	X	237
	2.0×10^{-1}	9200	Janini and Quaddora (1986)	X	298
	1.1×10^{-1}		Howard (1993)	X	412
	1.3×10^{-1}		Cabani et al. (1981)	C	
	8.6×10^{-2}		Dupeux et al. (2022)	Q	259
	2.2×10^{-1}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	4.3×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.3×10^{-1}		Wang et al. (2017)	Q	80, 239
	6.6×10^{-2}		Wang et al. (2017)	Q	80, 240
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	7.5×10^{-2}		Gharagheizi et al. (2010)	Q	246
	9.2×10^{-2}		Hilal et al. (2008)	Q	
	1.9×10^{-1}		Modarresi et al. (2007)	Q	67
		6200	Kühne et al. (2005)	Q	
	1.4×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	4.3×10^{-2}		Yao et al. (2002)	Q	229
	1.1×10^{-1}		English and Carroll (2001)	Q	230, 274
	2.7×10^{-2}		Katritzky et al. (1998)	Q	
	1.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	2.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		6800	Kühne et al. (2005)	?	
	8.2×10^{-2}		Yaws (1999)	?	21
	1.2×10^{-1}		Yaws et al. (1998)	?	
	7.3×10^{-2}		Abraham and Weathersby (1994)	?	21
	1.3×10^{-1}		Abraham et al. (1990)	?	



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-cyclopropyl-ethanone C_5H_8O (cyclopropyl methyl ketone) [765-43-5] HVGFCAITDHOQFX-UHFFFAOYSA-N	9.5×10^{-1}	5900	Bagno et al. (1991)	T	473
		5900	Della Gatta et al. (1981)	T	
	2.2×10^{-1}		Keshavarz et al. (2022)	Q	
	9.9×10^{-2}		Duchowicz et al. (2020)	Q	299
	4.8×10^{-1}		Hilal et al. (2008)	Q	
	5.2×10^{-1}		Modarresi et al. (2007)	Q	67
	3.1×10^{-1}		English and Carroll (2001)	Q	230, 274
	6.4×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	9.7×10^{-1}		Duchowicz et al. (2020)	?	185, 21
3-methyl-2-butanone $C_5H_{10}O$ (isopropyl methyl ketone) [563-80-4] SYBYTAAJFKOIEJ-UHFFFAOYSA-N	1.1×10^{-1}	5800	Brockbank (2013)	L	1
	9.1×10^{-2}	5700	Plyasunov and Shock (2001)	L	
	9.3×10^{-2}	5600	Hovorka et al. (2019)	M	
	1.0×10^{-1}		Duchowicz et al. (2020)	V	186
	8.7×10^{-2}		HSDB (2015)	V	
	9.6×10^{-2}		Cabani et al. (1981)	V	
	9.0×10^{-2}	5700	Bagno et al. (1991)	T	473
		5700	Della Gatta et al. (1981)	T	
	1.3×10^{-2}		Duchowicz et al. (2020)	Q	
	4.9×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.3×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.5×10^{-1}		Wang et al. (2017)	Q	80, 240
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	8.4×10^{-2}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	67
		5300	Kühne et al. (2005)	Q	
9.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249	
6.4×10^{-2}		English and Carroll (2001)	Q	230, 231	
2.5×10^{-2}		Katritzky et al. (1998)	Q		
1.0×10^{-1}		Nirmalakhandan et al. (1997)	Q		
	7200	Kühne et al. (2005)	?		
1.1×10^{-1}		Yaws (1999)	?	21	
1.1×10^{-1}		Yaws et al. (1998)	?		
9.7×10^{-2}		Abraham et al. (1990)	?		
cyclopentanone C_5H_8O [120-92-3] BGTOWKSIORTVQH-UHFFFAOYSA-N	1.2	5800	Brockbank (2013)	L	1
	2.8		O'Farrell and Waghorne (2010)	M	
	8.2×10^{-1}	4900	Hovorka et al. (2002)	M	11
	8.2×10^{-1}		Hawthorne et al. (1985)	M	
	7.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.5×10^{-1}		Duchowicz et al. (2020)	Q	299
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.1		Hilal et al. (2008)	Q	
4.7×10^{-1}		Modarresi et al. (2007)	Q	67	



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		5800	Kühne et al. (2005)	Q	
	1.0		Yaffe et al. (2003)	Q	248, 249
	7.5×10^{-1}		English and Carroll (2001)	Q	230, 260
	6.9×10^{-2}		Katritzky et al. (1998)	Q	
	7.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	9.9×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		5600	Kühne et al. (2005)	?	
	1.1		Abraham et al. (1990)	?	
2-hexanone $\text{C}_6\text{H}_{12}\text{O}$ [591-78-6] QQZOPKMRPOGIEB-UHFFFAOYSA-N	1.1×10^{-1}	6500	Brockbank (2013)	L	1
	9.8×10^{-2}	6300	Plyasunov and Shock (2001)	L	
	9.9×10^{-2}	6300	Hovorka et al. (2019)	M	
	1.5×10^{-1}	8600	Hiatt (2013)	M	
	7.9×10^{-2}	4800	Falabella et al. (2006)	M	11, 338
	1.1×10^{-1}		Straver and de Loos (2005)	M	
	8.6×10^{-2}	5100	Chai et al. (2005)	M	11
	4.3×10^{-2}		Sato and Nakajima (1979a)	M	14
	1.1×10^{-1}		Duchowicz et al. (2020)	V	186
	1.1×10^{-1}		HSDB (2015)	V	
	1.1×10^{-1}		Mackay et al. (2006c)	V	
	1.1×10^{-1}		Mackay et al. (1995)	V	
	1.0×10^{-1}		Meylan and Howard (1991)	V	
	6.5×10^{-1}	4900	Djerki and Laub (1988)	V	
	1.0×10^{-1}		Cabani et al. (1981)	V	
		6200	Della Gatta et al. (1981)	T	
	1.2×10^{-1}		Yaws (2003)	X	258
	1.0×10^{-1}		Howard (1993)	X	412
	1.7×10^{-1}		Dupeux et al. (2022)	Q	259
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	3.8×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.1×10^{-1}		Wang et al. (2017)	Q	80, 239
	1.7×10^{-1}		Wang et al. (2017)	Q	80, 240
	8.2×10^{-2}		Hilal et al. (2008)	Q	
	1.5×10^{-1}		Modarresi et al. (2007)	Q	67
		6600	Kühne et al. (2005)	Q	
	7.9×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	8.4×10^{-2}		English and Carroll (2001)	Q	230, 231
	2.4×10^{-2}		Katritzky et al. (1998)	Q	
	9.2×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	8.5×10^{-2}		Meylan and Howard (1991)	Q	
		6200	Kühne et al. (2005)	?	
	1.2×10^{-1}		Yaws (1999)	?	21
	1.2×10^{-1}		Yaws et al. (1998)	?	
	4.5×10^{-2}		Abraham and Weathersby (1994)	?	21
	1.0×10^{-1}		Abraham et al. (1990)	?	



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Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-hexanone-1,1,1,3,3-d5 $C_6H_{12}O$ [4840-82-8] QQZOPKMRPOGIEB-ZTIZGVCASA-N	1.7×10^{-1}	9000	Hiatt (2013)	M	
3-hexanone $C_6H_{12}O$ [589-38-8] PFCHFHIRKBAQGU-UHFFFAOYSA-N	7.9×10^{-2}	7100	Brockbank (2013)	L	1
	7.5×10^{-2}		Plyasunov and Shock (2001)	L	
	7.6×10^{-2}	6400	Hovorka et al. (2019)	M	
			Dewulf et al. (1999)	M	362
	7.9×10^{-2}		Duchowicz et al. (2020)	V	186
	8.0×10^{-2}		Yaws (2003)	X	237
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	3.8×10^{-2}		Wang et al. (2017)	Q	80, 238
	8.9×10^{-2}		Wang et al. (2017)	Q	80, 239
	1.5×10^{-1}		Wang et al. (2017)	Q	80, 240
	6.2×10^{-2}		Gharagheizi et al. (2010)	Q	246
	6.9×10^{-2}		Hilal et al. (2008)	Q	
	1.6×10^{-1}		Modarresi et al. (2007)	Q	67
	6600	Kühne et al. (2005)	Q		
7.9×10^{-2}		Yaffe et al. (2003)	Q	248, 249	
2.1×10^{-2}		Katritzky et al. (1998)	Q		
	5800	Kühne et al. (2005)	?		
8.0×10^{-2}		Yaws (1999)	?	21	
8.0×10^{-2}		Yaws et al. (1998)	?		
3-methyl-2-pentanone $C_6H_{12}O$ [565-61-7] UIHCLUNTOQBZGK-UHFFFAOYSA-N	8.4×10^{-2}		Plyasunov and Shock (2001)	L	
	7.9×10^{-2}	6000	Hovorka et al. (2019)	M	
	1.3×10^{-1}		Duchowicz et al. (2020)	V	186
	1.3×10^{-2}		Duchowicz et al. (2020)	Q	
	4.0×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.1×10^{-1}		Wang et al. (2017)	Q	80, 239
	1.8×10^{-1}		Wang et al. (2017)	Q	80, 240
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	7.3×10^{-2}		Hilal et al. (2008)	Q	
2.2×10^{-1}		Modarresi et al. (2007)	Q	67	
9.6×10^{-2}		Yaws et al. (1998)	?		
4-methyl-2-pentanone $(CH_3)_2CHCH_2COCH_3$ (methyl isobutyl ketone; MIBK) [108-10-1] NTIZESTWPVYFNL-UHFFFAOYSA-N	6.9×10^{-2}	6200	Brockbank (2013)	L	1
	6.9×10^{-2}	6000	Plyasunov and Shock (2001)	L	
	6.5×10^{-2}	6000	Hovorka et al. (2019)	M	
	3.9×10^{-2}		Kim and Kim (2014)	M	
	1.0×10^{-1}	8700	Hiatt (2013)	M	
	3.9×10^{-2}		Kim et al. (2000)	M	
	4.7×10^{-2}		Welke et al. (1998)	M	
	4.3×10^{-2}	4600	Kolb et al. (1992)	M	277
2.2×10^{-2}	110	Ashworth et al. (1988)	M	42, 278	
6.5×10^{-2}		Hellmann (1987)	M	87	



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1×10^{-2}		Sato and Nakajima (1979a)	M	14
	7.2×10^{-2}		Duchowicz et al. (2020)	V	186
	7.0×10^{-2}		HSDB (2015)	V	
	6.5×10^{-2}		Mackay et al. (2006c)	V	
	6.5×10^{-2}		Mackay et al. (1995)	V	
	7.2×10^{-2}		Hwang et al. (1992)	V	
	1.4×10^{-1}		Rathbun and Tai (1982)	V	
	7.1×10^{-2}		Cabani et al. (1981)	V	
	7.3×10^{-2}		Yaws (2003)	X	258
	1.1×10^{-1}		Howard (1990)	X	412
	1.4×10^{-1}		Dupeux et al. (2022)	Q	259
	1.3×10^{-2}		Duchowicz et al. (2020)	Q	
	4.0×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.3×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.1×10^{-1}		Wang et al. (2017)	Q	80, 240
	8.8×10^{-2}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	67
		6600	Kühne et al. (2005)	Q	
	7.3×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	5.1×10^{-2}		English and Carroll (2001)	Q	230, 260
	1.7×10^{-2}		Katritzky et al. (1998)	Q	
	7.9×10^{-2}		Nirmalakhandan et al. (1997)	Q	
		5700	Kühne et al. (2005)	?	
	7.3×10^{-2}		Yaws (1999)	?	21
	7.2×10^{-2}		Yaws et al. (1998)	?	
	3.2×10^{-2}		Abraham and Weathersby (1994)	?	21
	3.0×10^{-1}		Betterton (1991)	?	
	7.0×10^{-2}		Abraham et al. (1990)	?	
2-methyl-3-pentanone $C_6H_{12}O$ [565-69-5] HYTRYEXINDDXJK-UHFFFAOYSA-N	5.3×10^{-2}		Plyasunov and Shock (2001)	L	
	5.2×10^{-2}	6100	Hovorka et al. (2019)	M	
	6.4×10^{-2}		Duchowicz et al. (2020)	V	186
	1.3×10^{-2}		Duchowicz et al. (2020)	Q	
	4.0×10^{-2}		Wang et al. (2017)	Q	80, 238
	9.3×10^{-2}		Wang et al. (2017)	Q	80, 239
	1.1×10^{-1}		Wang et al. (2017)	Q	80, 240
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.5×10^{-2}		Hilal et al. (2008)	Q	
	1.6×10^{-1}		Modarresi et al. (2007)	Q	67
	9.7×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	2.3×10^{-2}		Katritzky et al. (1998)	Q	
	6.4×10^{-2}		Yaws et al. (1998)	?	



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3-dimethyl-2-butanone	4.3×10^{-2}	5800	Brockbank (2013)	L	1
$C_6H_{12}O$	4.5×10^{-2}	5700	Plyasunov and Shock (2001)	L	
(<i>tert</i> -butyl methyl ketone)	4.3×10^{-2}	5700	Hovorka et al. (2019)	M	
[75-97-8]	4.5×10^{-2}		Duchowicz et al. (2020)	V	186
PJGSXYOJGTZAV-UHFFFAOYSA-N	4.5×10^{-2}		HSDB (2015)	V	
	7.6×10^{-2}	6000	Bagno et al. (1991)	T	473
		6000	Della Gatta et al. (1981)	T	
	5.5×10^{-3}		Duchowicz et al. (2020)	Q	
	2.8×10^{-2}		Wang et al. (2017)	Q	80, 238
	7.1×10^{-2}		Wang et al. (2017)	Q	80, 239
	1.8×10^{-1}		Wang et al. (2017)	Q	80, 240
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.7×10^{-2}		Hilal et al. (2008)	Q	
	2.8×10^{-1}		Modarresi et al. (2007)	Q	67
		5700	Kühne et al. (2005)	Q	
	7.9×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	4.5×10^{-2}		English and Carroll (2001)	Q	230, 231
	2.7×10^{-2}		Katritzky et al. (1998)	Q	
	7.9×10^{-2}		Nirmalakhandan et al. (1997)	Q	
		5400	Kühne et al. (2005)	?	
	6.4×10^{-2}		Yaws et al. (1998)	?	
cyclohexanone	1.5	6400	Brockbank (2013)	L	1
$C_6H_{10}O$	8.6×10^{-1}	5100	Hovorka et al. (2002)	M	11
[108-94-1]	8.2×10^{-1}		Hawthorne et al. (1985)	M	
JHIVVAPYMSGYDF-UHFFFAOYSA-N	1.1		HSDB (2015)	V	
	3.8×10^{-1}		Mackay et al. (2006c)	V	
	3.8×10^{-1}		Mackay et al. (1995)	V	
	4.4×10^{-1}		Meylan and Howard (1991)	V	
	2.2		Yaws (2003)	X	258
	2.6		Dupeux et al. (2022)	Q	259
	1.0		Keshavarz et al. (2022)	Q	
	2.5×10^{-1}		Duchowicz et al. (2020)	Q	184
	1.0×10^{-1}		Wang et al. (2017)	Q	80, 238
	2.0		Wang et al. (2017)	Q	80, 239
	5.9		Wang et al. (2017)	Q	80, 240
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.0		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	67
		6200	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	248, 249
	9.0×10^{-1}		English and Carroll (2001)	Q	230, 231
	6.2×10^{-2}		Katritzky et al. (1998)	Q	
	5.6×10^{-1}		Nirmalakhandan et al. (1997)	Q	



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.9×10^{-1}		Meylan and Howard (1991)	Q	
	1.1		Duchowicz et al. (2020)	?	185, 21
		6300	Kühne et al. (2005)	?	
	1.8		Yaws (1999)	?	21
	1.6		Abraham et al. (1990)	?	
2-heptanone $C_7H_{14}O$ [110-43-0] CATSNJVOTSVZJV-UHFFFAOYSA-N	6.8×10^{-2}	6800	Brockbank (2013)	L	1
	7.2×10^{-2}	6800	Plyasunov and Shock (2001)	L	
	5.9×10^{-2}	5300	Falabella et al. (2006)	M	11, 338
	6.8×10^{-2}	5700	Chai et al. (2005)	M	11
	3.9×10^{-2}		van Ruth et al. (2002)	M	14
	4.1×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 361
	2.5×10^{-2}		van Ruth et al. (2001)	M	14
	6.2×10^{-2}		Kim et al. (2000)	M	
	5.8×10^{-2}		Shiu and Mackay (1997)	M	
	3.7×10^{-2}		Sato and Nakajima (1979a)	M	14
	6.8×10^{-2}		Buttery et al. (1969)	M	
	7.5×10^{-2}		Mackay et al. (2006c)	V	
	7.5×10^{-2}		Shiu and Mackay (1997)	V	
	7.5×10^{-2}		Mackay et al. (1995)	V	
	1.8	5600	Djerki and Laub (1988)	V	
	1.7×10^{-1}		Rathbun and Tai (1982)	V	
	7.5×10^{-2}		Yaws (2003)	X	258
	7.4×10^{-2}		Yaws (2003)	X	237
	3.5×10^{-1}	4500	Janini and Quaddora (1986)	X	298
	1.5×10^{-1}		Dupeux et al. (2022)	Q	259
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	184
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	5.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
	6.2×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	67
		6900	Kühne et al. (2005)	Q	
	1.2×10^{-1}		Yaffe et al. (2003)	Q	248, 272
	6.5×10^{-2}		English and Carroll (2001)	Q	230, 274
	2.3×10^{-2}		Katritzky et al. (1998)	Q	
	7.2×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	6.2×10^{-2}		Russell et al. (1992)	Q	279
	6.9×10^{-2}		Suzuki et al. (1992)	Q	232
	5.8×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	6.8×10^{-2}		Mackay et al. (2006c)	?	21
		6900	Kühne et al. (2005)	?	
	7.5×10^{-2}		Yaws (1999)	?	21
	7.5×10^{-2}		Yaws et al. (1998)	?	
	3.9×10^{-2}		Abraham and Weathersby (1994)	?	21
	6.9×10^{-2}		Abraham et al. (1990)	?	



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Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-1}		Mackay and Yeun (1983)	?	
3-heptanone $C_7H_{14}O$ [106-35-4] NGAZZOYFWWSOGK-UHFFFAOYSA-N	7.2×10^{-2}	7000	Brockbank (2013)	L	1
	1.1×10^{-1}		HSDB (2015)	V	
	4.9×10^{-2}		Yaws (2003)	X	258
	5.0×10^{-2}		Yaws (2003)	X	237
	7.3×10^{-2}		Dupeux et al. (2022)	Q	259
	3.1×10^{-2}		Wang et al. (2017)	Q	80, 238
	6.0×10^{-2}		Wang et al. (2017)	Q	80, 239
	1.4×10^{-1}		Wang et al. (2017)	Q	80, 240
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	5.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-1}		Modarresi et al. (2007)	Q	67
	1.2×10^{-1}	6900	Kühne et al. (2005)	Q	
	1.4×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.4×10^{-2}		Katritzky et al. (1998)	Q	
	2.4×10^{-2}	6000	Kühne et al. (2005)	?	
	2.4×10^{-2}		Yaws et al. (1998)	?	
4-heptanone $C_7H_{14}O$ [123-19-3] HCFAJYNVAYBARA-UHFFFAOYSA-N	5.1×10^{-2}	6800	Brockbank (2013)	L	1, 480
	6.1×10^{-2}	7000	Plyasunov and Shock (2001)	L	
	1.8×10^{-1}		Duchowicz et al. (2020)	V	186
	4.1×10^{-2}		HSDB (2015)	V	
	5.6×10^{-2}		Cabani et al. (1981)	V	
	3.3×10^{-2}		Yaws (2003)	X	258
	3.3×10^{-2}		Yaws (2003)	X	237
	3.8×10^{-2}		Dupeux et al. (2022)	Q	259
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	5.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
	4.8×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	67
	5.8×10^{-2}	6900	Kühne et al. (2005)	Q	
	6.5×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	6.5×10^{-2}		English and Carroll (2001)	Q	230, 231
	1.8×10^{-2}		Katritzky et al. (1998)	Q	
	7.7×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.3×10^{-2}	7800	Kühne et al. (2005)	?	
	2.3×10^{-2}		Yaws et al. (1998)	?	38
	5.6×10^{-2}		Abraham et al. (1990)	?	



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-2-hexanone $C_7H_{14}O$ [2550-21-2] GYWYASONLSQZBB-UHFFFAOYSA-N	2.8×10^{-2}		Yaws (2003)	X	237
	4.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.2×10^{-2}		Yaws et al. (1998)	?	
4-methyl-2-hexanone $C_7H_{14}O$ [105-42-0] XUPXMIAWKPTZLZ-UHFFFAOYSA-N	4.9×10^{-2}		Yaws (2003)	X	237
	3.6×10^{-2}		Wang et al. (2017)	Q	80, 238
	9.3×10^{-2}		Wang et al. (2017)	Q	80, 239
	2.1×10^{-1}		Wang et al. (2017)	Q	80, 240
	4.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.3×10^{-2}		Yaws et al. (1998)	?	
5-methyl-2-hexanone $C_7H_{14}O$ [110-12-3] FFWSICBKRCICMR-UHFFFAOYSA-N	6.4×10^{-2}	6800	Brockbank (2013)	L	1
	6.2×10^{-2}		Duchowicz et al. (2020)	V	186
	6.2×10^{-2}		HSDB (2015)	V	
	4.1×10^{-2}		Yaws (2003)	X	237
	1.3×10^{-2}		Duchowicz et al. (2020)	Q	
	3.6×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.1×10^{-1}		Wang et al. (2017)	Q	80, 239
	3.8×10^{-1}		Wang et al. (2017)	Q	80, 240
	4.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
	7.7×10^{-2}		Hilal et al. (2008)	Q	
	1.1×10^{-1}		Modarresi et al. (2007)	Q	67
	7.3×10^{-2}	6900	Kühne et al. (2005)	Q	
	2.2×10^{-2}		Yaffe et al. (2003)	Q	248, 249
2.2×10^{-2}		Katritzky et al. (1998)	Q		
2.7×10^{-2}	7600	Kühne et al. (2005)	?		
2.7×10^{-2}		Yaws et al. (1998)	?		
2-methyl-3-hexanone $C_7H_{14}O$ [7379-12-6] HIGGFWFRAWMSBR-UHFFFAOYSA-N	4.9×10^{-2}		Yaws (2003)	X	237
	3.7×10^{-2}		Gharagheizi et al. (2010)	Q	246
	4.1×10^{-2}		Yaws et al. (1998)	?	
4-methyl-3-hexanone $C_7H_{14}O$ [17042-16-9] ULPMRXXHGUFZA-UHFFFAOYSA-N	3.1×10^{-2}		Yaws (2003)	X	237
	3.7×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.7×10^{-2}		Yaws et al. (1998)	?	
5-methyl-3-hexanone $C_7H_{14}O$ [623-56-3] DXVYLFHTJZWTRF-UHFFFAOYSA-N	3.1×10^{-2}		Yaws (2003)	X	237
	3.9×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.7×10^{-2}		Yaws et al. (1998)	?	
3-ethyl-2-pentanone $C_7H_{14}O$ [6137-03-7] GSNKRSKIWF BWEG-UHFFFAOYSA-N	2.9×10^{-2}		Yaws (2003)	X	237
	3.9×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-2}		Yaws et al. (1998)	?	



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.1×10^{-2}		Hilal et al. (2008)	Q	
	1.0×10^{-1}	7600	Modarresi et al. (2007)	Q	67
	2.7×10^{-2}		Kühne et al. (2005)	Q	
	3.9×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.3×10^{-2}		English and Carroll (2001)	Q	230, 231
	4.4×10^{-2}		Katritzky et al. (1998)	Q	
	4.0×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.7×10^{-2}	8100	Suzuki et al. (1992)	Q	232
	2.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	2.7×10^{-2}		Kühne et al. (2005)	?	
	2.9×10^{-2}		Yaws et al. (1998)	?	
	2.7×10^{-2}		Abraham et al. (1990)	?	
3-nonanone $\text{C}_9\text{H}_{18}\text{O}$ [925-78-0] IYTXKIXETAELAV-UHFFFAOYSA-N	5.1×10^{-2}	6600	Brockbank (2013)	L	1
	2.2×10^{-2}		Wang et al. (2017)	Q	80, 238
	3.2×10^{-2}		Wang et al. (2017)	Q	80, 239
	1.2×10^{-1}		Wang et al. (2017)	Q	80, 240
5-nonanone $\text{C}_9\text{H}_{18}\text{O}$ (dibutyl ketone) [502-56-7] WSGCRAOTEDLMFQ-UHFFFAOYSA-N	4.0×10^{-2}	8000	Brockbank (2013)	L	1
	3.5×10^{-2}		Duchowicz et al. (2020)	V	186
	3.5×10^{-2}		HSDB (2015)	V	
	3.4×10^{-2}		Meylan and Howard (1991)	V	
	3.7×10^{-2}		Cabani et al. (1981)	V	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	2.7×10^{-2}		Hilal et al. (2008)	Q	
	9.0×10^{-2}	7600	Modarresi et al. (2007)	Q	67
	2.7×10^{-2}		Kühne et al. (2005)	Q	
	3.9×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	3.9×10^{-2}		English and Carroll (2001)	Q	230, 231
	4.7×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.6×10^{-2}		Meylan and Howard (1991)	Q	
	3.4×10^{-2}	7900	Kühne et al. (2005)	?	
	3.4×10^{-2}		Yaws et al. (1998)	?	38
	3.5×10^{-2}		Abraham et al. (1990)	?	
2,6-dimethyl-4-heptanone $\text{C}_9\text{H}_{18}\text{O}$ (diisobutyl ketone) [108-83-8] PTTPXKJBFFKCEK-UHFFFAOYSA-N	1.3×10^{-2}	7500	Brockbank (2013)	L	1
	1.3×10^{-2}		Plyasunov and Shock (2001)	L	
	8.4×10^{-2}		Duchowicz et al. (2020)	V	186
	8.2×10^{-2}		HSDB (2015)	V	
	4.9×10^{-3}		Duchowicz et al. (2020)	Q	
	3.1×10^{-2}		Hilal et al. (2008)	Q	
	1.1×10^{-1}	7600	Modarresi et al. (2007)	Q	67
	8.6×10^{-2}		Kühne et al. (2005)	Q	
	1.2×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	8.3×10^{-2}	5500	Kühne et al. (2005)	?	
	8.3×10^{-2}		Yaws (1999)	?	21, 79
	9.2×10^{-2}		Yaws et al. (1998)	?	79



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,4,4-tetramethyl-3-pentanone $\text{C}_9\text{H}_{18}\text{O}$ (di-(<i>tert</i> -butyl) ketone) [815-24-7] UIQGEWJEWJMQSL-UHFFFAOYSA-N	2.3×10^{-2}		Bagno et al. (1991)	T	473
2-decanone $\text{C}_8\text{H}_{17}\text{COCH}_3$ [693-54-9] ZAJNGDIORYACQU-UHFFFAOYSA-N	1.8×10^{-2} 1.5×10^{-2} 1.5×10^{-2} 2.1×10^{-2} 1.7×10^{-2} 9.2×10^{-2} 4.0×10^{-3} 3.4×10^{-2} 8.0×10^{-2} 2.7×10^{-2} 3.1×10^{-2} 1.4×10^{-1} 1.4×10^{-2} 2.1×10^{-2}		van Ruth et al. (2002) van Ruth and Villeneuve (2002) van Ruth et al. (2001) Abraham (1984) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Nirmalakhandan et al. (1997) Yaws et al. (1998) Abraham et al. (1990)	M M M V X Q Q Q Q Q Q Q ? ?	14 14, 361 14 258 259 67 248, 272 230, 260
2-undecanone $\text{C}_9\text{H}_{19}\text{COCH}_3$ [112-12-9] KYWIYKKSMDLRDC-UHFFFAOYSA-N	1.9×10^{-2} 1.6×10^{-2} 1.8×10^{-2} 1.7×10^{-2} 7.6×10^{-2} 1.8×10^{-1} 3.2×10^{-2} 1.5×10^{-2} 4.1×10^{-3} 2.5×10^{-2} 4.9×10^{-1} 2.0×10^{-2} 2.2×10^{-2} 2.7×10^{-2} 6.3×10^{-2} 1.6×10^{-2} 2.3×10^{-2} 1.2×10^{-2} 2.8×10^{-2} 2.4×10^{-2} 1.6×10^{-1} 5.8×10^{-3} 1.5×10^{-2}		Plyasunov and Shock (2001) Buttery et al. (1969) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Li et al. (2014) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Duchowicz et al. (2020) Yaws et al. (1998) Abraham et al. (1990)	L M X X Q	258 237 259 299 241 242, 243 244 245 246 67 248, 249 230, 231 232 185, 21



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
6-undecanone $C_{11}H_{22}O$ [927-49-1] ZPQAKYPOZRKXFA-UHFFFAOYSA-N	1.5×10^{-2} 6.9×10^{-2}		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	67
2-dodecanone $C_{12}H_{24}O$ [6175-49-1] LSKONYRONEBKA-UHFFFAOYSA-N	4.6×10^{-3} 2.1×10^{-3}		Gharagheizi et al. (2012) Yaws et al. (1998)	Q ?	
2,6,8-trimethyl-4-nonanone $C_{12}H_{24}O$ [123-18-2] GFWVDQCGDBTBS-UHFFFAOYSA-N			Brockbank (2013)	W	484
2-tridecanone $C_{13}H_{26}O$ [593-08-8] CYIFVRUOHKNECG-UHFFFAOYSA-N	4.6×10^{-3} 6.7×10^{-4}		Gharagheizi et al. (2012) Yaws et al. (1998)	Q ?	
2-tetradecanone $C_{14}H_{28}O$ [2345-27-9] POQLVOYRGNFGRM-UHFFFAOYSA-N	4.7×10^{-3} 2.1×10^{-4}		Gharagheizi et al. (2012) Yaws et al. (1998)	Q ?	
2-pentadecanone $C_{15}H_{30}O$ [2345-28-0] CJPNOLIZCWDHJK-UHFFFAOYSA-N	5.4×10^{-5}		Yaws et al. (1998)	?	
2-hexadecanone $C_{16}H_{32}O$ [18787-63-8] XCXKZBWAKKPCJ-UHFFFAOYSA-N	1.7×10^{-5}		Yaws et al. (1998)	?	
2-heptadecanone $C_{17}H_{34}O$ [2922-51-2] TVTCXPXLRKTHAU-UHFFFAOYSA-N	3.9×10^{-6}		Yaws et al. (1998)	?	
menthone $C_{10}H_{18}O$ [89-80-5] NFLGAXVYCFJBMK-UHFFFAOYSA-N	5.7×10^{-2} 5.0×10^{-2} 6.2×10^{-2} 5.8×10^{-2}		Marin et al. (1999) Marin et al. (1999) HSDB (2015) Marin et al. (1999)	M V Q Q	99
tricyclo[3.3.1.1(3,7)]decanone $C_{10}H_{14}O$ (2-adamantanone) [700-58-3] IYKFYARMMIESOX-UHFFFAOYSA-N	1.4 7.5×10^{-1}	5800	van Roon et al. (2005) Cabani et al. (1981)	V V	



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.2×10^{-1}		Hine and Mookerjee (1975)	V	
	9.5×10^{-1}	6400	Bagno et al. (1991)	T	473
	1.1		Yaws (2003)	X	258
	9.3×10^{-1}		Schüürmann (2000)	C	21
	1.8		Dupeux et al. (2022)	Q	259
	7.1×10^{-2}		Keshavarz et al. (2022)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	Q	184
	2.0		Wang et al. (2017)	Q	80, 238
	2.0		Wang et al. (2017)	Q	80, 239
	4.6		Wang et al. (2017)	Q	80, 240
	9.2×10^{-1}		Li et al. (2014)	Q	241
	1.2		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.1		Hilal et al. (2008)	Q	
	2.9		Modarresi et al. (2007)	Q	67
		6100	Kühne et al. (2005)	Q	
	1.0		Yaffe et al. (2003)	Q	248, 249
	1.1		English and Carroll (2001)	Q	230, 231
	1.9×10^{-1}		Katritzky et al. (1998)	Q	
	5.3×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	9.2×10^{-1}		Suzuki et al. (1992)	Q	232
	9.5×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		6700	Kühne et al. (2005)	?	
	1.1		Yaws (1999)	?	21
	9.2×10^{-1}		Abraham et al. (1990)	?	
1-phenylethanone-d5 $C_6D_5COCH_3$ (acetophenone-d5) [28077-64-7] KWOLFJPFCHCOCG-VIQYUKPQSA-N	2.3	10000	Hiatt (2013)	M	
4-methoxy-4-methyl-2-pentanone $C_7H_{14}O_2$ [107-70-0] KOKPBCHLPVDQTK-UHFFFAOYSA-N	5.1		Duchowicz et al. (2020)	V	186
	5.1		HSDB (2015)	V	
	2.2×10^{-1}		Duchowicz et al. (2020)	Q	
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	2.0		Raventos-Duran et al. (2010)	Q	244
	7.8		Raventos-Duran et al. (2010)	Q	245
	1.8		Hilal et al. (2008)	Q	
	2.4		Modarresi et al. (2007)	Q	67
2'-hydroxyacetophenone $C_8H_8O_2$ [118-93-4] JECYUBVRTQDVAT-UHFFFAOYSA-N	1.0	8400	Ji et al. (2008)	M	



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3'-methoxyacetophenone $C_9H_{10}O_2$ (3-methoxyphenyl methyl ketone) [586-37-8] BAYUSCHCCGXLAY-UHFFFAOYSA-N	1.9×10^1	9400	Ji et al. (2008)	M	
4'-methoxyacetophenone $C_9H_{10}O_2$ (4-methoxyphenyl methyl ketone) [100-06-1] NTPLXRHDUXRPNE-UHFFFAOYSA-N	6.8×10^{-1} 6.9 1.4 1.3		Bagno et al. (1991) Hilal et al. (2008) English and Carroll (2001) Nirmalakhandan et al. (1997)	T Q Q Q	473 230, 231
2-methyl-5-(1-methylethenyl)-2-cyclohexen-1-one $C_{10}H_{14}O$ (carvone) [6485-40-1] ULDHMXUKGWMISQ-SECBINFHSA-N	4.9×10^{-1} 5.5×10^{-1} 8.0×10^{-1}		Amoore and Buttery (1978) Amoore and Buttery (1978) Hilal et al. (2008)	M V Q	
benzophenone $C_{13}H_{10}O$ (diphenyl ketone) [119-61-9] RWCCWEUUXYIKHB-UHFFFAOYSA-N	1.7×10^1 6.1 1.7 9.6 5.2 5.1 2.9 3.6×10^1 3.4×10^1 1.7	9400	Mackay et al. (2006c) Bagno et al. (1991) Yaws (2003) Dupeux et al. (2022) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Yaws (1999)	V T X Q Q Q Q Q Q ?	473 258 259 99 287, 288 287, 289 287, 290 287, 291 21
2,4-dihydroxybenzophenone $C_{13}H_{10}O_3$ [131-56-6] ZXDDPOHVAMWLBH-UHFFFAOYSA-N	4.6×10^5		Abraham et al. (2019)	Q	
3,5,5-trimethyl-2-cyclohexen-1-one $C_9H_{14}O$ (isophorone) [78-59-1] HJOVHMDZYOCNQW-UHFFFAOYSA-N	1.5 1.5 1.7 1.7 1.7 1.7 1.8 1.7×10^{-2} 2.0×10^{-1} 9.9×10^{-1} 1.6×10^{-1} 6.9×10^{-1} 1.3		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Hwang et al. (1992) Suntio et al. (1988) Goldstein (1982) Suntio et al. (1988) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005)	V V V V V X C Q Q Q Q Q Q Q	186 12 298 12 242, 243 244 245 67
		7300			



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5 1.2×10^{-1}		Yaffe et al. (2003) Katritzky et al. (1998)	Q Q	248, 249
		7400	Kühne et al. (2005)	?	
	1.5		Yaws (1999)	?	21
bicyclo[2.2.1]heptan-2-one $C_7H_{10}O$ (norcamphor; 2-norbornanone) [497-38-1] KPMKEVXVHNIEY-UHFFFAOYSA-N	4.3×10^{-1}	5100	van Roon et al. (2005)	V	
4-methyl-1-(1-methylethyl)- bicyclo[3.1.0]hexan-3-one $C_{10}H_{16}O$ (thujone) [1125-12-8] USMNOWBWPHYOEA-UHFFFAOYSA-N	1.0×10^{-1}	4700	van Roon et al. (2005)	V	
isopropyl phenyl ketone $C_{10}H_{12}O$ [611-70-1] BSMGLVDZMBWQB-UHFFFAOYSA-N	5.7×10^{-1} 3.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010)	Q Q	287, 288 287, 289
	1.7		Zhang et al. (2010)	Q	287, 290
	8.2×10^{-1}		Zhang et al. (2010)	Q	287, 291
carvone $C_{10}H_{14}O$ [99-49-0] ULDHMXUKGWMISQ-UHFFFAOYSA-N	1.3×10^{-1}		HSDB (2015)	Q	99
thujone $C_{10}H_{16}O$ [76231-76-0] USMNOWBWPHYOEA-VWHDNNRLSA-N	6.2×10^{-1}		HSDB (2015)	Q	99
<i>cis</i> -jasmone $C_{11}H_{16}O$ [488-10-8] XMLSXPIVAXONDL-PLNGDYQASA-N	5.2		Dupeux et al. (2022)	Q	259
α -damascone $C_{13}H_{20}O$ [24720-09-0] CRIGTVCBMUKRSL-FNORWQNLASA-N	2.1×10^1		Abney (2021)	Q	399
(<i>E</i>)- β -damascenone $C_{13}H_{18}O$ [23726-93-4] POIARNZEYGURDG-FNORWQNLASA-N	3.2×10^{-1}	4600	Wieland et al. (2015)	M	485



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
9H-fluoren-9-one $C_{13}H_8O$ [486-25-9] YLQWCDQJODRMT-UHFFFAOYSA-N	6.4 1.5×10^1 2.3×10^1		Abraham et al. (2019) HSDB (2015) Parnis et al. (2015)	Q Q Q	 99 369
anthrone $C_{14}H_{10}O$ [90-44-8] RJGDLRDCYRQOQ-UHFFFAOYSA-N	1.2×10^1		HSDB (2015)	Q	99
1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one $C_{14}H_{22}O$ [33704-61-9] MIZGSAALSARKU-UHFFFAOYSA-N	7.0×10^{-2} 6.7×10^{-3} 2.0×10^1 4.8×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
benzoin $C_{14}H_{12}O_2$ [119-53-9] ISAOCJYIOMQJEB-UHFFFAOYSA-N	2.2×10^5		Abraham et al. (2019)	Q	
methyl-alpha-ionone $C_{14}H_{22}O$ [93302-56-8] VPKMGDRERYMTJX-XEHSLEBBSA-N	1.2		Dupeux et al. (2022)	Q	259
iso-e super $C_{16}H_{26}O$ [54464-57-2] FVUGZKDGWKGCFE-UHFFFAOYSA-N	5.5×10^{-1}		Dupeux et al. (2022)	Q	259
2,4,6-trimethylbenzophenone $C_{16}H_{16}O$ [954-16-5] HPAFOABSQZMTHE-UHFFFAOYSA-N	3.8 3.8 1.5×10^1 6.0		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one $C_{16}H_{26}O$ [68155-66-8] NOMWSTMYQKABST-UHFFFAOYSA-N	2.5×10^{-2} 3.0×10^{-1} 1.1×10^1 4.0×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
civetone $C_{17}H_{30}O$ [542-46-1] ZKVZSBSZTMBQR-UPHRSURJSA-N	3.0		Dupeux et al. (2022)	Q	259



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-(2,3-dihydro-1,1,2,3,3,6-hexamethyl-1H-inden-5-yl)ethanone $C_{17}H_{24}O$ [15323-35-0] VDBHOHJWUDKDRW-UHFFFAOYSA-N	3.1×10^{-1} 2.0 5.2 9.9×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
celestolide $C_{17}H_{24}O$ [13171-00-1] IKTHMQYJOWTSJO-UHFFFAOYSA-N	3.1×10^{-1} 2.4 3.1 8.8×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
7H-benz[de]anthracen-7-one $C_{17}H_{10}O$ (benzanthrone) [82-05-3] HUKPVYBUJRAUAG-UHFFFAOYSA-N	1.5×10^2 8.0×10^2		HSDB (2015) Parnis et al. (2015)	Q Q	99 369
11H-benzo[a]fluoren-11-one $C_{17}H_{10}O$ [479-79-8] RNICURKVFSAHLQ-UHFFFAOYSA-N	7.2×10^1		Parnis et al. (2015)	Q	369
11H-benzo[b]fluoren-11-one $C_{17}H_{10}O$ [3074-03-1] MLMNDNOSVOKYMT-UHFFFAOYSA-N	5.4×10^4		Parnis et al. (2015)	Q	369
benz[a]anthracene-7,12-dione $C_{18}H_{10}O_2$ [2498-66-0] LHMRXAIRPKSGDE-UHFFFAOYSA-N	4.2×10^2		Parnis et al. (2015)	Q	369
1-[2,3-dihydro-1,1,2,6-tetramethyl-3-(1-methylethyl)-1H-inden-5-yl]ethanone $C_{18}H_{26}O$ [68140-48-7] IMRYETFJNLKUH-K-UHFFFAOYSA-N	2.3×10^{-1} 3.2 4.4 1.3×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
tonalide $C_{18}H_{26}O$ [21145-77-7] DNRJTBAOUJJKDY-UHFFFAOYSA-N	7.0×10^{-2} 2.3×10^{-1} 2.4 7.9 7.9×10^{-2}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	 287, 288 287, 289 287, 290 287, 291



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-butanedione	7.3×10^{-1}	5700	Burkholder et al. (2019)	L	
CH ₃ COCOCH ₃	7.3×10^{-1}	5700	Burkholder et al. (2015)	L	
(diacetyl; dimethylglyoxal)	7.3×10^{-1}	5700	Sander et al. (2011)	L	
[431-03-8]	1.4×10^{-1}	4900	Wu et al. (2022b)	M	
QSJXEFYDPANLFS-UHFFFAOYSA-N	4.2×10^{-1}	7200	Wieland et al. (2015)	M	486
	5.6×10^{-1}	6700	Strekowski and George (2005)	M	
	5.6×10^{-1}		Straver and de Loos (2005)	M	
	2.1×10^{-1}		van Ruth et al. (2002)	M	14
	2.0×10^{-1}		van Ruth and Villeneuve (2002)	M	14, 361
	2.0×10^{-1}		van Ruth et al. (2001)	M	14
	1.0		Marin et al. (1999)	M	
	3.7×10^{-1}		Roberts and Pollien (1997)	M	
	9.1×10^{-1}		Landy et al. (1995)	M	
	7.3×10^{-1}	5700	Betterton (1991)	M	
	5.7×10^{-1}		Snider and Dawson (1985)	M	
	6.1×10^{-1}		Marin et al. (1999)	V	
	1.9		Gaffney and Senum (1984)	X	446
	1.9		Gaffney and Senum (1984)	X	389
	1.6×10^{-1}		Keshavarz et al. (2022)	Q	
	2.2		Duchowicz et al. (2020)	Q	299
	3.6×10^1		Wang et al. (2017)	Q	80, 238
	9.1		Wang et al. (2017)	Q	80, 239
	1.9×10^{-1}		Wang et al. (2017)	Q	80, 240
	2.0×10^1		Raventos-Duran et al. (2010)	Q	271, 243
	1.2×10^1		Raventos-Duran et al. (2010)	Q	244
	4.9×10^1		Raventos-Duran et al. (2010)	Q	245
	3.8		Hilal et al. (2008)	Q	
	1.4×10^1		Modarresi et al. (2007)	Q	67
		6500	Kühne et al. (2005)	Q	
	7.1×10^{-1}		Marin et al. (1999)	Q	
	7.4×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		6000	Kühne et al. (2005)	?	
2,3-pentanedione	1.3×10^{-1}	6200	Wu et al. (2022b)	M	
C ₅ H ₈ O ₂	3.2×10^1		Wang et al. (2017)	Q	80, 238
[600-14-6]	8.7		Wang et al. (2017)	Q	80, 239
TZMFJUDUGYTVRY-UHFFFAOYSA-N	1.4×10^{-1}		Wang et al. (2017)	Q	80, 240
2,4-pentanedione	8.5×10^{-1}	3800	Brockbank (2013)	L	1
C ₅ H ₈ O ₂	1.5		Nozière and Riemer (2003)	M	79
(acetylacetone)	9.9×10^{-1}	4400	Hovorka et al. (2002)	M	11
[123-54-6]	1.7		Hellmann (1987)	M	87
YRKCREAYFQTBPV-UHFFFAOYSA-N	4.3		HSDB (2015)	V	
	3.0		Yaws (2003)	X	237, 12
	3.2×10^1		Wang et al. (2017)	Q	80, 238
	4.5×10^1		Wang et al. (2017)	Q	80, 239
	2.5×10^1		Wang et al. (2017)	Q	80, 240
	3.9×10^1		Raventos-Duran et al. (2010)	Q	242, 243



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^1		Raventos-Duran et al. (2010)	Q	244
	2.0×10^2		Raventos-Duran et al. (2010)	Q	245
	3.2		Gharagheizi et al. (2010)	Q	246
	1.7×10^1		Hilal et al. (2008)	Q	
	1.1×10^1		Modarresi et al. (2007)	Q	67
	1.1×10^1	7300	Kühne et al. (2005)	Q	
	1.1×10^1		Yao et al. (2002)	Q	229
		4400	Kühne et al. (2005)	?	
	2.2		Yaws (1999)	?	21, 12
1,2-naphthalenedione $C_{10}H_6O_2$ [524-42-5] KETQAJRQOHHATG-UHFFFAOYSA-N	2.3×10^3		HSDB (2015)	Q	99
1,4-naphthalenedione $C_{10}H_6O_2$ (1,4-naphthoquinone) [130-15-4] FRASJONUBLZVQX-UHFFFAOYSA-N	5.0×10^3 1.6×10^2		HSDB (2015) Parnis et al. (2015)	Q Q	99 369
menadione $C_{11}H_8O_2$ [58-27-5] MJVAVZPDRWSRRC-UHFFFAOYSA-N	3.2×10^3		HSDB (2015)	Q	99
2,6-di- <i>tert</i> -butyl- <i>p</i> -benzoquinone $C_{14}H_{20}O_2$ [719-22-2] RDQSIADLBQFVMY-UHFFFAOYSA-N	6.2×10^2		HSDB (2015)	Q	99
9,10-phenanthrenedione $C_{14}H_8O_2$ [84-11-7] YYVYAPXYZVYDHN-UHFFFAOYSA-N	3.7×10^3		HSDB (2015)	Q	447
9,10-anthracenedione $C_{14}H_8O_2$ [84-65-1] RZVHIXYEVGDQDX-UHFFFAOYSA-N	4.2×10^2 4.2×10^2 1.1×10^{-1} 4.9×10^2 1.6×10^2 3.1×10^3 5.6×10^2 1.7×10^2 2.5×10^4 1.1×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Parnis et al. (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Gharagheizi et al. (2010)	V V X Q Q Q Q Q Q Q	186 237 369 287, 288 287, 289 287, 290 287, 291 246



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-hydroxy-9,10-anthracenedione $C_{14}H_8O_3$ [605-32-3] GCDBEYOJJCZLKM-UHFFFAOYSA-N	5.4×10^5 2.8×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
1,4-dihydroxy-9,10-anthracenedione $C_{14}H_8O_4$ [81-64-1] GUEIZVNYDFNHJU-UHFFFAOYSA-N	1.2×10^2 1.4×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
benzil $C_{14}H_{10}O_2$ [134-81-6] WURBFLDFSFBTLW-UHFFFAOYSA-N	3.0×10^1		Abraham et al. (2019)	Q	
dibenzoylmethane $C_{15}H_{12}O_2$ [120-46-7] NZZIMKJIVMHWC-UHFFFAOYSA-N	7.5×10^3 8.0×10^2 6.9×10^4 1.3×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-methyl-9,10-anthracenedione $C_{15}H_{10}O_2$ [84-54-8] NJWQARXZDRHCD-UHFFFAOYSA-N	2.4×10^2		Parnis et al. (2015)	Q	369
2-ethyl-9,10-anthracenedione $C_{16}H_{12}O_2$ [84-51-5] SJEBAWHUJDUKQK-UHFFFAOYSA-N	2.6×10^1 2.1×10^3 4.2×10^2 1.6×10^2 1.1×10^4		Abraham et al. (2019) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	287, 288 287, 289 287, 290 287, 291
diphenadione $C_{23}H_{16}O_3$ [82-66-6] JYGLAHSASAEAL-UHFFFAOYSA-N	6.4×10^4 2.9×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
MCM:CH3COCO3H $C_3H_4O_4$ BXASKOSTAOGNPV-UHFFFAOYSA-N	6.6×10^4 4.7×10^2 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HYPERACET $C_3H_6O_3$ LSIGHSKIPNHVEN-UHFFFAOYSA-N	5.0×10^3 2.1×10^2 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BIACETOOH $C_4H_6O_4$ JYWVDPVJSGSFMT-UHFFFAOYSA-N	2.6×10^6 1.2×10^4 5.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2C3CO3H $C_4H_6O_4$ SJOPHMGAZWPERQ-UHFFFAOYSA-N	5.1×10^4 6.2×10^3 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MEKAOOH $C_4H_8O_3$ VEPDQRPKXSSVPR-UHFFFAOYSA-N	4.0×10^3 6.3×10^3 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MEKBOOH $C_4H_8O_3$ ISENHODUDKGYVAU-UHFFFAOYSA-N	4.7×10^3 7.4×10^1 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MEKCOOH $C_4H_8O_3$ PSPWSCBXMKHAFW-UHFFFAOYSA-N	4.0×10^3 1.0×10^2 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MVKOOH $C_4H_6O_3$ PRFKYXWFQJOCGY-UHFFFAOYSA-N	1.1×10^4 2.6×10^2 9.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C41CO3H $C_5H_8O_4$ FAYQBJFLGPEOW-UHFFFAOYSA-N	4.8×10^4 2.0×10^3 3.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CO14OOH $C_5H_6O_4$ FKGAAIITVQJZMS-UHFFFAOYSA-N	2.0×10^5 7.8×10^4 4.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CO234 $C_5H_6O_3$ MVDYEFQVZNBPPH-UHFFFAOYSA-N	2.1×10^4 2.2×10^3 2.5×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CO234OOH $C_5H_6O_5$ XNGUZQHZGCMOHY-UHFFFAOYSA-N	1.6×10^9 3.0×10^6 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CO23OOH $C_5H_8O_4$ BRUGMCFWMGXRAP-UHFFFAOYSA-N	2.4×10^6 5.3×10^3 3.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO23C4CO3H $C_5H_6O_5$ BRGQKBIYWSYIOL-UHFFFAOYSA-N	3.2×10^7 4.5×10^5 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO23C54OOH $C_5H_8O_4$ QASRSSCEZIIDD-UHFFFAOYSA-N	2.5×10^6 4.0×10^3 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO24C53OOH $C_5H_8O_4$ AULGAHCEUJLTF-UHFFFAOYSA-N	2.5×10^6 2.1×10^4 8.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO24C4CO3H $C_5H_8O_4$ COVHHGSUFohlBW-UHFFFAOYSA-N	1.9×10^4 4.8×10^4 1.3×10^4 7.1×10^1	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO3C4CO3H $C_5H_8O_4$ HMOQHHYQXPCOJD-UHFFFAOYSA-N	4.8×10^4 2.5×10^3 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DIEKAOOH $C_5H_{10}O_3$ GVIFMISHBUBLQF-UHFFFAOYSA-N	3.7×10^3 3.6×10^1 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DIEKBOOH $C_5H_{10}O_3$ PNIUWVGTVWVIRO-UHFFFAOYSA-N	3.2×10^3 3.4×10^3 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIPKAOOH $C_5H_{10}O_3$ UWVYZAHMDOAIIN-UHFFFAOYSA-N	2.6×10^3 1.6×10^1 9.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIPKBOOH $C_5H_{10}O_3$ OWEKNVKRJSTQCB-UHFFFAOYSA-N	3.7×10^3 3.2×10^3 6.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPRKAOOH $C_5H_{10}O_3$ RFXMBEJILJUHJO-UHFFFAOYSA-N	3.7×10^3 4.0×10^1 8.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPRKBOOH $C_5H_{10}O_3$ BOKMIGXVNYNOOE-UHFFFAOYSA-N	3.7×10^3 2.3×10^3 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PE2ONE1OOH $C_5H_{10}O_3$ NFPIZNOAHNBIPJ-UHFFFAOYSA-N	3.2×10^3 5.8×10^1 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23C54CO3H $C_6H_8O_5$ FOQTZZGGVXWRDJ-UHFFFAOYSA-N	3.0×10^7 1.7×10^5 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3COCCO3H $C_6H_{10}O_4$ NQEGAXBMSWAEJ-UHFFFAOYSA-N	3.7×10^4 1.4×10^3 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4DBDIKET $C_6H_8O_2$ OTSKZNVDZOOHRX-UHFFFAOYSA-N	1.0×10^2 1.8×10^3 2.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C51CO3H $C_6H_{10}O_4$ JNOOBNCRAVKFDO-UHFFFAOYSA-N	4.5×10^4 3.7×10^3 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CODBCO3H $C_6H_8O_4$ DSQMAYIDJPXZOY-UHFFFAOYSA-N	1.3×10^5 5.6×10^4 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C5DBCOCO3H $C_6H_8O_4$ NVTHKHSWEVWMOZ-UHFFFAOYSA-N	1.3×10^5 5.4×10^4 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C611OOH $C_6H_{10}O_4$ YTLUYDMGHZGK-UHFFFAOYSA-N	1.4×10^6 3.1×10^3 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C619OOH $C_6H_8O_4$ CLPCTPYJHZPKK-UHFFFAOYSA-N	6.0×10^6 3.0×10^6 1.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C627OOH $C_6H_{10}O_4$ BKNNHKNGGIDPKB-UHFFFAOYSA-N	1.9×10^6 2.3×10^5 5.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C62OOH $C_6H_8O_5$ NRJLAAIGKSDANL-UHFFFAOYSA-N	1.5×10^9 1.4×10^6 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO134OOH $C_6H_8O_5$ KXHHBNOARBHHNQ-UHFFFAOYSA-N	2.5×10^7 2.3×10^5 3.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO34 $C_6H_{10}O_2$ KVFQMAZOBTXCAZ-UHFFFAOYSA-N	2.6×10^1 5.4 1.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO34OOH $C_6H_{10}O_4$ GOPKJUXJYMJAQC-UHFFFAOYSA-N	2.3×10^6 2.0×10^3 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CYTONOOH $C_6H_6O_5$ JAWAIWJCDXBIXQU-UHFFFAOYSA-N	4.8×10^9 2.1×10^9 2.6×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6DCRBBOOH $C_6H_8O_4$ JRENYXREJINFO-UHFFFAOYSA-N	1.5×10^5 2.9×10^4 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO234C6 $C_6H_8O_3$ FYLKBSXPBXZJV-UHFFFAOYSA-N	1.7×10^4 1.1×10^3 2.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO234C6OOH $C_6H_8O_5$ RXZSKHWIVPRCNE-UHFFFAOYSA-N	1.5×10^9 1.1×10^6 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO235C6 $C_6H_8O_3$ POASQEFMMPWSLD-UHFFFAOYSA-N	1.7×10^4 3.1×10^3 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO235C6OOH $C_6H_8O_5$ OFEOQWJKJVUBKA-UHFFFAOYSA-N	1.3×10^9 2.9×10^6 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO23C65OOH $C_6H_{10}O_4$ QKJDOFMXAZMTSN-UHFFFAOYSA-N	2.3×10^6 9.6×10^4 3.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO23C6 $C_6H_{10}O_2$ MWVFCEVNXHTDNF-UHFFFAOYSA-N	2.6×10^1 6.0 7.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO24C63OOH $C_6H_{10}O_4$ BCTNDVKHSPOTQH-UHFFFAOYSA-N	2.3×10^6 9.1×10^3 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO24C6 $C_6H_{10}O_2$ NDOGLIPWGRQCO-UHFFFAOYSA-N	2.6×10^1 3.5×10^1 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO24C6OOH $C_6H_{10}O_4$ SLWLMHWJPVVUSV-UHFFFAOYSA-N	2.3×10^6 1.3×10^4 5.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO24M3C5 $C_6H_{10}O_2$ GSOHKPVFCOWKPU-UHFFFAOYSA-N	3.0×10^1 2.1×10^1 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO25C6 $C_6H_{10}O_2$ OJVAMHKKJUGICOG-UHFFFAOYSA-N	2.6×10^1 4.9×10^2 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO25C6OOH $C_6H_{10}O_4$ JXALTZPWVLRWQW-UHFFFAOYSA-N	2.3×10^6 6.6×10^4 6.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2C54CO3H $C_6H_{10}O_4$ CNZIZHTUCKWXXF-UHFFFAOYSA-N	4.5×10^4 3.8×10^3 4.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2M33CO3H $C_6H_{10}O_4$ NINAOMADVJMMOS-UHFFFAOYSA-N	2.6×10^4 7.1×10^2 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO3C54CO3H $C_6H_{10}O_4$ VXADHVSNPNTBLA-UHFFFAOYSA-N	4.5×10^4 8.7×10^2 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO3C5CO3H $C_6H_{10}O_4$ NEAYDZAAQZUWAX-UHFFFAOYSA-N	3.7×10^4 5.3×10^3 3.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CY6COCO00H $C_6H_8O_4$ PCNGBCRTMCKUHD-UHFFFAOYSA-N	6.0×10^6 1.1×10^8 4.5×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CY6DION00H $C_6H_8O_4$ WZMMYHNHRXLTA-UHFFFAOYSA-N	6.0×10^6 2.2×10^7 5.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CYC613DION $C_6H_8O_2$ HJSLFCCWAKVHIW-UHFFFAOYSA-N	8.0×10^1 2.5×10^3 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CYC6DIONE $C_6H_8O_2$ OILAIQUEIWIYQPH-UHFFFAOYSA-N	8.0×10^1 6.5×10^2 8.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CYHXONAOOH $C_6H_{10}O_3$ YLRKXGGQIKRPE-UHFFFAOYSA-N	9.1×10^3 4.8×10^4 5.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ECO3CO3H $C_6H_6O_6$ LOIDTPBEOYNRI-UHFFFAOYSA-N	2.0×10^{10} 2.6×10^7 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EIPKAOOH $C_6H_{12}O_3$ UUAGRKYHKYSONO-UHFFFAOYSA-N	2.0×10^3 8.9 4.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EIPKBOOH $C_6H_{12}O_3$ GSVDUVPILFIVQC-UHFFFAOYSA-N	2.9×10^3 1.7×10^3 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX2ONAOOH $C_6H_{12}O_3$ BPODHSIMBCVMGL-UHFFFAOYSA-N	2.9×10^3 1.4×10^3 2.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX2ONBOOH $C_6H_{12}O_3$ XXENGSKOCXRCDY-UHFFFAOYSA-N	2.9×10^3 3.5×10^3 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX2ONCOOH $C_6H_{12}O_3$ UIIPZQPVNWMUDI-UHFFFAOYSA-N	2.9×10^3 2.8×10^1 4.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX3ONAOOH $C_6H_{12}O_3$ ZKBVMKAKXKAOJG-UHFFFAOYSA-N	2.9×10^3 1.3×10^3 6.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX3ONBOOH $C_6H_{12}O_3$ CFZVDJFTDOASSJ-UHFFFAOYSA-N	2.9×10^3 2.2×10^1 9.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HEX3ONCOOH $C_6H_{12}O_3$ RCWXBCITQMXQRJ-UHFFFAOYSA-N	2.9×10^3 2.3×10^1 5.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX3ONDOOH $C_6H_{12}O_3$ GTTLVNDVFPDHBU-UHFFFAOYSA-N	2.5×10^3 2.2×10^3 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2BKAOOH $C_6H_{12}O_3$ UYZBTKCJJDJNOE-UHFFFAOYSA-N	3.5×10^3 1.6×10^3 8.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2BKBOOH $C_6H_{12}O_3$ HXTZBJMRLHBDT-UHFFFAOYSA-N	2.0×10^3 1.1×10^1 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBK3CO $C_6H_{10}O_2$ JENYBWHRLYZSSZ-UHFFFAOYSA-N	3.0×10^1 5.1 5.9×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBK3COOOH $C_6H_{10}O_4$ REESTLWXXTVHDK-UHFFFAOYSA-N	1.4×10^6 8.9×10^2 6.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBKAOOH $C_6H_{12}O_3$ TVLYPTZVJFAYSU-UHFFFAOYSA-N	2.0×10^3 8.5×10^2 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBKBOOH $C_6H_{12}O_3$ NTAUGUQNNYBRPR-UHFFFAOYSA-N	3.5×10^3 3.2×10^1 3.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBKOOH $C_6H_{12}O_3$ FSDVGLADHCPPED-UHFFFAOYSA-N	2.0×10^3 1.6×10^3 5.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C235C6CO3H $C_7H_8O_6$ MCULIRAVDBAPRO-UHFFFAOYSA-N	1.6×10^{10} 4.4×10^7 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C710OOH $C_7H_{14}O_3$ WMYMHSKADBIKY-UHFFFAOYSA-N	1.7×10^3 5.1×10^2 6.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C713OOH $C_7H_{12}O_4$ BVAIBJLRLWSCNT-UHFFFAOYSA-N	1.2×10^6 1.2×10^4 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C714OOH $C_7H_{12}O_4$ FQLJODGQMVISEK-UHFFFAOYSA-N	2.0×10^6 3.0×10^4 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C715OOH <chem>C7H10O5</chem> IFAJGMRVFBYSYLP-UHFFFAOYSA-N	8.3×10^8 2.5×10^5 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7236CO <chem>C7H8O3</chem> ZXGNLLPQXKXPQ-UHFFFAOYSA-N	6.3×10^4 6.8×10^4 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C726CO5OOH <chem>C7H10O4</chem> DRGOPDAWFSWANX-UHFFFAOYSA-N	7.3×10^6 1.0×10^5 6.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C727CO <chem>C7H10O3</chem> XDJAUXXCWBLXGT-UHFFFAOYSA-N	1.6×10^4 5.6×10^3 6.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C727OOH <chem>C7H12O4</chem> IMCLYNFQESJQRO-UHFFFAOYSA-N	2.0×10^5 1.8×10^6 4.3×10^4 9.8×10^2	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C73OOH <chem>C7H10O5</chem> QFSLTANEYKLBVH-UHFFFAOYSA-N	1.2×10^9 1.1×10^6 7.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C74OOH <chem>C7H10O5</chem> ZLQFKUKGFNRBMM-UHFFFAOYSA-N	1.2×10^9 1.4×10^6 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C75OOH <chem>C7H14O3</chem> YNKFHYFADYHYPZ-UHFFFAOYSA-N	2.7×10^3 8.9×10^2 1.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7ADCCO3H <chem>C7H10O4</chem> KFHCVBUEDOUEG-UHFFFAOYSA-N	8.5×10^4 6.5×10^4 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7BDICARB <chem>C7H10O2</chem> SGWFXGZCQBUNH-UHFFFAOYSA-N	6.9×10^1 1.4×10^3 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7DCCO3H <chem>C7H10O4</chem> VBFDFNFUMYAFQG-UHFFFAOYSA-N	1.4×10^5 1.5×10^4 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7DDCCO3H <chem>C7H10O4</chem> ITRURPAVBVUCD-UHFFFAOYSA-N	1.0×10^5 2.2×10^4 5.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7EDICARB <chem>C7H10O2</chem> YTVSAHBJOWKZHT-UHFFFAOYSA-N	9.3×10^1 1.1×10^3 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C821OOH $C_7H_{10}O_5$ VNKKTGYQOPWEKF-UHFFFAOYSA-N	1.2×10^9 2.6×10^6 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO235C7 $C_7H_{10}O_3$ PLNIROICNOROEN-UHFFFAOYSA-N	1.6×10^4 9.6×10^2 9.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO245C7 $C_7H_{10}O_3$ SOSHREJUCDQQIR-UHFFFAOYSA-N	1.6×10^4 9.6×10^2 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO25C6CO3H $C_7H_{10}O_5$ NZAOVWOYFADSGM-UHFFFAOYSA-N	2.3×10^7 4.6×10^6 7.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO25C73OOH $C_7H_{12}O_4$ NWTMJMDPQCUCZE-UHFFFAOYSA-N	1.8×10^6 2.8×10^4 9.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO25C74OOH $C_7H_{12}O_4$ VDRXHYKLZSMLBZ-UHFFFAOYSA-N	1.8×10^6 2.8×10^4 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO25C7 $C_7H_{12}O_2$ HGRGPAAXHOTBAM-UHFFFAOYSA-N	2.0×10^1 2.6×10^2 8.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO3C75OOH $C_7H_{14}O_3$ TVVPPVSOZMPRIM-UHFFFAOYSA-N	2.7×10^3 8.0×10^2 4.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IC7DCCO3H $C_7H_{10}O_4$ JFPQYVJBAXIOAT-UHFFFAOYSA-N	1.4×10^5 1.6×10^4 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M3CO245C6 $C_7H_{10}O_3$ FMABCBYNHKBBEH-UHFFFAOYSA-N	1.6×10^4 6.3×10^2 8.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M3CO25C6 $C_7H_{12}O_2$ NLLILAUVOOREKR-UHFFFAOYSA-N	2.3×10^1 1.8×10^2 8.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5DBECO3H $C_8H_{10}O_5$ QHSWUEYXPZRIAH-UHFFFAOYSA-N	6.0×10^7 1.5×10^6 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5EDBCO3H $C_8H_{10}O_5$ YXJCVNQUVAHMKT-UHFFFAOYSA-N	6.0×10^7 1.6×10^6 6.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C727CO3H $\text{C}_8\text{H}_{12}\text{O}_5$ FJTLPXSUBBYIDW-UHFFFAOYSA-N	2.1×10^7 9.6×10^5 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7CO2M5OOH $\text{C}_8\text{H}_{12}\text{O}_4$ GOMWBXPFZKXIF-UHFFFAOYSA-N	4.0×10^6 1.1×10^4 2.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7M2CO5OOH $\text{C}_8\text{H}_{12}\text{O}_4$ BVDWDBGMQXZSJX-UHFFFAOYSA-N	4.9×10^6 7.6×10^4 4.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7M3CO $\text{C}_8\text{H}_{10}\text{O}_3$ WFGYJTNUNWJHJN-UHFFFAOYSA-N	4.3×10^4 8.1×10^4 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7ODLBCO3H $\text{C}_8\text{H}_{12}\text{O}_4$ NMESNSUDSMNPLZ-UHFFFAOYSA-N	8.1×10^4 1.2×10^4 3.2×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C816CO $\text{C}_8\text{H}_{12}\text{O}_2$ FXXXYZSMIIVJDG-UHFFFAOYSA-N	3.1×10^2 3.8×10^1 3.0×10^2 6.2×10^1	10000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C816OOH $\text{C}_8\text{H}_{14}\text{O}_3$ GWYFGLCLKWVIQ-UHFFFAOYSA-N	4.9×10^3 2.0×10^3 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C817OOH $\text{C}_8\text{H}_{14}\text{O}_4$ WQMXPSRLZCZTO-UHFFFAOYSA-N	1.2×10^6 1.5×10^6 1.5×10^6 1.6×10^4	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C8236CO $\text{C}_8\text{H}_{10}\text{O}_3$ IOHUPZZTKNTURH-UHFFFAOYSA-N	4.9×10^4 6.0×10^4 4.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C826CO3OOH $\text{C}_8\text{H}_{12}\text{O}_4$ JGDMXPACXAYITG-UHFFFAOYSA-N	6.5×10^6 4.4×10^4 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C827OOH $\text{C}_8\text{H}_{14}\text{O}_4$ MYZHYUNBFYQPIX-UHFFFAOYSA-N	9.8×10^5 1.5×10^4 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C828OOH $\text{C}_8\text{H}_{12}\text{O}_5$ IPIPKWBUGMDLTO-UHFFFAOYSA-N	6.8×10^8 3.1×10^5 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C83OOH $\text{C}_8\text{H}_{12}\text{O}_5$ MTDHYROWVQXAOV-UHFFFAOYSA-N	1.1×10^9 3.6×10^5 5.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C84OOH $\text{C}_8\text{H}_{14}\text{O}_4$ HQUQRVBRCTTSE-UHFFFAOYSA-N	1.5×10^6 1.4×10^4 7.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C85OOH $\text{C}_8\text{H}_{14}\text{O}_3$ MGHQHHXZPXRRHQ-UHFFFAOYSA-N	5.5×10^3 5.5×10^3 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C88CO $\text{C}_8\text{H}_{10}\text{O}_3$ KYJUTSWXKQCOOZ-UHFFFAOYSA-N	2.8×10^4 7.4×10^4 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C88OOH $\text{C}_8\text{H}_{12}\text{O}_4$ LSPOEQNSUKNPK-UHFFFAOYSA-N	3.2×10^6 6.9×10^5 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8BCCO $\text{C}_8\text{H}_{12}\text{O}$ BYOKRVKHSHTAOM-UHFFFAOYSA-N	2.0×10^{-1} 9.6×10^{-1} 3.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO346C8 $\text{C}_8\text{H}_{12}\text{O}_3$ YUHNMTZZLXCOZ-UHFFFAOYSA-N	1.3×10^4 1.1×10^3 7.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO36C8 $\text{C}_8\text{H}_{14}\text{O}_2$ CVZGUJMLZZTPKH-UHFFFAOYSA-N	1.8×10^1 1.5×10^2 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO3C85OOH $\text{C}_8\text{H}_{16}\text{O}_3$ RPACFUNVWVDXHA-UHFFFAOYSA-N	2.1×10^3 5.9×10^2 3.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXEQONE $\text{C}_8\text{H}_8\text{O}_2$ SENUUPBBLQWHMF-UHFFFAOYSA-N	2.1 5.3×10^3 1.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYQONE $\text{C}_8\text{H}_8\text{O}_2$ AIACLXROWHONEE-UHFFFAOYSA-N	2.1 5.3×10^3 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PEBQONE $\text{C}_8\text{H}_8\text{O}_2$ IGRSQEOIAAGSGS-UHFFFAOYSA-N	2.7 4.7×10^3 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXEQONE $\text{C}_8\text{H}_8\text{O}_2$ MYKLQMNSSFAPLZ-UHFFFAOYSA-N	2.1 5.3×10^3 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C816CO3H $\text{C}_9\text{H}_{14}\text{O}_4$ IXOBDNIWKDFSA-UHFFFAOYSA-N	5.3×10^4 1.5×10^3 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C817CO3H $\text{C}_9\text{H}_{14}\text{O}_5$ NVOUBBWWYUIRJW-UHFFFAOYSA-N	3.4×10^7 1.7×10^7 1.7×10^6	16000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017)	Q Q Q	437 80, 238 80, 239
MCM:C827CO3H $\text{C}_9\text{H}_{14}\text{O}_5$ DZJUGPICXPPSEN-UHFFFAOYSA-N	2.0×10^4 1.2×10^7 6.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:C828CO3H $\text{C}_9\text{H}_{12}\text{O}_6$ XCCOWFUPSCLDCA-UHFFFAOYSA-N	1.4×10^2 7.8×10^9 2.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:C85CO3H $\text{C}_9\text{H}_{14}\text{O}_4$ DAYKQISVSRMABH-UHFFFAOYSA-N	8.9×10^1 5.8×10^4 3.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:C88CO3H $\text{C}_9\text{H}_{12}\text{O}_5$ KOEDWBONHQRVNE-UHFFFAOYSA-N	1.1×10^2 3.7×10^7 2.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:C8M2CO6OOH $\text{C}_9\text{H}_{14}\text{O}_4$ LMHVWEUXUKAUJEE-UHFFFAOYSA-N	4.8×10^4 3.9×10^6 3.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:C8M3CO $\text{C}_9\text{H}_{12}\text{O}_3$ VNKKGGMTAOGJCS-UHFFFAOYSA-N	1.0×10^4 3.3×10^4 6.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:C917OOH $\text{C}_9\text{H}_{14}\text{O}_4$ USPARXGTYFQA AO-UHFFFAOYSA-N	1.3×10^1 2.9×10^6 1.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:C91OOH $\text{C}_9\text{H}_{18}\text{O}_3$ LTHHCRGMHVQJHW-UHFFFAOYSA-N	1.2×10^6 1.7×10^3 4.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:C923OOH $\text{C}_9\text{H}_{16}\text{O}_3$ ZSCOJLRNNZZYOH-UHFFFAOYSA-N	4.5×10^2 1.1×10^4 4.1×10^3	12000	Wang et al. (2017) Wieser et al. (2023) Wang et al. (2017)	Q Q Q	80, 240 437 80, 238
MCM:C928OOH $\text{C}_9\text{H}_{16}\text{O}_4$ NVMDAOHKHIQTQS-UHFFFAOYSA-N	2.2×10^3 2.9×10^2 8.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 239 80, 240 80, 238
MCM:C94OOH $\text{C}_9\text{H}_{16}\text{O}_4$ ZEMHBLLRPWJGDG-UHFFFAOYSA-N	1.2×10^4 1.4×10^6 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C95OOH $\text{C}_9\text{H}_{14}\text{O}_5$ OKPNQXXXVOPUSS-UHFFFAOYSA-N	2.8×10^2 1.3×10^6 9.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
	5.4		Wang et al. (2017)	Q	80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C96OOH $\text{C}_9\text{H}_{16}\text{O}_3$ UOSOYGOFNRNBVGT-UHFFFAOYSA-N	4.4×10^3 6.9×10^3 4.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C9DC $\text{C}_9\text{H}_{12}\text{O}_2$ MRLMBLCAGJIZHM-UHFFFAOYSA-N	1.2×10^2 2.3×10^3 4.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C9DCCO $\text{C}_9\text{H}_{10}\text{O}_3$ CNGBBXSWKSNDDL-UHFFFAOYSA-N	9.6×10^4 7.6×10^5 2.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C9DCOOH $\text{C}_9\text{H}_{12}\text{O}_4$ LVYPIBNFNZWAIN-UHFFFAOYSA-N	1.1×10^7 8.3×10^7 2.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO356C9 $\text{C}_9\text{H}_{14}\text{O}_3$ UAWDJSGDSYOWDW-UHFFFAOYSA-N	1.0×10^4 1.1×10^3 5.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO36C9 $\text{C}_9\text{H}_{16}\text{O}_2$ NTESQQRXNMSRF-UHFFFAOYSA-N	1.5×10^1 1.0×10^2 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRBQONE $\text{C}_9\text{H}_{10}\text{O}_2$ XLTSBDOZTUSCMX-UHFFFAOYSA-N	2.5 2.4×10^3 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMKET $\text{C}_9\text{H}_{14}\text{O}$ HOBBEYSRFFJETF-UHFFFAOYSA-N	6.4×10^{-1} 2.4×10^{-1} 9.8×10^{-1} 3.2	8000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:METLQONE $\text{C}_9\text{H}_{10}\text{O}_2$ FBVFNJVAQSWLOP-UHFFFAOYSA-N	1.8 3.7×10^3 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINAOOH $\text{C}_9\text{H}_{14}\text{O}_3$ AGOGLNHOAUIZEO-UHFFFAOYSA-N	1.4×10^4 2.9×10^4 8.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINBCO $\text{C}_9\text{H}_{12}\text{O}_2$ AQDJLLQBRRXMBZ-UHFFFAOYSA-N	1.2×10^2 2.2×10^3 4.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINBOOH $\text{C}_9\text{H}_{14}\text{O}_3$ ICIAOEDGJQUKIV-UHFFFAOYSA-N	1.4×10^4 4.0×10^4 9.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINCOOH $\text{C}_9\text{H}_{14}\text{O}_3$ YDBPVAMAGOPNKC-UHFFFAOYSA-N	8.5×10^3 1.3×10^4 7.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NOPINDCO $\text{C}_9\text{H}_{12}\text{O}_2$ QEZVNLZLSDOZRT-UHFFFAOYSA-N	1.2×10^2 5.0×10^2 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINDOOH $\text{C}_9\text{H}_{14}\text{O}_3$ MUTHAEIFCDWSQQ-UHFFFAOYSA-N	1.4×10^4 5.4×10^2 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINONE $\text{C}_9\text{H}_{14}\text{O}$ XZFDKWMYCUKSS-UHFFFAOYSA-N	1.8×10^{-1} 1.0 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLQONE $\text{C}_9\text{H}_{10}\text{O}_2$ CMBANAGVBLPIPT-UHFFFAOYSA-N	1.8 3.7×10^3 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLQONE $\text{C}_9\text{H}_{10}\text{O}_2$ JUIQOKRNPGGIPV-UHFFFAOYSA-N	1.8 3.7×10^3 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PPRBQONE $\text{C}_9\text{H}_{10}\text{O}_2$ NBHAZVWKRHTWRW-UHFFFAOYSA-N	2.2 3.0×10^3 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124QONE $\text{C}_9\text{H}_{10}\text{O}_2$ QIXDHVDPXPBRRD-UHFFFAOYSA-N	1.4 4.1×10^3 7.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1011CO $\text{C}_{10}\text{H}_{16}\text{O}_2$ HCTKOTXYXFZDNL-UHFFFAOYSA-N	3.1×10^1 3.3×10^2 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1011OOH $\text{C}_{10}\text{H}_{18}\text{O}_3$ SNMQVMGNQAVOQP-UHFFFAOYSA-N	3.6×10^3 4.3×10^3 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C101OOH $\text{C}_{10}\text{H}_{20}\text{O}_3$ SFSDJTUNVGIHA-UHFFFAOYSA-N	1.4×10^3 4.4×10^2 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C104OOH $\text{C}_{10}\text{H}_{18}\text{O}_4$ NAKDXHBWPFMZPE-UHFFFAOYSA-N	1.0×10^6 6.9×10^3 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C105OOH $\text{C}_{10}\text{H}_{16}\text{O}_5$ SMUSKFONQIUMCM-UHFFFAOYSA-N	7.1×10^8 1.7×10^5 2.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C923CO3H $\text{C}_{10}\text{H}_{16}\text{O}_4$ JSHGCGTVDATAK-UHFFFAOYSA-N	2.2×10^4 4.7×10^4 1.0×10^3 3.1×10^2	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C928CO3H $C_{10}H_{16}O_5$ LCMHUZKVXFENZ-UHFFFAOYSA-N	9.1×10^6 1.5×10^6 1.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C9M2CO6OOH $C_{10}H_{16}O_4$ ACPAJMUJFSDSAX-UHFFFAOYSA-N	3.6×10^6 1.9×10^4 9.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C9M3CO $C_{10}H_{14}O_3$ DYAPBQRZCUBYWEA-UHFFFAOYSA-N	3.1×10^4 3.5×10^4 9.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO356C10 $C_{10}H_{16}O_3$ OKXFSYMNZFSQOL-UHFFFAOYSA-N	8.7×10^3 9.1×10^2 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO36C10 $C_{10}H_{18}O_2$ WYDYPTGJLWEFAY-UHFFFAOYSA-N	1.2×10^1 8.0×10^1 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DEC3ONE $C_{10}H_{20}O$ XJLDYKIEURAVBW-UHFFFAOYSA-N	1.8×10^{-2} 2.6×10^{-2} 1.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PERPINONIC $C_{10}H_{16}O_4$ VFMYUIAYOIENK-UHFFFAOYSA-N	5.3×10^4 3.0×10^3 5.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1011CO3H $C_{11}H_{18}O_4$ MDKPIQZSHUIYJQ-UHFFFAOYSA-N	4.2×10^4 2.5×10^3 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C111OOH $C_{11}H_{22}O_3$ AMIJEMPORNRGBW-UHFFFAOYSA-N	1.3×10^3 3.6×10^2 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C114OOH $C_{11}H_{20}O_4$ YQNGKLISCMALPY-UHFFFAOYSA-N	8.3×10^5 5.4×10^3 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C115OOH $C_{11}H_{18}O_5$ VPBZYPGTLQIJKG-UHFFFAOYSA-N	6.3×10^8 1.3×10^5 6.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO356C11 $C_{11}H_{18}O_3$ YADKKYWEPSBFCL-UHFFFAOYSA-N	7.3×10^3 7.8×10^2 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO36C11 $C_{11}H_{20}O_2$ KWHQQLQVDJMTG-UHFFFAOYSA-N	1.1×10^1 6.5×10^1 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:UDEEC3ONE $C_{11}H_{22}O$ YNMZZHPSYMOGCI-UHFFFAOYSA-N	1.4×10^{-2} 2.1×10^{-2} 1.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C121OOH $C_{12}H_{24}O_3$ NWJGDRGGQZUDJ-UHFFFAOYSA-N	9.8×10^2 2.8×10^2 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C124OOH $C_{12}H_{22}O_4$ DCPRRPHGFZBUMW-UHFFFAOYSA-N	6.6×10^5 4.8×10^3 9.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C125OOH $C_{12}H_{20}O_5$ FTFXETPWXYMYNK-UHFFFAOYSA-N	4.9×10^8 1.1×10^5 2.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO356C12 $C_{12}H_{20}O_3$ FQYVJQVZHPFSKC-UHFFFAOYSA-N	5.6×10^3 7.3×10^2 3.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO36C12 $C_{12}H_{22}O_2$ RUTQSYKISNASLK-UHFFFAOYSA-N	8.5 5.8×10^1 2.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DDEC3ONE $C_{12}H_{24}O$ PERIHWAPLOBAJM-UHFFFAOYSA-N	1.1×10^{-2} 1.7×10^{-2} 9.6×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C131OOH $C_{13}H_{22}O_4$ HPZPYFVEAXAGHY-UHFFFAOYSA-N	1.5×10^6 2.0×10^6 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCKET $C_{14}H_{22}O$ MBZBBVTYLUNZPJ-UHFFFAOYSA-N	2.3×10^{-1} 2.6 2.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C131CO3H $C_{14}H_{22}O_5$ LLSRBTGTUZRQT-UHFFFAOYSA-N	1.7×10^7 2.1×10^6 8.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C141OOH $C_{14}H_{24}O_3$ HKWHMEKBBPOBSQ-UHFFFAOYSA-N	3.8×10^3 4.9×10^3 7.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C141CO3H $C_{15}H_{24}O_4$ ADRMPTUALHKSOU-UHFFFAOYSA-N	4.6×10^4 1.8×10^3 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C619CO $C_6H_6O_3$ NGHVTTBOPYXCFB-UHFFFAOYSA-N	5.3×10^4 1.1×10^6 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CY6TRION $C_6H_6O_3$ GKSCYYCYSXPQFY-UHFFFAOYSA-N	5.3×10^4 4.6×10^6 1.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PHCOME00H $C_8H_8O_3$ BXVCLOREWFXMNM-UHFFFAOYSA-N	1.6×10^5 1.4×10^3 3.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPHCOME00H $C_9H_{10}O_3$ NJDRUBYBGCJLJU-UHFFFAOYSA-N	9.1×10^4 1.4×10^3 3.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PHCOCOCOOH $C_9H_8O_4$ XMJMKOZGMVOAIC-UHFFFAOYSA-N	9.1×10^7 4.7×10^4 5.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PHCOCOME $C_9H_8O_2$ BVQVLAIMHVDZEL-UHFFFAOYSA-N	1.3×10^3 9.1×10^1 6.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PHCOETO0H $C_9H_{10}O_3$ RYQHVKZCKUBIFL-UHFFFAOYSA-N	1.5×10^5 6.0×10^2 3.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMPHCOME $C_{10}H_{12}O$ BKIHFZLJJUNKMZ-UHFFFAOYSA-N	7.4×10^{-1} 1.5 5.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMPHCOMOOH $C_{10}H_{12}O_3$ SEDWELDPOZYWLL-UHFFFAOYSA-N	5.4×10^4 8.5×10^2 3.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EMPHCOME $C_{11}H_{14}O$ CZNGKVDFOIGBEW-UHFFFAOYSA-N	6.5×10^{-1} 1.2 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EMPHCOMOOH $C_{11}H_{14}O_3$ OJNDCDHAKIGFTB-UHFFFAOYSA-N	5.0×10^4 5.0×10^2 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BIACETOH $C_4H_6O_3$ NXIVQSJQXMAXJR-UHFFFAOYSA-N	5.1×10^3 4.3×10^3 3.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2H3CO3H $C_4H_6O_5$ WNDCKXJVQKFRM-UHFFFAOYSA-N	2.0×10^6 1.7×10^4 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H13CO2CO3H $C_4H_6O_6$ RXVYYLAFXUAZCR-UHFFFAOYSA-N	1.2×10^9 4.0×10^5 1.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:H14CO23C4 <chem>C4H6O4</chem> GJCZUCLKDGABDS-UHFFFAOYSA-N	2.1×10^6 6.5×10^5 1.0×10^6	17000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017)	Q Q Q	437 80, 238 80, 239
MCM:H1C23C4OOH <chem>C4H6O5</chem> FQXHRCVOGVCTSR-UHFFFAOYSA-N	1.6×10^3 3.9×10^8 6.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:HMVKAOOH <chem>C4H8O4</chem> XTELZFGIGJBUGR-UHFFFAOYSA-N	3.7×10^3 8.3×10^5 7.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:HMVKBOOH <chem>C4H8O4</chem> NGLQGLCPXKPDMS-UHFFFAOYSA-N	1.3×10^4 1.6×10^7 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:HO12CO3C4 <chem>C4H8O3</chem> SEYLPWVFCVRQ-UHFFFAOYSA-N	1.2×10^3 9.8×10^3 3.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:HO14CO2C4 <chem>C4H8O3</chem> XBJODPUPYBBDEM-UHFFFAOYSA-N	1.0×10^3 1.9×10^4 9.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:HOCO3C4OOH <chem>C4H8O4</chem> GQXQZBROPOTXJQ-UHFFFAOYSA-N	1.0×10^4 1.0×10^7 1.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:MEKAOH <chem>C4H8O2</chem> LVSQXDHWDMMRJ-UHFFFAOYSA-N	1.0×10^5 1.5×10^2 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:MEKCOH <chem>C4H8O2</chem> GFAZHVHNLUBROE-UHFFFAOYSA-N	2.0×10^2 7.8 7.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:MVKOHAOH <chem>C4H8O4</chem> UQPHVQVXLPRNCX-UHFFFAOYSA-N	8.3 6.2×10^6 3.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:MVKOHAOOH <chem>C4H8O5</chem> MOVXURHCNUWOQO-UHFFFAOYSA-N	8.9×10^4 4.6×10^8 2.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:MVKOHBOOH <chem>C4H8O5</chem> WSMWIMXDHMPHIN-UHFFFAOYSA-N	1.8×10^6 2.0×10^9 2.7×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239
MCM:MVKOH <chem>C4H6O2</chem> LHBQGXZUVXFJRJ-UHFFFAOYSA-N	5.8×10^5 2.1×10^1 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 240 80, 238 80, 239



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C517OH $C_5H_{10}O_3$ NQMZUMSFJBKHAU-UHFFFAOYSA-N	3.8×10^5 1.6×10^6 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C517OOH $C_5H_{10}O_4$ OAFCGFSCVCGKSH-UHFFFAOYSA-N	1.1×10^6 1.0×10^7 4.9×10^5 1.1×10^4	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C519OOH $C_5H_{10}O_4$ RDSFTYTWLRLHJGZ-UHFFFAOYSA-N	1.7×10^5 1.0×10^7 4.0×10^5 8.0×10^4	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C51OH2CO $C_5H_{10}O_2$ WOVLKKLXYZJMSN-UHFFFAOYSA-N	6.0 4.2×10^1 9.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C51OH $C_5H_{10}O_3$ NJUQBPKVORANW-UHFFFAOYSA-N	1.5×10^5 2.1×10^5 4.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C51OOH $C_5H_{10}O_4$ IZBMMNKBXWQLB-UHFFFAOYSA-N	1.3×10^7 2.1×10^6 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C521OH $C_5H_8O_4$ UOGQGBWLBZOULD-UHFFFAOYSA-N	1.2×10^7 4.8×10^7 9.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C521OOH $C_5H_8O_5$ INSNYERMNWOCIO-UHFFFAOYSA-N	6.5×10^9 1.9×10^7 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C524CO $C_5H_8O_3$ JVFYSLPFISVGRS-UHFFFAOYSA-N	3.5×10^4 1.9×10^5 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C525OOH $C_5H_{10}O_6$ KYXSOONCNSTMJK-UHFFFAOYSA-N	3.8×10^{12} 2.0×10^{11} 3.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C53OH $C_5H_{10}O_3$ PLVCXNLHUHTLCR-UHFFFAOYSA-N	1.8×10^4 1.1×10^6 6.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C53OOH $C_5H_{10}O_4$ VCGFNBZCPLQJUR-UHFFFAOYSA-N	1.0×10^7 1.8×10^6 6.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C55OOH $C_5H_{10}O_4$ IEXMEMALQGQSKE-UHFFFAOYSA-N	3.2×10^5 1.3×10^6 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C59OOH	1.1×10^9		Wang et al. (2017)	Q	80, 238
C ₅ H ₁₀ O ₅	1.6×10^8		Wang et al. (2017)	Q	80, 239
JWNCLQLBUYGMN-UHFFFAOYSA-N	3.0×10^4		Wang et al. (2017)	Q	80, 240
MCM:C5CO243OH	1.1×10^3		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ O ₃	1.1×10^4		Wang et al. (2017)	Q	80, 239
SLKPFVOVRYRNBA-UHFFFAOYSA-N	9.8		Wang et al. (2017)	Q	80, 240
MCM:C5OHC04OOH	4.7×10^5		Wang et al. (2017)	Q	80, 238
C ₅ H ₁₀ O ₄	1.6×10^6		Wang et al. (2017)	Q	80, 239
DSLXKXJLFFUGE-UHFFFAOYSA-N	4.1×10^4		Wang et al. (2017)	Q	80, 240
MCM:CO2C5OH	3.6×10^3	9800	Wieser et al. (2023)	Q	437
C ₅ H ₁₀ O ₂	1.2×10^2		Wang et al. (2017)	Q	80, 238
JSHPTIGHEWEXRW-UHFFFAOYSA-N	2.6×10^3		Wang et al. (2017)	Q	80, 239
	1.3×10^3		Wang et al. (2017)	Q	80, 240
MCM:CO2H3MCO3H	1.1×10^6		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ O ₅	3.2×10^3		Wang et al. (2017)	Q	80, 239
LZACDMRRAOGIBF-UHFFFAOYSA-N	3.5×10^1		Wang et al. (2017)	Q	80, 240
MCM:CO3H4CO3H	1.6×10^6		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ O ₅	1.0×10^4		Wang et al. (2017)	Q	80, 239
LAOPLCWFGWEKGR-UHFFFAOYSA-N	1.8×10^2		Wang et al. (2017)	Q	80, 240
MCM:DIEKAOH	7.3		Wang et al. (2017)	Q	80, 238
C ₅ H ₁₀ O ₂	6.8×10^1		Wang et al. (2017)	Q	80, 239
QMXCHEVUAIPIRM-UHFFFAOYSA-N	7.6		Wang et al. (2017)	Q	80, 240
MCM:H3C2C4CO3H	6.9×10^6		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ O ₅	3.0×10^6		Wang et al. (2017)	Q	80, 239
NYZNEBYYPQANOB-UHFFFAOYSA-N	6.3×10^2		Wang et al. (2017)	Q	80, 240
MCM:HC23C4CO3H	4.5×10^9		Wang et al. (2017)	Q	80, 238
C ₅ H ₆ O ₆	1.1×10^8		Wang et al. (2017)	Q	80, 239
UQNPRJBDVQJQC-UHFFFAOYSA-N	2.0×10^3		Wang et al. (2017)	Q	80, 240
MCM:HCOC5	1.4×10^1		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ O ₂	1.4×10^2		Wang et al. (2017)	Q	80, 239
LSMLKPXBSFFBNR-UHFFFAOYSA-N	3.4		Wang et al. (2017)	Q	80, 240
MCM:HMVKBCO3H	1.4×10^8		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ O ₅	5.8×10^6		Wang et al. (2017)	Q	80, 239
VFNFGUWSZFHBRW-UHFFFAOYSA-N	2.1×10^3		Wang et al. (2017)	Q	80, 240
MCM:HO13CO4C5	1.8×10^4		Wang et al. (2017)	Q	80, 238
C ₅ H ₁₀ O ₃	2.6×10^5		Wang et al. (2017)	Q	80, 239
CGPIPFJOMJUWJK-UHFFFAOYSA-N	3.6×10^3		Wang et al. (2017)	Q	80, 240
MCM:HO14CO2C5	1.8×10^4		Wang et al. (2017)	Q	80, 238
C ₅ H ₁₀ O ₃	1.5×10^6		Wang et al. (2017)	Q	80, 239
XLKDOKPMNKVMP-UHFFFAOYSA-N	4.2×10^3		Wang et al. (2017)	Q	80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO14CO3C5 $C_5H_{10}O_3$ YMIRTLUDYUWGWY-UHFFFAOYSA-N	1.8×10^4 1.6×10^6 4.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO1CO24C5 $C_5H_8O_3$ VBUBLWCIADYRMB-UHFFFAOYSA-N	4.1×10^3 3.2×10^4 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO1CO34C5 $C_5H_8O_3$ LKLKMCUVBQDYFU-UHFFFAOYSA-N	7.8×10^4 4.7×10^4 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO1CO3C5 $C_5H_{10}O_2$ TYXULUBCBKMSSK-UHFFFAOYSA-N	1.2×10^2 4.6×10^2 6.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2CO4C5 $C_5H_{10}O_2$ PCYZZYAEGNVNMH-UHFFFAOYSA-N	1.4×10^2 1.3×10^3 9.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOCO3C5OOH $C_5H_{10}O_4$ ZLPJDXTYGYNOQK-UHFFFAOYSA-N	1.0×10^7 1.3×10^6 4.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOCO4C5OOH $C_5H_{10}O_4$ MYGJVQXASRJPCS-UHFFFAOYSA-N	1.0×10^7 1.9×10^6 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MBOACO $C_5H_{10}O_3$ FEIUXLCYVBUGD-UHFFFAOYSA-N	2.8×10^3 9.8×10^2 6.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ME3CO2BUOL $C_5H_{10}O_2$ NBEGXSQMVJTIAR-UHFFFAOYSA-N	7.3 4.6×10^1 6.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIPKAOH $C_5H_{10}O_2$ BNDRWEVUODOUDW-UHFFFAOYSA-N	4.5 4.4×10^1 7.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIPKBOH $C_5H_{10}O_2$ VVSRECWZBBJOTG-UHFFFAOYSA-N	1.4×10^2 6.3×10^2 6.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPRKAOH $C_5H_{10}O_2$ HDKKRASBPFULQ-UHFFFAOYSA-N	7.3 8.5×10^1 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZOBIPEROH $C_6H_6O_4$ OGRXSIBGKCRBOL-UHFFFAOYSA-N	6.2×10^6 3.6×10^3 1.7×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4COMEOH $\text{C}_6\text{H}_{12}\text{O}_2$ FDJJNIXWMAWMBP-UHFFFAOYSA-N	5.0 2.7×10^1 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4COMOH3OH $\text{C}_6\text{H}_{12}\text{O}_3$ NCEURKGQTPCVEC-UHFFFAOYSA-N	1.6×10^4 7.6×10^5 1.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4COMOHOOH $\text{C}_6\text{H}_{12}\text{O}_4$ JZGTXIGKACACHL-UHFFFAOYSA-N	4.3×10^5 8.9×10^5 3.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4MOHOCO3H $\text{C}_6\text{H}_{10}\text{O}_5$ BJXKNHIKUQDPQL-UHFFFAOYSA-N	1.4×10^6 5.4×10^3 8.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C517CO3H $\text{C}_6\text{H}_{10}\text{O}_5$ HTNOTPIWPYZOLN-UHFFFAOYSA-N	1.2×10^8 1.1×10^7 7.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C519CO3H $\text{C}_6\text{H}_{10}\text{O}_5$ OBKQTPZEBGGJT-UHFFFAOYSA-N	1.2×10^8 1.6×10^7 5.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5COHOCO3H $\text{C}_6\text{H}_8\text{O}_6$ BPYCYKKOURHNJX-UHFFFAOYSA-N	5.9×10^8 2.3×10^5 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5O5OHCO3H $\text{C}_6\text{H}_{10}\text{O}_5$ GCQMJNYHSPBFDA-UHFFFAOYSA-N	1.3×10^6 4.8×10^3 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C610OH $\text{C}_6\text{H}_{12}\text{O}_3$ YFEDHAQJQZUIL-UHFFFAOYSA-N	1.6×10^5 2.4×10^5 2.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C610OOH $\text{C}_6\text{H}_{12}\text{O}_4$ VBEFRWQFSDXQDV-UHFFFAOYSA-N	1.2×10^7 2.0×10^6 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C611OH $\text{C}_6\text{H}_{10}\text{O}_3$ PYRMISJRKRVPNG-UHFFFAOYSA-N	5.9×10^2 3.0×10^3 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C612OH $\text{C}_6\text{H}_{12}\text{O}_3$ VCLSUNMNDIKRMY-UHFFFAOYSA-N	9.8×10^3 6.0×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C612OOH $\text{C}_6\text{H}_{12}\text{O}_4$ OANIXDZJWBEQCD-UHFFFAOYSA-N	5.6×10^6 9.3×10^5 5.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C613OOH $\text{C}_6\text{H}_{12}\text{O}_5$ MBLADDFAKVGAFO-UHFFFAOYSA-N	1.2×10^9 2.0×10^8 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C614CO $\text{C}_6\text{H}_8\text{O}_4$ DFWHGSPVJPYJZ-UHFFFAOYSA-N	2.5×10^6 1.4×10^6 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C614OH $\text{C}_6\text{H}_{10}\text{O}_4$ WLPHOQAEQJPJID-UHFFFAOYSA-N	9.3×10^7 9.1×10^6 8.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C614OOH $\text{C}_6\text{H}_{10}\text{O}_5$ AZSLPKKGLPCKMI-UHFFFAOYSA-N	7.8×10^9 8.3×10^7 4.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C619OH $\text{C}_6\text{H}_8\text{O}_3$ WEYIBABPZCYASX-UHFFFAOYSA-N	1.2×10^4 2.5×10^6 4.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C61CO $\text{C}_6\text{H}_{10}\text{O}_3$ MGEAAKFVOQZVFH-UHFFFAOYSA-N	3.8×10^3 2.2×10^4 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C61OH $\text{C}_6\text{H}_{12}\text{O}_3$ JOVKXRBMZIPRBZ-UHFFFAOYSA-N	1.6×10^5 3.6×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C61OOH $\text{C}_6\text{H}_{12}\text{O}_4$ ZUQHNOGBULTRH-UHFFFAOYSA-N	1.2×10^7 1.7×10^6 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C621OOH $\text{C}_6\text{H}_{10}\text{O}_6$ OMSKVAAPFLCUBC-UHFFFAOYSA-N	9.8×10^{11} 2.7×10^{10} 3.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C624CO $\text{C}_6\text{H}_{10}\text{O}_2$ SAJQFIMRYKQCMA-UHFFFAOYSA-N	2.3×10^2 6.3×10^2 5.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C625OH $\text{C}_6\text{H}_{12}\text{O}_4$ UHZLCNNVPSWLBR-UHFFFAOYSA-N	1.2×10^7 3.9×10^8 2.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C625OOH $\text{C}_6\text{H}_{12}\text{O}_5$ RLEQEEKQTRHVBK-UHFFFAOYSA-N	2.0×10^{10} 7.8×10^8 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C627OH $\text{C}_6\text{H}_{10}\text{O}_3$ YXADPHVQSSNJLB-UHFFFAOYSA-N	3.7×10^3 1.9×10^5 5.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C630OH $\text{C}_6\text{H}_{10}\text{O}_3$ LTOZVYXSZHEKZ-UHFFFAOYSA-N	2.9×10^4 1.7×10^6 2.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C630OOH $\text{C}_6\text{H}_{10}\text{O}_4$ FPSNWVZQINIJKM-UHFFFAOYSA-N	1.8×10^7 2.2×10^6 1.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C63OH $\text{C}_6\text{H}_{12}\text{O}_3$ YEHSHVSOJHCML-UHFFFAOYSA-N	1.4×10^5 1.2×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C63OOH $\text{C}_6\text{H}_{12}\text{O}_4$ RYUSCYCDUHZJRL-UHFFFAOYSA-N	1.0×10^7 1.1×10^6 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C64OH $\text{C}_6\text{H}_{12}\text{O}_3$ DWHFPVYPGLVOER-UHFFFAOYSA-N	8.5×10^4 2.2×10^5 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C64OOH $\text{C}_6\text{H}_{12}\text{O}_4$ WKWKMZQJHCBFC-UHFFFAOYSA-N	7.3×10^6 1.1×10^6 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C66CO $\text{C}_6\text{H}_{10}\text{O}_3$ POXOVUFKUOXAY-UHFFFAOYSA-N	7.4×10^4 2.9×10^4 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C66OH $\text{C}_6\text{H}_{12}\text{O}_3$ YKCRSYHGATDJD-UHFFFAOYSA-N	1.7×10^4 9.3×10^5 6.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C66OOH $\text{C}_6\text{H}_{12}\text{O}_4$ ZIMKSIUZUDHWGV-UHFFFAOYSA-N	1.0×10^7 7.4×10^5 9.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C67CO3H $\text{C}_6\text{H}_{10}\text{O}_5$ BGZGHPIMJISIBNB-UHFFFAOYSA-N	3.9×10^6 6.6×10^5 3.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C69OH $\text{C}_6\text{H}_{12}\text{O}_3$ UAFVHAXODPLTF-UHFFFAOYSA-N	1.7×10^4 8.9×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C69OOH $\text{C}_6\text{H}_{12}\text{O}_4$ IBTXITPBBYCNLS-UHFFFAOYSA-N	1.0×10^7 1.3×10^6 6.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO23HO5 $\text{C}_6\text{H}_{10}\text{O}_3$ ZFXUWHPHUNDYBV-UHFFFAOYSA-N	7.4×10^4 2.6×10^4 5.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6CO243OH $\text{C}_6\text{H}_{10}\text{O}_3$ YZRCADLLOAXRLD-UHFFFAOYSA-N	8.5×10^2 6.6×10^3 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO34HO1 $\text{C}_6\text{H}_{10}\text{O}_3$ LBGWMVXVPMPEID-UHFFFAOYSA-N	7.3×10^4 2.0×10^4 9.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO3HO14 $\text{C}_6\text{H}_{12}\text{O}_3$ AEYYIRCLAOJEMX-UHFFFAOYSA-N	1.6×10^4 9.1×10^5 9.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO3HO25 $\text{C}_6\text{H}_{12}\text{O}_3$ AQJAHIKLRWQRAX-UHFFFAOYSA-N	1.7×10^4 1.1×10^6 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO3HO4 $\text{C}_6\text{H}_{12}\text{O}_2$ SKCYVGUCBRYGTE-UHFFFAOYSA-N	5.6 4.6×10^1 6.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO3OHOOH $\text{C}_6\text{H}_{12}\text{O}_4$ VJHRZIUXRMRGDC-UHFFFAOYSA-N	1.0×10^7 6.3×10^5 6.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6HOCOOH $\text{C}_6\text{H}_{12}\text{O}_4$ DEHZHOWOLMWYLS-UHFFFAOYSA-N	9.1×10^6 7.4×10^5 8.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO24M3C5OH $\text{C}_6\text{H}_{10}\text{O}_3$ JUTFYFRULBWUNH-UHFFFAOYSA-N	3.8×10^3 1.1×10^4 2.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO25C6OH $\text{C}_6\text{H}_{10}\text{O}_3$ MXGSILCFPNVDMX-UHFFFAOYSA-N	3.8×10^3 1.6×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2HO3C6 $\text{C}_6\text{H}_{12}\text{O}_2$ UHSBCAJZDUQTHH-UHFFFAOYSA-N	5.6 5.8×10^1 4.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2HO4C6 $\text{C}_6\text{H}_{12}\text{O}_2$ ODWYTDVNWFBCLV-UHFFFAOYSA-N	1.1×10^2 7.8×10^2 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2HOC6OOH $\text{C}_6\text{H}_{12}\text{O}_4$ DONIGPAOCGSEHJ-UHFFFAOYSA-N	9.1×10^6 1.0×10^6 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2M3C5OH $\text{C}_6\text{H}_{12}\text{O}_2$ YJCMJVMCCJIPRV-UHFFFAOYSA-N	1.1×10^2 1.7×10^3 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO2MC5OH $C_6H_{12}O_2$ NZBRXFKHZBOFBW-UHFFFAOYSA-N	1.1×10^2 1.9×10^3 5.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CY6DIONOH $C_6H_8O_3$ ACRUCDPQQCIOID-UHFFFAOYSA-N	2.3×10^5 6.5×10^7 2.9×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CYHXOLACO $C_6H_{10}O_2$ ODZTXUYIYJLMC-UHFFFAOYSA-N	1.8×10^1 1.4×10^3 6.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CYHXONAOH $C_6H_{10}O_2$ TWEVQGUWCLBRMJ-UHFFFAOYSA-N	3.5×10^2 3.5×10^4 8.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMK2OH $C_6H_{10}O_4$ RQDWELNLPMBYMA-UHFFFAOYSA-N	2.8×10^5 4.2×10^6 2.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMKCOOH $C_6H_8O_4$ OKDWWGVTKQPUTM-UHFFFAOYSA-N	6.5×10^5 3.2×10^5 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMKOOH $C_6H_{10}O_5$ WAHPQVAXIMVNL-UHFFFAOYSA-N	4.1×10^8 7.3×10^6 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EIPKAOH $C_6H_{12}O_2$ SYAVYWAMVZKGTU-UHFFFAOYSA-N	3.9 3.3×10^1 4.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EIPKBOH $C_6H_{12}O_2$ JYEMLYGXHDIVRA-UHFFFAOYSA-N	1.1×10^2 3.1×10^2 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H13M3CO4C5 $C_6H_{12}O_3$ NBNMOYHUQSLZCQ-UHFFFAOYSA-N	9.8×10^3 1.7×10^5 3.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3C25C6OH $C_6H_{10}O_4$ XLUGOLRJRPRATMY-UHFFFAOYSA-N	5.6×10^5 4.8×10^7 3.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3C25C6OOH $C_6H_{10}O_5$ XIJKANBCMKWKRM-UHFFFAOYSA-N	2.9×10^8 5.0×10^7 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX3ONAOH $C_6H_{12}O_2$ XHYXKWWFNRBCGE-UHFFFAOYSA-N	1.1×10^2 6.5×10^2 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HEX3ONCOH $\text{C}_6\text{H}_{12}\text{O}_2$ ZWBUSAWJHMPOEJ-UHFFFAOYSA-N	5.6 4.2×10^1 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX3ONDOH $\text{C}_6\text{H}_{12}\text{O}_2$ ITHSWIXXHGKFJW-UHFFFAOYSA-N	9.8×10^1 2.6×10^2 5.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO1CO24C6 $\text{C}_6\text{H}_{10}\text{O}_3$ NUDMYLMVZRZHHU-UHFFFAOYSA-N	3.7×10^3 1.4×10^4 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO1CO4C6 $\text{C}_6\text{H}_{12}\text{O}_2$ APQMHEQLBDXGMP-UHFFFAOYSA-N	9.8×10^1 1.4×10^3 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2CO5C6 $\text{C}_6\text{H}_{12}\text{O}_2$ ZSDLLTJVENEIDW-UHFFFAOYSA-N	2.8×10^3 1.1×10^2 2.3×10^3 6.9×10^2	10000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:M2BKAOH $\text{C}_6\text{H}_{12}\text{O}_2$ ZXZUCILLTLHIBZ-UHFFFAOYSA-N	1.3×10^2 6.9×10^2 4.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2BKBOH $\text{C}_6\text{H}_{12}\text{O}_2$ KHCUSEDRQWYNDS-UHFFFAOYSA-N	3.9 4.4×10^1 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MBKCOOHOH $\text{C}_6\text{H}_{10}\text{O}_5$ VGLNQNYMFMHPV-UHFFFAOYSA-N	2.5×10^8 2.1×10^6 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBKAOH3CO $\text{C}_6\text{H}_{10}\text{O}_3$ NARMPYMUEZMSEV-UHFFFAOYSA-N	2.6×10^3 4.6×10^2 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBKBOH $\text{C}_6\text{H}_{12}\text{O}_2$ IGPIDYBTBPKQT-UHFFFAOYSA-N	6.5 6.3×10^1 2.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBKHO14 $\text{C}_6\text{H}_{12}\text{O}_3$ UZSRJTNVDUYOLE-UHFFFAOYSA-N	9.8×10^3 8.1×10^5 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBKHO4OOH $\text{C}_6\text{H}_{12}\text{O}_4$ FGHCVAJLMYVGOV-UHFFFAOYSA-N	5.6×10^6 1.1×10^6 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBKOH34 $\text{C}_6\text{H}_{12}\text{O}_3$ OSPIOFUQWMUWOI-UHFFFAOYSA-N	5.0×10^3 4.1×10^4 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MIBKHOAAOH $C_6H_{12}O_4$ WIXFQYMFSUQGGT-UHFFFAOYSA-N	8.1×10^6 1.8×10^5 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBKOHBOOH $C_6H_{12}O_4$ NCKNZQNPSVRYAP-UHFFFAOYSA-N	7.3×10^6 2.9×10^5 3.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBKOH $C_6H_{12}O_2$ DYAWMXSWDGP GOI-UHFFFAOYSA-N	7.6×10^1 3.8×10^2 3.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZQCO $C_6H_4O_4$ LTWQMDFZHUKCN-UHFFFAOYSA-N	8.3×10^6 3.6×10^9 3.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZQOH $C_6H_6O_4$ KGAUAKJVBKFEJK-UHFFFAOYSA-N	3.6×10^6 5.0×10^8 1.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZQOOH $C_6H_6O_5$ GWWKDNKIVTFLV-UHFFFAOYSA-N	5.3×10^9 1.9×10^9 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C61CO3H $C_7H_{10}O_6$ LNQZNTUCDYUQNY-UHFFFAOYSA-N	7.8×10^8 4.6×10^5 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C62CO3H $C_7H_{10}O_6$ OTMFEIRKQNFPTO-UHFFFAOYSA-N	8.9×10^8 5.1×10^5 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C711OOH $C_7H_{14}O_4$ CHMPWQJFRSDBMP-UHFFFAOYSA-N	5.0×10^6 7.4×10^5 5.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C712OH $C_7H_{14}O_3$ XKQDJNZCXUTPAB-UHFFFAOYSA-N	8.7×10^4 3.6×10^5 5.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C712OOH $C_7H_{14}O_4$ ISDXEEIPAJYQKS-UHFFFAOYSA-N	6.5×10^6 7.6×10^5 8.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C713OH $C_7H_{12}O_3$ KKMPMNHJUNYFMY-UHFFFAOYSA-N	2.1×10^3 4.0×10^4 2.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C714OH $C_7H_{12}O_3$ BDJIDAHOXAZMLT-UHFFFAOYSA-N	3.6×10^3 6.8×10^4 4.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C719OH $C_7H_{12}O_4$ SNLGDDBZBHBGGDF-UHFFFAOYSA-N	5.4×10^8 7.1×10^{10} 2.3×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C719OOH $C_7H_{12}O_5$ RIQZESWBZQGTQF-UHFFFAOYSA-N	7.1×10^{10} 5.8×10^{11} 2.0×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C71OOH $C_7H_{14}O_4$ NBQALOYIKVIATH-UHFFFAOYSA-N	8.5×10^6 4.1×10^5 3.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C726CO3OH $C_7H_{10}O_3$ KXKCGTAVIRFZLI-UHFFFAOYSA-N	1.4×10^4 9.1×10^4 6.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C72OH $C_7H_{14}O_3$ NSVUCXUEJIZYCX-UHFFFAOYSA-N	1.3×10^5 1.9×10^5 8.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C72OOH $C_7H_{14}O_4$ HOCRXLJRKJDOAI-UHFFFAOYSA-N	9.3×10^6 9.3×10^5 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C76OOH $C_7H_{14}O_4$ RNKPFJWWQPAQZAU-UHFFFAOYSA-N	8.5×10^6 8.0×10^5 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C77CO $C_7H_{12}O_3$ LRWVVHMPWURQP-UHFFFAOYSA-N	2.1×10^3 8.1×10^3 7.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C77OH $C_7H_{14}O_3$ BWFQHNIFKCYIN-UHFFFAOYSA-N	8.7×10^4 3.2×10^5 8.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C77OOH $C_7H_{14}O_4$ VLZZBCPZVYCEGU-UHFFFAOYSA-N	6.5×10^6 6.5×10^5 4.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C78CO $C_7H_{12}O_3$ XZDSUXRHWGXGLP-UHFFFAOYSA-N	4.2×10^4 1.8×10^4 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C78OH $C_7H_{14}O_3$ RHPPFSWJNLIJH-UHFFFAOYSA-N	9.1×10^3 3.0×10^5 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C78OOH $C_7H_{14}O_4$ CHSMMMZNDOTLZ-UHFFFAOYSA-N	5.6×10^6 3.7×10^5 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C79OOH $C_7H_{12}O_5$ PAASZTKJDWJXEO-UHFFFAOYSA-N	2.2×10^8 1.0×10^7 1.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7BDCOH $C_7H_{12}O_4$ IQLAANIUQOXZGT-UHFFFAOYSA-N	1.6×10^5 3.6×10^6 7.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7BDCCOH $C_7H_{12}O_5$ YSGKLAZJXASOJQ-UHFFFAOYSA-N	2.3×10^8 2.5×10^6 2.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7EDCCO $C_7H_{10}O_4$ ZZJOBVIMQADRSQ-UHFFFAOYSA-N	5.3×10^5 2.2×10^5 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7EDCOH $C_7H_{12}O_4$ ILHMXLYATWSMQV-UHFFFAOYSA-N	2.3×10^5 2.7×10^6 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7EDCCOH $C_7H_{12}O_5$ GFYCWYCYSZRNIC-UHFFFAOYSA-N	3.7×10^8 4.6×10^6 4.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO25C73OH $C_7H_{12}O_3$ SUAOXERUOLNODJ-UHFFFAOYSA-N	3.5×10^3 8.3×10^4 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO25C74OH $C_7H_{12}O_3$ WVDVIEDFZYMNAI-UHFFFAOYSA-N	3.5×10^3 8.5×10^4 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M2CO5C6 $C_7H_{14}O_2$ GNNBSAPGFGNCCT-UHFFFAOYSA-N	6.0×10^1 1.5×10^3 4.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M3CO5C6 $C_7H_{14}O_2$ JXXNGUYHZPNXHL-UHFFFAOYSA-N	1.0×10^2 1.7×10^3 2.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M4CO5C6 $C_7H_{14}O_2$ ZIVAMUMQDXZFCR-UHFFFAOYSA-N	1.0×10^2 1.4×10^3 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3C25CCO3H $C_7H_{10}O_6$ ARDZNQBCJILRHG-UHFFFAOYSA-N	3.3×10^9 9.8×10^8 6.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HCC7CO $C_7H_{10}O_2$ WWMVYBISUAVCBD-UHFFFAOYSA-N	9.1×10^2 4.6×10^4 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO2CO35C7 $C_7H_{12}O_3$ LULWLVLVBHVZLB-UHFFFAOYSA-N	3.5×10^3 1.1×10^4 5.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2CO5C7 $C_7H_{14}O_2$ DWMNUVZLRBCGOL-UHFFFAOYSA-N	8.7×10^1 1.3×10^3 2.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3CO6C7 $C_7H_{14}O_2$ MQRALIJAASQNT-UHFFFAOYSA-N	2.1×10^3 8.7×10^1 1.6×10^3 1.7×10^2	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:PTLQCO $C_7H_6O_4$ QCLUMLMJNMFFX-UHFFFAOYSA-N	5.6×10^6 6.2×10^9 6.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PTLQOH $C_7H_8O_4$ FWCZASAU MADEU-UHFFFAOYSA-N	2.4×10^6 5.1×10^8 1.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PTLQOOH $C_7H_8O_5$ ULCYCDVSDDOIBS-UHFFFAOYSA-N	3.6×10^9 1.8×10^9 3.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLCOBIPEOH $C_7H_8O_4$ BTRXIMYFXDXNL-UHFFFAOYSA-N	3.3×10^6 7.3×10^2 2.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLOBIPEROH $C_7H_8O_4$ OGIZZGFCOPEREO-UHFFFAOYSA-N	3.3×10^6 1.3×10^3 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6MOCOCO3H $C_8H_{10}O_6$ UAMJQIWNIVSAA-UHFFFAOYSA-N	2.1×10^9 1.7×10^9 4.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7CO2M5OH $C_8H_{12}O_3$ VIGCXZSBZQABDL-UHFFFAOYSA-N	7.8×10^3 2.0×10^4 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7CO2OCO3H $C_8H_{10}O_6$ PYNUNZYCLWJPS-UHFFFAOYSA-N	2.1×10^9 2.0×10^9 4.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7M2CO5OH $C_8H_{12}O_3$ IWFVDGADKJRMAL-UHFFFAOYSA-N	9.1×10^3 8.5×10^4 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C817OH $C_8H_{14}O_3$ HXKXVESDDNIBIQ-UHFFFAOYSA-N	5.4×10^4 4.9×10^5 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C818CO $C_8H_{12}O_4$ CRQAGKNTHDNGEW-UHFFFAOYSA-N	6.5×10^6 3.6×10^7 1.7×10^7	16000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017)	Q Q Q	437 80, 238 80, 239
	1.3×10^3		Wang et al. (2017)	Q	80, 240
MCM:C818OH $C_8H_{14}O_4$ GYBDPSWJEGVQPC-UHFFFAOYSA-N	8.0×10^6 2.9×10^8 7.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C818OOH $C_8H_{14}O_5$ DLMBPALZQHFDH-UHFFFAOYSA-N	5.7×10^8 5.0×10^9 1.0×10^8	17000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017)	Q Q Q	437 80, 238 80, 239
	9.1×10^4		Wang et al. (2017)	Q	80, 240
MCM:C819OOH $C_8H_{14}O_5$ JRXMSSDNDAZISI-UHFFFAOYSA-N	2.1×10^7 3.5×10^9 6.3×10^7	17000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017)	Q Q Q	437 80, 238 80, 239
	6.3×10^4		Wang et al. (2017)	Q	80, 240
MCM:C81OOH $C_8H_{16}O_4$ SFFBCYBCCUXGLX-UHFFFAOYSA-N	6.8×10^6 3.3×10^5 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C820OOH $C_8H_{12}O_6$ MPCACGHSMGOFNV-UHFFFAOYSA-N	2.3×10^{12} 1.4×10^9 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C826CO3OH $C_8H_{12}O_3$ GGSZUEZFMJTLBX-UHFFFAOYSA-N	1.1×10^4 5.6×10^4 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C827OH $C_8H_{14}O_3$ VYHQZXLAUHJBAB-UHFFFAOYSA-N	1.9×10^3 5.4×10^4 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C829OH $C_8H_{14}O_4$ ZFRREEXTYBESJX-UHFFFAOYSA-N	1.0×10^8 1.0×10^8 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C829OOH $C_8H_{14}O_5$ PFFZQAOPEABNHU-UHFFFAOYSA-N	2.8×10^9 8.0×10^7 9.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C82OOH $C_8H_{16}O_4$ AQECYOJQUIJAFS-UHFFFAOYSA-N	8.5×10^6 6.8×10^5 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C84OH $C_8H_{14}O_3$ HXKSWDLNZPICFQ-UHFFFAOYSA-N	2.8×10^3 4.1×10^4 5.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C88OH $\text{C}_8\text{H}_{12}\text{O}_3$ DCTATDQRTQNXHW-UHFFFAOYSA-N	6.0×10^3 1.1×10^6 3.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZOBPEROH $\text{C}_8\text{H}_{10}\text{O}_4$ YDVGQTQYIBCICQ-UHFFFAOYSA-N	2.8×10^6 8.3×10^2 6.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO34CO6C8 $\text{C}_8\text{H}_{16}\text{O}_3$ GQDVWZAGWHUXKX-UHFFFAOYSA-N	1.0×10^5 1.7×10^5 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3CO46C8 $\text{C}_8\text{H}_{14}\text{O}_3$ LLYUJOAMIUBKSA-UHFFFAOYSA-N	2.8×10^3 8.3×10^3 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3CO6C8 $\text{C}_8\text{H}_{16}\text{O}_2$ VJDZJBNTVLGPEM-UHFFFAOYSA-N	8.0×10^1 9.6×10^2 8.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYOBEROH $\text{C}_8\text{H}_{10}\text{O}_4$ BQJOHFWATKFGAQ-UHFFFAOYSA-N	1.9×10^6 3.0×10^2 4.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYQOH $\text{C}_8\text{H}_{10}\text{O}_4$ DNSXSYZLXRHYTM-UHFFFAOYSA-N	1.3×10^6 3.0×10^8 3.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYQOOH $\text{C}_8\text{H}_{10}\text{O}_5$ UAWVAAITGKOKNW-UHFFFAOYSA-N	1.9×10^9 3.0×10^8 5.9×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYQCO $\text{C}_8\text{H}_8\text{O}_4$ QSCBEEAIZLBQA-UHFFFAOYSA-N	3.4×10^6 6.2×10^9 1.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYQOH $\text{C}_8\text{H}_{10}\text{O}_4$ LJMMKZLQFVIDLQ-UHFFFAOYSA-N	1.6×10^6 3.5×10^8 7.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYQOOH $\text{C}_8\text{H}_{10}\text{O}_5$ NOWQTCYBLCRAEJ-UHFFFAOYSA-N	2.3×10^9 1.2×10^9 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYQOH $\text{C}_8\text{H}_{10}\text{O}_4$ RORXCXPFLRGHV-UHFFFAOYSA-N	1.3×10^6 3.0×10^8 5.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYQOOH $\text{C}_8\text{H}_{10}\text{O}_5$ FYDHRLZPZZTRLJ-UHFFFAOYSA-N	1.9×10^9 4.2×10^8 2.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6EO2HCO3H $\text{C}_9\text{H}_{12}\text{O}_6$ KMUWHHLLOUXRZEC-UHFFFAOYSA-N	1.7×10^9 1.6×10^9 3.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7MJPCO3H $\text{C}_9\text{H}_{12}\text{O}_6$ HVGFXMJLWNDQT-UHFFFAOYSA-N	1.7×10^9 1.2×10^9 6.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7MOCOCO3H $\text{C}_9\text{H}_{12}\text{O}_6$ UXMGGYROBLVMKA-UHFFFAOYSA-N	1.4×10^9 2.3×10^9 9.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8M2CO6OH $\text{C}_9\text{H}_{14}\text{O}_3$ AU YUFIFJEU TOMG-UHFFFAOYSA-N	7.6×10^3 4.8×10^4 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C917OH $\text{C}_9\text{H}_{14}\text{O}_3$ DVAQWOBQFULNSX-UHFFFAOYSA-N	9.8×10^4 4.3×10^6 3.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C920OOH $\text{C}_9\text{H}_{16}\text{O}_4$ CXKZGZGALDRTB-UHFFFAOYSA-N	6.5×10^5 1.6×10^6 6.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C921OOH $\text{C}_9\text{H}_{16}\text{O}_5$ MIFQELLQXZRDQ-UHFFFAOYSA-N	1.2×10^9 3.2×10^9 7.1×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C922OOH $\text{C}_9\text{H}_{16}\text{O}_6$ IOTRHTNOHNKLJT-UHFFFAOYSA-N	3.6×10^{11} 7.8×10^9 6.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C923OH $\text{C}_9\text{H}_{16}\text{O}_2$ VZYSLJNPEGILSI-UHFFFAOYSA-N	5.3×10^3 1.5×10^2 2.0×10^3 7.4×10^2	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C924CO $\text{C}_9\text{H}_{14}\text{O}_3$ IEIWFPIZSBHOOD-UHFFFAOYSA-N	1.0×10^5 5.6×10^4 4.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C924OH $\text{C}_9\text{H}_{16}\text{O}_3$ OXSRPARPRXNCEH-UHFFFAOYSA-N	3.8×10^5 2.2×10^4 1.4×10^5 2.7×10^3	16000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C924OOH $\text{C}_9\text{H}_{16}\text{O}_4$ BVODBOGLMHSBGK-UHFFFAOYSA-N	3.0×10^6 1.2×10^7 3.1×10^5 5.0×10^4	16000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C925OOH $\text{C}_9\text{H}_{16}\text{O}_6$ BGVLBDREANIMN-UHFFFAOYSA-N	9.1×10^{12} 5.0×10^{10} 1.6×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C927OH $\text{C}_9\text{H}_{16}\text{O}_3$ JILOVKBSEAXPMT-UHFFFAOYSA-N	2.9×10^5 1.2×10^7 9.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C927OOH $\text{C}_9\text{H}_{16}\text{O}_4$ UVVCFCCMOUIWEJ-UHFFFAOYSA-N	7.6×10^6 8.9×10^6 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C928OH $\text{C}_9\text{H}_{16}\text{O}_3$ QGCNXXROUFNWXOO-UHFFFAOYSA-N	2.9×10^4 3.8×10^5 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C929CO $\text{C}_9\text{H}_{14}\text{O}_4$ BWILLNTUIBCKIM-UHFFFAOYSA-N	2.0×10^7 5.4×10^6 3.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C929OH $\text{C}_9\text{H}_{16}\text{O}_4$ PMWQIXWFMSCXRH-UHFFFAOYSA-N	4.4×10^6 5.9×10^8 6.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C929OOH $\text{C}_9\text{H}_{16}\text{O}_5$ IKUORCWWMOEDGL-UHFFFAOYSA-N	2.9×10^9 3.3×10^8 1.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C92OOH $\text{C}_9\text{H}_{18}\text{O}_4$ MOTPUWPPGZYDTM-UHFFFAOYSA-N	5.3×10^6 2.9×10^5 2.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C93CO $\text{C}_9\text{H}_{16}\text{O}_3$ NCWLHDSPIENNF-UHFFFAOYSA-N	2.2×10^3 6.6×10^3 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C93OH $\text{C}_9\text{H}_{18}\text{O}_3$ XOZZRVPGLURXSU-UHFFFAOYSA-N	8.0×10^4 1.5×10^5 2.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C93OOH $\text{C}_9\text{H}_{18}\text{O}_4$ DSWUJVMVGXNEV-UHFFFAOYSA-N	6.8×10^6 3.3×10^5 8.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C94OH $\text{C}_9\text{H}_{16}\text{O}_3$ RCWXDPYULGSTKX-UHFFFAOYSA-N	2.2×10^3 2.6×10^4 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C96OH $\text{C}_9\text{H}_{16}\text{O}_2$ RRFQMYCDTHUGSU-UHFFFAOYSA-N	1.7×10^2 3.3×10^3 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C97OH $\text{C}_9\text{H}_{16}\text{O}_3$ QWYKJUQBVIHQW-UHFFFAOYSA-N	1.4×10^4 1.2×10^6 8.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C97OOH $\text{C}_9\text{H}_{16}\text{O}_4$ AXRJNDGSGFVBSX-UHFFFAOYSA-N	8.1×10^6 3.9×10^5 1.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C98OH $\text{C}_9\text{H}_{16}\text{O}_4$ BWKWRXKCGJAJAO-UHFFFAOYSA-N	9.3×10^7 1.0×10^8 4.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C98OOH $\text{C}_9\text{H}_{16}\text{O}_5$ MEUGYCLQCHPCPY-UHFFFAOYSA-N	2.9×10^9 3.3×10^7 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C9DCOH $\text{C}_9\text{H}_{12}\text{O}_3$ DIFRJFLUSYQBQM-UHFFFAOYSA-N	4.0×10^5 1.9×10^7 4.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO4CO7C9 $\text{C}_9\text{H}_{18}\text{O}_2$ BPRAKHMALGYKO-UHFFFAOYSA-N	6.3×10^1 8.3×10^2 7.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBZOBPROH $\text{C}_9\text{H}_{12}\text{O}_4$ WRQNGVASMLSOGA-UHFFFAOYSA-N	2.6×10^6 7.1×10^2 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRBQCO $\text{C}_9\text{H}_{10}\text{O}_4$ UYSSVGYDANWBFJ-UHFFFAOYSA-N	4.1×10^6 2.6×10^9 1.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRBQOH $\text{C}_9\text{H}_{12}\text{O}_4$ BQKYQBQGYWJSQ-UHFFFAOYSA-N	1.8×10^6 1.7×10^8 7.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRBQOOH $\text{C}_9\text{H}_{12}\text{O}_5$ CCPBRYDTGCPJNX-UHFFFAOYSA-N	2.9×10^9 6.9×10^8 1.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMKAOH $\text{C}_9\text{H}_{16}\text{O}_3$ RDFVUMNEKCADL-UHFFFAOYSA-N	2.0×10^5 6.2×10^6 1.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMKAOOH $\text{C}_9\text{H}_{16}\text{O}_4$ ZYSXBTHWQDNLBX-UHFFFAOYSA-N	1.5×10^7 2.7×10^7 3.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMKBCO $\text{C}_9\text{H}_{14}\text{O}_3$ QJYRJOZGIVJKQK-UHFFFAOYSA-N	5.0×10^3 3.7×10^5 2.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:LMKBOOH $\text{C}_9\text{H}_{16}\text{O}_4$ PMLHMEIQMSUJKR-UHFFFAOYSA-N	1.5×10^7 2.6×10^7 8.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLOBPROH $\text{C}_9\text{H}_{12}\text{O}_4$ ZSTYNOMBQJBFRA-UHFFFAOYSA-N	1.5×10^6 1.8×10^2 2.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLQOH $\text{C}_9\text{H}_{12}\text{O}_4$ YIUSRNITCRMJQW-UHFFFAOYSA-N	1.1×10^6 2.0×10^8 2.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLQOOH $\text{C}_9\text{H}_{12}\text{O}_5$ JBNOKZJMGKNXDA-UHFFFAOYSA-N	1.7×10^9 1.3×10^8 5.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINAOH $\text{C}_9\text{H}_{14}\text{O}_2$ CVWGOJDPALGYKB-UHFFFAOYSA-N	5.4×10^2 2.5×10^4 4.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINBOH $\text{C}_9\text{H}_{14}\text{O}_2$ FPBMXOVOMRHDTB-UHFFFAOYSA-N	5.4×10^2 3.2×10^4 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINCOH $\text{C}_9\text{H}_{14}\text{O}_2$ OXRZVROAQDQWAA-UHFFFAOYSA-N	3.1×10^2 9.3×10^3 3.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINDOH $\text{C}_9\text{H}_{14}\text{O}_2$ MLOBETUCFXAOL-UHFFFAOYSA-N	2.8×10^1 7.3×10^2 8.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLQCO $\text{C}_9\text{H}_{10}\text{O}_4$ WOEKXHYIEUCKR-UHFFFAOYSA-N	3.0×10^6 4.7×10^9 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLQOH $\text{C}_9\text{H}_{12}\text{O}_4$ DZHQWTGZQAKVBN-UHFFFAOYSA-N	1.3×10^6 2.0×10^8 5.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLQOOH $\text{C}_9\text{H}_{12}\text{O}_5$ KKWSBZSFLIKUTL-UHFFFAOYSA-N	1.9×10^9 8.0×10^8 2.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZOBPEROH $\text{C}_9\text{H}_{12}\text{O}_4$ JGNLEXNHGWFGL-UHFFFAOYSA-N	2.1×10^6 5.5×10^2 5.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLQOH $\text{C}_9\text{H}_{12}\text{O}_4$ KZOAJFYPECZGSC-UHFFFAOYSA-N	1.1×10^6 2.2×10^8 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PETLQOOH $\text{C}_9\text{H}_{12}\text{O}_5$ BJRXYOXPPIRVAX-UHFFFAOYSA-N	1.7×10^9 2.0×10^8 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123OBPOH $\text{C}_9\text{H}_{12}\text{O}_4$ WQSRICCLTUNRX-UHFFFAOYSA-N	1.0×10^6 1.7×10^2 4.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124QOH $\text{C}_9\text{H}_{12}\text{O}_4$ GVKLCWOTVYVOTB-UHFFFAOYSA-N	8.9×10^5 1.7×10^8 2.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124QOOH $\text{C}_9\text{H}_{12}\text{O}_5$ SLEWHRYFRSXVOQ-UHFFFAOYSA-N	1.3×10^9 2.6×10^8 3.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135OBPOH $\text{C}_9\text{H}_{12}\text{O}_4$ MWFJWFJYOSXFGA-UHFFFAOYSA-N	1.2×10^6 1.9×10^2 4.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:APINBCO $\text{C}_{10}\text{H}_{16}\text{O}_2$ VZRRCQOUNSHSGB-UHFFFAOYSA-N	1.5×10^1 4.4×10^2 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1011OH $\text{C}_{10}\text{H}_{18}\text{O}_2$ FSFKNSSBELMLGT-UHFFFAOYSA-N	1.3×10^2 2.1×10^3 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C102OOH $\text{C}_{10}\text{H}_{20}\text{O}_4$ QHLMVJFPLBXXKZ-UHFFFAOYSA-N	4.9×10^6 2.6×10^5 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C103CO $\text{C}_{10}\text{H}_{18}\text{O}_3$ QIIAZEBRWZSMOM-UHFFFAOYSA-N	2.0×10^3 5.4×10^3 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C103OH $\text{C}_{10}\text{H}_{20}\text{O}_3$ SXEGIXJYQPAQK-UHFFFAOYSA-N	7.4×10^4 1.3×10^5 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C103OOH $\text{C}_{10}\text{H}_{20}\text{O}_4$ DOFXWCNTKGZWNW-UHFFFAOYSA-N	5.5×10^6 3.0×10^5 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C104OH $\text{C}_{10}\text{H}_{18}\text{O}_3$ FHITZQAABUJLCH-UHFFFAOYSA-N	2.0×10^3 1.9×10^4 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C920CO3H $\text{C}_{10}\text{H}_{16}\text{O}_5$ OFVMBWQGLFFRLM-UHFFFAOYSA-N	6.6×10^6 9.1×10^5 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C9M2CO6OH $C_{10}H_{16}O_3$ SLPXKTFAPIGCFF-UHFFFAOYSA-N	5.9×10^3 2.4×10^4 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMEOBPROH $C_{10}H_{14}O_4$ ZCTKJUASOMJGQC-UHFFFAOYSA-N	1.0×10^6 1.3×10^2 9.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO5CO8C10 $C_{10}H_{20}O_2$ GDOWVFFRHQHNZ-UHFFFAOYSA-N	5.1×10^1 7.4×10^2 8.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMBCO $C_{10}H_{16}O_2$ JEQLRDRDFLXSHY-UHFFFAOYSA-N	1.4×10^1 3.5×10^2 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C112OOH $C_{11}H_{22}O_4$ IFXOTQISYXBGBQ-UHFFFAOYSA-N	3.8×10^6 2.4×10^5 5.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C113CO $C_{11}H_{20}O_3$ VJVDGYIYRBYKQO-UHFFFAOYSA-N	1.6×10^3 4.5×10^3 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C113OH $C_{11}H_{22}O_3$ IBMABDXBRFZEGO-UHFFFAOYSA-N	5.8×10^4 1.1×10^5 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C113OOH $C_{11}H_{22}O_4$ PBWNXGXFCLKSE-UHFFFAOYSA-N	4.9×10^6 3.0×10^5 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C114OH $C_{11}H_{20}O_3$ UGVQLPIEIIAJP-UHFFFAOYSA-N	1.6×10^3 1.4×10^4 3.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DETLOBPROH $C_{11}H_{16}O_4$ QNKVJNYVFVQVHN-UHFFFAOYSA-N	8.0×10^5 9.1×10^1 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO6CO9C11 $C_{11}H_{22}O_2$ HEIFQPPUFKWMSE-UHFFFAOYSA-N	4.6×10^1 6.5×10^2 5.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C122OOH $C_{12}H_{24}O_4$ PWTYXUGOJRDLPW-UHFFFAOYSA-N	3.2×10^6 2.3×10^5 9.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C123CO $C_{12}H_{22}O_3$ IVLDSNPYDYHHKW-UHFFFAOYSA-N	1.3×10^3 4.1×10^3 2.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C123OH $C_{12}H_{24}O_3$ FTSJAGYKUWYWCN-UHFFFAOYSA-N	4.8×10^4 9.6×10^4 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C123OOH $C_{12}H_{24}O_4$ YANZHJXFRFYAEY-UHFFFAOYSA-N	4.0×10^6 2.8×10^5 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C124OH $C_{12}H_{22}O_3$ ABVYFIKKAQHKSU-UHFFFAOYSA-N	1.3×10^3 1.3×10^4 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO7CO10C12 $C_{12}H_{24}O_2$ AJDNADCNOXGLCC-UHFFFAOYSA-N	3.7×10^1 5.1×10^2 4.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C131OH $C_{13}H_{22}O_3$ AONUZHGLRYBQFR-UHFFFAOYSA-N	5.1×10^4 2.3×10^5 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C132OH $C_{13}H_{22}O_4$ FIXMRMMYQTVSPU-UHFFFAOYSA-N	5.1×10^6 4.1×10^8 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C132OOH $C_{13}H_{22}O_5$ VUANIPKMYHABIK-UHFFFAOYSA-N	2.9×10^9 1.7×10^8 1.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C133CO $C_{13}H_{20}O_5$ NSPNCQPQMIWIRH-UHFFFAOYSA-N	7.1×10^9 4.6×10^9 4.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C133OH $C_{13}H_{22}O_5$ PJPMMZIOBGUFRQ-UHFFFAOYSA-N	3.2×10^{10} 6.0×10^{10} 8.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C133OOH $C_{13}H_{22}O_6$ TWNMHUJEMNHLMV-UHFFFAOYSA-N	8.5×10^{11} 3.7×10^{10} 5.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C134CO $C_{13}H_{18}O_6$ XVPKZNMZKWIEGC-UHFFFAOYSA-N	4.7×10^{12} 2.3×10^{11} 2.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C134OH $C_{13}H_{20}O_6$ CKMYGJKMMJWXII-UHFFFAOYSA-N	1.0×10^{12} 1.1×10^{13} 8.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C134OOH $C_{13}H_{20}O_7$ RYVAPXIZXOQMSU-UHFFFAOYSA-N	6.8×10^{14} 1.7×10^{12} 2.3×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C135OOH $C_{13}H_{18}O_8$ VAECXYXKQRKKE-UHFFFAOYSA-N	5.0×10^{17} 6.6×10^{13} 9.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCKAOH $C_{14}H_{24}O_3$ ARSAOHGCYSGONM-UHFFFAOYSA-N	2.0×10^5 8.3×10^6 7.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCKAOOH $C_{14}H_{24}O_4$ OXLVMLPVWDEZIL-UHFFFAOYSA-N	1.4×10^7 4.0×10^6 7.8×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCKBCO $C_{14}H_{22}O_3$ IWYBCVOMQFEOMA-UHFFFAOYSA-N	5.3×10^3 7.6×10^5 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCKBOOH $C_{14}H_{24}O_4$ SISQWITWYDFXLW-UHFFFAOYSA-N	1.4×10^7 2.6×10^6 3.7×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C141OH $C_{14}H_{24}O_2$ OMNNANPOKVZFEY-UHFFFAOYSA-N	1.4×10^2 2.3×10^3 7.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C142OH $C_{14}H_{24}O_3$ TZIWCZUVZZOIAI-UHFFFAOYSA-N	2.7×10^5 8.5×10^6 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C142OOH $C_{14}H_{24}O_4$ OJVOLXXWTGQGEJ-UHFFFAOYSA-N	7.4×10^6 1.8×10^7 1.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C143CO $C_{14}H_{22}O_4$ IPHIBGAHOYIGTO-UHFFFAOYSA-N	2.0×10^7 5.1×10^8 5.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C143OH $C_{14}H_{24}O_4$ PUMKKTACSBJGTI-UHFFFAOYSA-N	9.1×10^7 5.0×10^9 2.3×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C143OOH $C_{14}H_{24}O_5$ FMXAUTXFPHKMFA-UHFFFAOYSA-N	2.5×10^9 3.4×10^9 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C145OH $C_{14}H_{24}O_6$ CADDZNIHARUDOF-UHFFFAOYSA-N	1.0×10^{12} 3.1×10^{13} 1.5×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C145OOH $C_{14}H_{24}O_7$ CEBXMSFHIDLJKH-UHFFFAOYSA-N	1.5×10^{15} 4.9×10^{13} 1.8×10^{10}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BCBCO $C_{15}H_{24}O_2$ VLNGGDKMXDHPMK-UHFFFAOYSA-N	1.4×10^1 6.5×10^2 8.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PHCOMEOH $C_8H_8O_2$ ZVWHTXAYIKBMEE-UHFFFAOYSA-N	3.0×10^2 1.2×10^3 6.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPHCOMEOH $C_9H_{10}O_2$ CEJINNSYZFLSCS-UHFFFAOYSA-N	1.8×10^2 1.3×10^3 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PHCOETOH $C_9H_{10}O_2$ WLVPRARCUSDNI-UHFFFAOYSA-N	2.8×10^2 7.4×10^2 6.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMPHCOMOH $C_{10}H_{12}O_2$ DBYMZNOFJHQFFD-UHFFFAOYSA-N	1.0×10^2 7.8×10^2 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EMPHCOMOH $C_{11}H_{14}O_2$ MHJXTDDYZBYNEF-UHFFFAOYSA-N	8.3×10^1 4.5×10^2 8.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ALCOCH2OOH $C_3H_4O_4$ RQBGFCHISUOK-UHFFFAOYSA-N	4.1×10^6 7.6×10^3 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C33CO $C_3H_2O_3$ ICQNCHSXWNQIHC-UHFFFAOYSA-N	4.8×10^4 2.8×10^3 4.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C312COCO3H $C_4H_4O_5$ GUGBJTDAGNLAJO-UHFFFAOYSA-N	4.7×10^7 3.2×10^5 8.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C413COOOH $C_4H_6O_4$ XUKQLOKOLCMAI-UHFFFAOYSA-N	3.6×10^6 3.5×10^4 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4CO2OOH $C_4H_6O_4$ NOBUEMWCPQFCCN-UHFFFAOYSA-N	3.6×10^6 2.6×10^4 2.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4CODIAL $C_4H_4O_3$ OWIMZZMOFXSCLT-UHFFFAOYSA-N	4.3×10^4 5.0×10^3 2.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO23C3CHO $C_4H_4O_3$ LVZOZHOAAHWEOQ-UHFFFAOYSA-N	3.3×10^4 3.3×10^3 1.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO2C3CHO $C_4H_6O_2$ PKQIDSVLSKZFZQC-UHFFFAOYSA-N	4.7×10^1 6.0×10^1 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2C4DIAL $C_4H_2O_4$ OURVMEXCDVXLPR-UHFFFAOYSA-N	2.8×10^7 5.0×10^5 1.0×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EGLYOX $C_4H_6O_2$ RWHQMRRVZJSGX-UHFFFAOYSA-N	4.7×10^1 8.0 2.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:VGLYOX $C_4H_4O_2$ SDQVYUNYDAWYIK-UHFFFAOYSA-N	1.4×10^2 2.6×10^1 3.5×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4CO2DCO3H $C_5H_4O_5$ AXIVSVGHKYPZBE-UHFFFAOYSA-N	1.7×10^8 5.1×10^6 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4MCO2OOH $C_5H_8O_4$ RKGLOUQDKXPRQL-UHFFFAOYSA-N	2.0×10^6 3.6×10^3 6.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C511OOH $C_5H_8O_4$ NBNBXTZOPWFTP-UHFFFAOYSA-N	3.3×10^6 7.8×10^4 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5124COOOH $C_5H_6O_5$ BXDCDQOWFJMSCY-UHFFFAOYSA-N	2.0×10^9 3.0×10^6 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C512OOH $C_5H_8O_4$ UGOJGQBYBBLKDX-UHFFFAOYSA-N	2.8×10^6 9.3×10^5 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C515CO $C_5H_4O_4$ OONLXUUWPUJOU-UHFFFAOYSA-N	2.3×10^7 1.0×10^6 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C515OOH $C_5H_6O_5$ KCJHAINVUWKSI-UHFFFAOYSA-N	2.0×10^9 3.5×10^6 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C54CO $C_5H_4O_4$ KDLDWLXQVYMIBX-UHFFFAOYSA-N	2.0×10^7 5.8×10^5 5.8×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CO23CHO $C_5H_6O_3$ IPHREVVCPNNUEQ-UHFFFAOYSA-N	2.6×10^4 1.4×10^3 1.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C5COCHOOOH $C_5H_8O_4$ QJMOTDLHJFXUFN-UHFFFAOYSA-N	2.8×10^6 2.3×10^5 5.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5DIALCO $C_5H_4O_3$ SFSCHQJUYKUKJM-UHFFFAOYSA-N	1.4×10^5 4.9×10^4 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5DICARB $C_5H_6O_2$ GBLMMVFGENXAFZ-UHFFFAOYSA-N	1.6×10^2 1.1×10^3 2.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOC3COOOH $C_5H_6O_5$ KFSMXRNRQWYDJRM-UHFFFAOYSA-N	3.8×10^7 7.4×10^5 3.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO12C4CHO $C_5H_6O_3$ VUSMENNBCBGZQI-UHFFFAOYSA-N	3.6×10^4 9.3×10^3 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO13C4CHO $C_5H_6O_3$ SSMCSEDSANTCBB-UHFFFAOYSA-N	3.6×10^4 6.5×10^3 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO23C4CHO $C_5H_6O_3$ QGGCMCHYJIPQCE-UHFFFAOYSA-N	2.6×10^4 3.8×10^3 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO24C4CHO $C_5H_6O_3$ XHTYNUBGBUBFOA-UHFFFAOYSA-N	2.6×10^4 4.3×10^3 9.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2C43CHO $C_5H_8O_2$ KNTLTMLEQPLVDA-UHFFFAOYSA-N	4.4×10^1 1.7×10^1 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2C4CHO $C_5H_8O_2$ KEHNRUNQZGRQHU-UHFFFAOYSA-N	5.5×10^2 3.9×10^1 3.6×10^2 7.6×10^1	8400	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:CO3C4CHO $C_5H_8O_2$ ZNNXJRURXWWGLN-UHFFFAOYSA-N	3.9×10^1 2.6×10^1 6.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRGLYOX $C_5H_8O_2$ FTDZDHIBENIBKZ-UHFFFAOYSA-N	4.4×10^1 4.9 1.9×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PGLYOX $C_5H_8O_2$ GDTHVMAIBQVUMV-UHFFFAOYSA-N	3.9×10^1 5.8 1.9×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C23C54CHO $\text{C}_6\text{H}_8\text{O}_3$ CBIOWOAHGWGTSI-UHFFFAOYSA-N	2.7×10^4 7.4×10^2 2.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3COCCHO $\text{C}_6\text{H}_{10}\text{O}_2$ PVLKJSJIUOKAUMV-UHFFFAOYSA-N	3.0×10^1 2.2×10^1 7.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C45IC5CHO $\text{C}_6\text{H}_8\text{O}_3$ WETHXHAOPNKQLZ-UHFFFAOYSA-N	2.7×10^4 8.0×10^2 4.5×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4ECO2OOH $\text{C}_6\text{H}_{10}\text{O}_4$ CMRDMVGIWXQQFX-UHFFFAOYSA-N	1.8×10^6 1.8×10^3 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C511CHO $\text{C}_6\text{H}_8\text{O}_3$ SLKPDJWOVVFRRW-UHFFFAOYSA-N	3.2×10^4 1.4×10^4 1.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C511CO3H $\text{C}_6\text{H}_8\text{O}_5$ PKVJBWZRBOBAMT-UHFFFAOYSA-N	3.5×10^7 1.6×10^6 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C512CO3H $\text{C}_6\text{H}_8\text{O}_5$ OPLKNVAQLNTMAR-UHFFFAOYSA-N	3.4×10^7 1.6×10^6 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C515CHO $\text{C}_6\text{H}_6\text{O}_4$ JHVNJBQABGTRPH-UHFFFAOYSA-N	2.0×10^7 8.7×10^5 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C515CO3H $\text{C}_6\text{H}_6\text{O}_6$ XPLLUAMAYNXAT-UHFFFAOYSA-N	2.2×10^{10} 1.1×10^8 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CO2DCO3H $\text{C}_6\text{H}_6\text{O}_5$ DHHXAZIMZDQV-UHFFFAOYSA-N	1.1×10^8 4.5×10^6 3.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5DCO2CO3H $\text{C}_6\text{H}_6\text{O}_5$ GJOWGOOSLUXRQO-UHFFFAOYSA-N	1.1×10^8 4.2×10^6 6.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5MDICARB $\text{C}_6\text{H}_8\text{O}_2$ PFLPZDBOPDYJU-UHFFFAOYSA-N	1.0×10^2 1.0×10^3 5.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5TRONCO3H $\text{C}_6\text{H}_6\text{O}_6$ GGHLQXKHXYQGCE-UHFFFAOYSA-N	2.2×10^{10} 4.6×10^7 1.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6125CO $C_6H_6O_3$ RFTMILUWMDIPHH-UHFFFAOYSA-N	9.3×10^4 6.2×10^4 5.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6135COOOH $C_6H_8O_5$ HGYTXVUJUMREIP-UHFFFAOYSA-N	1.7×10^9 4.8×10^6 2.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6145COOOH $C_6H_8O_5$ DSJLQKNTJKMXRQ-UHFFFAOYSA-N	1.7×10^9 7.8×10^6 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C615CO2OOH $C_6H_8O_4$ MOFLPBJDWVVKPL-UHFFFAOYSA-N	1.1×10^7 1.2×10^5 2.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C615CO $C_6H_8O_3$ BRRWJVYIMRBLKB-UHFFFAOYSA-N	2.2×10^4 2.8×10^2 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C616OOH $C_6H_8O_5$ RZNSBZRPHHAABM-UHFFFAOYSA-N	2.4×10^9 1.7×10^7 3.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C617OOH $C_6H_{10}O_4$ VPKXUGZDYIOAPR-UHFFFAOYSA-N	1.8×10^6 6.2×10^3 4.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C618OOH $C_6H_{10}O_4$ AMQFKFSLRYJMS-UHFFFAOYSA-N	1.8×10^6 2.8×10^3 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C620OOH $C_6H_8O_5$ UWWRYJPKFSIPFS-UHFFFAOYSA-N	2.4×10^9 1.0×10^7 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C626OOH $C_6H_{10}O_4$ DHTMLHKAZOWLFT-UHFFFAOYSA-N	2.6×10^6 2.3×10^6 4.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C65OOH $C_6H_{10}O_4$ LHKMAYQHAYSMQO-UHFFFAOYSA-N	1.8×10^6 1.6×10^4 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO134 $C_6H_8O_3$ VIOZHXLWADQ-UHFFFAOYSA-N	2.3×10^4 1.3×10^3 6.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO4DB $C_6H_4O_4$ OGFBTMOHTIWBJU-UHFFFAOYSA-N	8.3×10^7 2.3×10^6 1.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6COALCO3H $\text{C}_6\text{H}_8\text{O}_5$ WRLXIVUJPLXKIG-UHFFFAOYSA-N	3.4×10^7 4.3×10^6 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6COCHOOOH $\text{C}_6\text{H}_{10}\text{O}_4$ DQAWORJSQGOPLV-UHFFFAOYSA-N	2.3×10^6 1.5×10^6 5.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CODIAL $\text{C}_6\text{H}_8\text{O}_3$ PAXFMQWEAJBIB-UHFFFAOYSA-N	2.8×10^4 3.2×10^4 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6DICARB $\text{C}_6\text{H}_8\text{O}_2$ GVKYFODEMNCLGS-UHFFFAOYSA-N	1.4×10^2 6.5×10^2 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO123C5CHO $\text{C}_6\text{H}_6\text{O}_4$ GLSSGXNNMIEKBR-UHFFFAOYSA-N	2.0×10^7 1.7×10^6 1.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO235C5CHO $\text{C}_6\text{H}_6\text{O}_4$ GPIFCHFPYCMCRY-UHFFFAOYSA-N	1.6×10^7 2.1×10^5 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO24M3CHO $\text{C}_6\text{H}_8\text{O}_3$ OQYGUGGUHGKPLC-UHFFFAOYSA-N	2.7×10^4 8.0×10^2 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2C4GLYOX $\text{C}_6\text{H}_8\text{O}_3$ YEJDUVJLIVLCFZ-UHFFFAOYSA-N	2.3×10^4 7.4×10^3 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2C54CHO $\text{C}_6\text{H}_{10}\text{O}_2$ IDAHIBMEKOEBSRG-UHFFFAOYSA-N	3.6×10^1 1.8×10^2 5.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2M33CHO $\text{C}_6\text{H}_{10}\text{O}_2$ HOOWKSPRVCRJJK-UHFFFAOYSA-N	2.5×10^1 1.1×10^1 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2M3C4CHO $\text{C}_6\text{H}_{10}\text{O}_2$ GQHWESFTVGVFIA-UHFFFAOYSA-N	3.6×10^1 1.8×10^2 4.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO35C5CHO $\text{C}_6\text{H}_8\text{O}_3$ KXLMWINKDVAJKB-UHFFFAOYSA-N	2.3×10^4 1.4×10^3 2.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO3C54CHO $\text{C}_6\text{H}_{10}\text{O}_2$ HFHZCESKBNQESK-UHFFFAOYSA-N	3.6×10^1 1.6×10^1 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO3C5CHO $C_6H_{10}O_2$ KKOFYQBBUSZDKJ-UHFFFAOYSA-N	3.0×10^1 2.3×10^2 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO45C5CHO $C_6H_8O_3$ WXTRRXKCNKUUA-UHFFFAOYSA-N	2.3×10^4 9.1×10^2 8.1×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ECO4 $C_6H_6O_4$ RGMUISDTMIPFQK-UHFFFAOYSA-N	1.6×10^7 2.5×10^5 4.2×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC5DICARB $C_6H_8O_2$ PEBMJGJUFNQE-UHFFFAOYSA-N	1.0×10^2 8.9×10^2 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4DBM2CO3H $C_7H_8O_5$ OAFSDIWBIPMWQP-UHFFFAOYSA-N	7.8×10^7 5.1×10^6 8.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C617CHO $C_7H_{10}O_3$ NFXFJRVNKJYMOX-UHFFFAOYSA-N	1.8×10^4 4.6×10^2 7.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C617CO3H $C_7H_{10}O_5$ GEJLCFNTSCJUHBUH-UHFFFAOYSA-N	2.0×10^7 1.2×10^5 5.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C618CO3H $C_7H_{10}O_5$ BCVYZYXNMFZMHQ-UHFFFAOYSA-N	2.0×10^7 1.0×10^5 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C626CHO $C_7H_{10}O_3$ HBIIDTOPQGUQOQ-UHFFFAOYSA-N	2.6×10^4 5.4×10^4 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C626CO3H $C_7H_{10}O_5$ XXGYBOYKTQFTKB-UHFFFAOYSA-N	3.2×10^7 2.9×10^6 8.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6M5CO2OOH $C_7H_{10}O_4$ BPEPZMFTCHTDHQ-UHFFFAOYSA-N	6.0×10^6 1.4×10^4 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C715CO2OOH $C_7H_{10}O_4$ MXRQCKDWMJYUGS-UHFFFAOYSA-N	1.0×10^7 5.8×10^4 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C716OOH $C_7H_{10}O_5$ PDOSKCUHLZEIAA-UHFFFAOYSA-N	1.6×10^9 8.3×10^6 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C717OOH $C_7H_{10}O_5$ PIJZITIWOWVNF-UHFFFAOYSA-N	1.6×10^9 4.9×10^7 6.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C718OOH $C_7H_{12}O_4$ IUOFUPZPJIEECL-UHFFFAOYSA-N	1.5×10^6 2.0×10^5 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C731OOH $C_7H_{12}O_4$ GGMJSZWHXPYNJN-UHFFFAOYSA-N	2.1×10^6 4.3×10^6 4.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C735OOH $C_7H_{10}O_5$ FKXMDVITUJPH-UHFFFAOYSA-N	1.4×10^9 8.0×10^6 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C736CO $C_7H_8O_3$ XIQVOMVDKSOEBZ-UHFFFAOYSA-N	5.3×10^4 1.4×10^4 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C736OOH $C_7H_{10}O_4$ FLZNSMFAMOSJOT-UHFFFAOYSA-N	4.3×10^6 1.4×10^5 4.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7ADICARB $C_7H_{10}O_2$ JOIPXRIQHWMPFU-UHFFFAOYSA-N	6.9×10^1 1.3×10^3 8.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7CO2DBAL $C_7H_8O_3$ YGMUVGSOGISXBZ-UHFFFAOYSA-N	7.6×10^4 5.5×10^4 3.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7CO2DCO3H $C_7H_8O_5$ GSEZJGCNFTSDI-UHFFFAOYSA-N	9.3×10^7 1.8×10^6 2.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7CO4DB $C_7H_6O_4$ RYPSCZRULGRFHH-UHFFFAOYSA-N	5.8×10^7 1.5×10^6 4.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7DDICARB $C_7H_{10}O_2$ SRVPSCZJUZZLCY-UHFFFAOYSA-N	9.3×10^1 6.2×10^2 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7DICARB $C_7H_{10}O_2$ GLRVVKVYRCSDF-UHFFFAOYSA-N	1.1×10^2 3.7×10^2 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO235C6CHO $C_7H_8O_4$ DKBJFPXQZAZJBK-UHFFFAOYSA-N	1.2×10^7 2.6×10^5 4.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO25C6CHO $C_7H_{10}O_3$ ZTMYUKBUAYLBJN-UHFFFAOYSA-N	1.9×10^4 2.6×10^4 4.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IC7DICARB $C_7H_{10}O_2$ XQQMMKHYZYQABV-UHFFFAOYSA-N	1.3×10^2 3.1×10^2 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC6CO2OOH $C_7H_{10}O_4$ HBFXSTFRJMUUSF-UHFFFAOYSA-N	6.0×10^6 6.2×10^3 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4DBMECO3H $C_8H_{10}O_5$ MRKOFGLZVJMLJ-UHFFFAOYSA-N	6.0×10^7 2.2×10^6 6.5×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO4M2DB $C_8H_8O_4$ XSTUBABFSAZOJC-UHFFFAOYSA-N	3.9×10^7 1.7×10^6 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6ETCO4DB $C_8H_8O_4$ OAQBTICOMUFUNE-UHFFFAOYSA-N	4.5×10^7 8.1×10^5 2.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C718CO3H $C_8H_{12}O_5$ TVOCFMMHLDKVAZ-UHFFFAOYSA-N	1.7×10^7 2.4×10^5 8.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C731CO3H $C_8H_{12}O_5$ NTZMYPVPFPPPF-UHFFFAOYSA-N	2.5×10^7 2.1×10^6 8.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7M6CO2OOH $C_8H_{12}O_4$ SYXNCLQMRSNQC-UHFFFAOYSA-N	5.4×10^6 6.6×10^3 5.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7MCO2DBAL $C_8H_{10}O_3$ PDQBAXJOXSGWHJ-UHFFFAOYSA-N	7.1×10^4 3.2×10^4 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7MCO2OOH $C_8H_{12}O_4$ IVJZKSXAPVTQOQ-UHFFFAOYSA-N	8.9×10^6 3.6×10^4 7.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C815CO2OOH $C_8H_{12}O_4$ BDUHFTDKOJODDX-UHFFFAOYSA-N	7.8×10^6 3.2×10^4 6.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C817CO $C_8H_{12}O_3$ WSCYQCAMZDXSLH-UHFFFAOYSA-N	3.1×10^5 1.7×10^4 5.8×10^3 3.1×10^3	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C830CO $C_8H_{12}O_2$ MHDCXCKIQVLVLU-UHFFFAOYSA-N	5.9×10^1 3.8×10^2 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C831CO $C_8H_{12}O_3$ ZUSGUVUFJOBUST-UHFFFAOYSA-N	1.4×10^4 5.4×10^3 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C86OOH $C_8H_{14}O_4$ DHFNMJQLJIWHS-UHFFFAOYSA-N	1.4×10^6 3.0×10^5 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C87CO $C_8H_{10}O_4$ ZGSYEWZWRFTZRGU-UHFFFAOYSA-N	1.5×10^7 7.1×10^4 2.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C87OOH $C_8H_{12}O_5$ ZQZQVMIZJFYBCH-UHFFFAOYSA-N	1.2×10^9 2.8×10^6 9.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8CO2DBAL $C_8H_{10}O_3$ WFUAEUZWLUGFPU-UHFFFAOYSA-N	6.8×10^4 3.9×10^4 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8CO2DCO3H $C_8H_{10}O_5$ AFZRTBPBEHNPV-UHFFFAOYSA-N	7.4×10^7 1.0×10^6 1.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8CO4DB $C_8H_8O_4$ XMBXSFIUGNBAMW-UHFFFAOYSA-N	3.9×10^7 1.1×10^6 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8DCO2CO3H $C_8H_{10}O_5$ LSJULIYFTAQYGE-UHFFFAOYSA-N	8.3×10^7 1.2×10^6 1.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO4DBC8 $C_8H_8O_4$ UUVQVHMBIAKFN-UHFFFAOYSA-N	3.9×10^7 1.1×10^6 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC7CO2OOH $C_8H_{12}O_4$ XEFYLFAPQOHXQI-UHFFFAOYSA-N	5.4×10^6 3.0×10^3 9.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO4MEDB $C_9H_{10}O_4$ KWNNUZJFJQSMOTR-UHFFFAOYSA-N	3.0×10^7 1.1×10^6 6.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6IPRCO4DB $C_9H_{10}O_4$ PHOIWTKCTUWXFI-UHFFFAOYSA-N	4.2×10^7 8.7×10^5 1.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6PRCO4DB $\text{C}_9\text{H}_{10}\text{O}_4$ ZAOQHXFQWRKJIE-UHFFFAOYSA-N	3.7×10^7 9.6×10^5 1.9×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7CO4EDB $\text{C}_9\text{H}_{10}\text{O}_4$ ZLFZFHOUUMHREF-UHFFFAOYSA-N	3.0×10^7 1.3×10^6 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7ECO4DB $\text{C}_9\text{H}_{10}\text{O}_4$ AWHQTSPUFRSDOO-UHFFFAOYSA-N	3.0×10^7 1.3×10^6 7.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C827CHO $\text{C}_9\text{H}_{14}\text{O}_3$ WRGXNTJWBXAOX-UHFFFAOYSA-N	9.6×10^3 8.5×10^3 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C828CHO $\text{C}_9\text{H}_{12}\text{O}_4$ YZUHPZZEPOWVFM-UHFFFAOYSA-N	7.1×10^6 5.8×10^4 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C87CO3H $\text{C}_9\text{H}_{12}\text{O}_6$ AJHPLULEOIFIGV-UHFFFAOYSA-N	1.5×10^{10} 5.3×10^7 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C88CHO $\text{C}_9\text{H}_{12}\text{O}_3$ NXCXUGLKKPDWEC-UHFFFAOYSA-N	3.5×10^4 8.9×10^4 8.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C914CO $\text{C}_9\text{H}_{10}\text{O}_4$ RDBINALOBQAVHT-UHFFFAOYSA-N	2.3×10^7 1.5×10^7 5.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C914OOH $\text{C}_9\text{H}_{12}\text{O}_5$ ZERYOMDBUHTQAV-UHFFFAOYSA-N	2.6×10^9 1.6×10^8 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C915OOH $\text{C}_9\text{H}_{14}\text{O}_4$ IHUGTHJLMVJJBZ-UHFFFAOYSA-N	4.0×10^6 4.2×10^6 2.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C916OOH $\text{C}_9\text{H}_{14}\text{O}_5$ FURCCROLNKVFJP-UHFFFAOYSA-N	1.0×10^9 4.8×10^7 4.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C918OOH $\text{C}_9\text{H}_{14}\text{O}_4$ RVRGXPTVZZTPQO-UHFFFAOYSA-N	4.0×10^6 7.8×10^5 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C919OOH $\text{C}_9\text{H}_{14}\text{O}_5$ HGDKSMVLGYFVMB-UHFFFAOYSA-N	1.0×10^9 4.5×10^7 2.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C926OOH $\text{C}_9\text{H}_{14}\text{O}_5$ YGLJXDYJGXWZRQ-UHFFFAOYSA-N	7.3×10^8 5.5×10^6 2.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C930OOH $\text{C}_9\text{H}_{14}\text{O}_5$ UQPOFUKCKANZIY-UHFFFAOYSA-N	7.3×10^8 2.6×10^7 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO4DBC9 $\text{C}_9\text{H}_{10}\text{O}_4$ KCIAXTRCVKQJBW-UHFFFAOYSA-N	2.5×10^7 1.2×10^6 7.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMLKACO $\text{C}_9\text{H}_{12}\text{O}_4$ JZUAMOXWRDMCCH-UHFFFAOYSA-N	1.0×10^7 8.1×10^5 8.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMLKAOOH $\text{C}_9\text{H}_{14}\text{O}_5$ VTXNRXDJNZTEJV-UHFFFAOYSA-N	1.2×10^9 1.7×10^7 9.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMLKBCO $\text{C}_9\text{H}_{12}\text{O}_4$ UMGHNOQMPCKCSD-UHFFFAOYSA-N	1.3×10^7 5.5×10^5 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMLKBOOH $\text{C}_9\text{H}_{14}\text{O}_5$ YVDVZIZUYUAKKJ-UHFFFAOYSA-N	1.0×10^9 3.6×10^7 3.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMLKET $\text{C}_9\text{H}_{14}\text{O}_3$ CWEQHJLFCKMWEE-UHFFFAOYSA-N	1.1×10^6 1.4×10^4 5.4×10^4 3.8×10^4	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:NORLIMAL $\text{C}_9\text{H}_{14}\text{O}_2$ WPNOYHDEEVPEJH-UHFFFAOYSA-N	6.1×10^2 4.9×10^1 1.0×10^2 9.8×10^1	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:NORPINAL $\text{C}_9\text{H}_{14}\text{O}_2$ CRBGTXDFEDFSU-UHFFFAOYSA-N	5.3×10^1 2.2×10^2 4.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1010OOH $\text{C}_{10}\text{H}_{16}\text{O}_4$ PQCOZMUQYGSZBV-UHFFFAOYSA-N	2.0×10^6 3.8×10^5 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1012CO $\text{C}_{10}\text{H}_{16}\text{O}_3$ ZTXNVHZVZBDWRG-UHFFFAOYSA-N	7.4×10^3 6.5×10^4 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1012OOH $\text{C}_{10}\text{H}_{18}\text{O}_4$ NQAGNHJKHGEOIP-UHFFFAOYSA-N	9.8×10^5 3.5×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C106OOH $C_{10}H_{16}O_5$ QENSMPURVPEBQ-UHFFFAOYSA-N	6.8×10^8 3.2×10^7 1.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C107OOH $C_{10}H_{16}O_4$ JYIMELQJWXRSLA-UHFFFAOYSA-N	2.1×10^6 1.6×10^4 3.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C108OOH $C_{10}H_{16}O_5$ AIXQDYAMZUITKH-UHFFFAOYSA-N	6.8×10^8 1.7×10^7 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C109CO $C_{10}H_{14}O_3$ GPWOGFGLGKGEOT-UHFFFAOYSA-N	3.9×10^4 5.6×10^3 8.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C109OOH $C_{10}H_{16}O_4$ ODTCGEBAGAWAJ-UHFFFAOYSA-N	3.2×10^6 5.8×10^4 5.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMALACO $C_{10}H_{14}O_3$ OXUPJDFJWCMZMO-UHFFFAOYSA-N	4.3×10^4 2.6×10^4 2.9×10^3 3.2×10^1	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:LIMALAOOH $C_{10}H_{16}O_4$ DVORBFWFUCUOYLW-UHFFFAOYSA-N	2.5×10^5 3.5×10^6 1.1×10^4 4.2×10^3	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:LIMALBCO $C_{10}H_{14}O_3$ OFCYPGCVYWHDSNB-UHFFFAOYSA-N	3.5×10^4 2.0×10^3 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMALBOOH $C_{10}H_{16}O_4$ DCWLKDSHBWMMQU-UHFFFAOYSA-N	2.4×10^5 2.9×10^6 2.0×10^4 1.4×10^4	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:LIMAL $C_{10}H_{16}O_2$ OGCGCISRMFSLTC-UHFFFAOYSA-N	4.0×10^2 3.8×10^1 7.4×10^1 2.1×10^2	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:PINAL $C_{10}H_{16}O_2$ GCHDWVBHKKDJOKU-UHFFFAOYSA-N	4.3×10^1 2.0×10^2 1.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PINALOOH $C_{10}H_{16}O_4$ IKYOAMQPSDRUHL-UHFFFAOYSA-N	2.1×10^6 1.0×10^6 5.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C116CO $C_{11}H_{16}O_3$ XGVKCDPIYHMT-UHFFFAOYSA-N	3.0×10^4 2.0×10^4 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C116OOH $C_{11}H_{18}O_4$ GLQGYMROFUHSE-UHFFFAOYSA-N	2.6×10^6 2.0×10^6 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C116CHO $C_{12}H_{18}O_3$ LCDZSXGLJAAQMI-UHFFFAOYSA-N	2.8×10^4 1.4×10^5 1.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C116CO3H $C_{12}H_{18}O_5$ DYOBAPPYFCOAS-UHFFFAOYSA-N	3.0×10^7 2.4×10^6 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1210OOH $C_{12}H_{20}O_4$ KZRFFJDVJJJBDU-UHFFFAOYSA-N	2.2×10^6 4.7×10^6 4.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C129CO $C_{12}H_{16}O_4$ RGVZWLUBXGGBI-UHFFFAOYSA-N	1.9×10^7 8.7×10^5 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C129OOH $C_{12}H_{18}O_5$ OVAMHHASBHCMI-UHFFFAOYSA-N	2.2×10^9 1.5×10^7 2.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1210CO3H $C_{13}H_{20}O_5$ BXGKTBFJJURUHS-UHFFFAOYSA-N	2.8×10^7 1.9×10^6 6.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C131CO $C_{13}H_{20}O_3$ FDPPFMUIMWYEIX-UHFFFAOYSA-N	1.8×10^4 2.1×10^4 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCLKACO $C_{14}H_{20}O_4$ ARRZIWJBSIOKE-UHFFFAOYSA-N	1.0×10^7 3.2×10^6 4.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCLKAOOH $C_{14}H_{22}O_5$ CKBNEDHFQWQWD-UHFFFAOYSA-N	1.1×10^9 1.7×10^7 2.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCLKBCO $C_{14}H_{20}O_4$ NZHCLRCYZNBCMK-UHFFFAOYSA-N	1.4×10^7 2.9×10^6 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCLKBOOH $C_{14}H_{22}O_5$ CNYMBWKCKYTSRZ-UHFFFAOYSA-N	1.1×10^9 4.6×10^7 1.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BCLKCCO $C_{14}H_{20}O_4$ RVZWWCAHYGTHHX-UHFFFAOYSA-N	1.0×10^7 1.2×10^6 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCLKCOOH $C_{14}H_{22}O_5$ OVPKMRRDRUAGIL-UHFFFAOYSA-N	1.1×10^9 1.5×10^7 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCLKET $C_{14}H_{22}O_3$ UGDRYISIDBCIAI-UHFFFAOYSA-N	1.5×10^4 1.4×10^5 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C141CO $C_{14}H_{22}O_2$ LUPUYUXNGLIEMW-UHFFFAOYSA-N	4.7×10^1 1.6×10^2 7.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C146CO $C_{14}H_{20}O_4$ ODTZTSYIOXMEF-UHFFFAOYSA-N	1.0×10^7 1.1×10^6 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C146OOH $C_{14}H_{22}O_5$ SPXXDEFIDYFSMG-UHFFFAOYSA-N	1.1×10^9 1.3×10^7 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCALACO $C_{15}H_{22}O_3$ ULXUQSOGQJAAAV-UHFFFAOYSA-N	2.8×10^4 3.6×10^3 4.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCALAOOH $C_{15}H_{24}O_4$ CATQWYAHYHBBFL-UHFFFAOYSA-N	3.2×10^6 1.4×10^4 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCALBCO $C_{15}H_{22}O_3$ DVBAGSYXLVWTHM-UHFFFAOYSA-N	3.4×10^4 2.9×10^3 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCALBOOH $C_{15}H_{24}O_4$ BXDTVEFUTYSWEH-UHFFFAOYSA-N	2.8×10^6 3.6×10^4 1.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCAL $C_{15}H_{24}O_2$ PJJCDGMFEIQRZ-UHFFFAOYSA-N	3.7×10^1 1.1×10^2 3.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCALCCO $C_{15}H_{22}O_3$ RMGPJKLPPRXORI-UHFFFAOYSA-N	2.8×10^4 4.7×10^3 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCALCOOH $C_{15}H_{24}O_4$ WQOUANLPJNTVBV-UHFFFAOYSA-N	3.2×10^6 1.7×10^4 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PHGLYOX $\text{C}_8\text{H}_6\text{O}_2$ OJUGVDONPJEEC-UHFFFAOYSA-N	1.9×10^3 8.9×10^1 8.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPHGLYOX $\text{C}_9\text{H}_8\text{O}_2$ ILRFLXHCGRIN-UHFFFAOYSA-N	1.1×10^3 1.1×10^2 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMPHGLYOX $\text{C}_{10}\text{H}_{10}\text{O}_2$ COKLAMNWKZGIN-UHFFFAOYSA-N	6.5×10^2 6.6×10^1 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EMPHGLYOX $\text{C}_{11}\text{H}_{12}\text{O}_2$ LRURTOBJFCJOFF-UHFFFAOYSA-N	5.9×10^2 5.3×10^1 8.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOCH2COCHO $\text{C}_3\text{H}_4\text{O}_3$ JLPAWRLRMTZCSF-UHFFFAOYSA-N	7.6×10^3 4.4×10^3 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CCOCOCOH $\text{C}_4\text{H}_6\text{O}_3$ AWMGPEHDHJUMEN-UHFFFAOYSA-N	7.1×10^3 3.2×10^3 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO13C4OH $\text{C}_4\text{H}_6\text{O}_3$ KATSYVMPKZTIRW-UHFFFAOYSA-N	6.2×10^3 2.3×10^4 4.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2H3CHO $\text{C}_4\text{H}_6\text{O}_3$ GTYYVZUSWKGYETP-UHFFFAOYSA-N	1.6×10^3 1.1×10^4 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H13CO2CHO $\text{C}_4\text{H}_6\text{O}_4$ RAPYKXPBVBNJGC-UHFFFAOYSA-N	1.0×10^6 4.6×10^5 3.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H1CO23CHO $\text{C}_4\text{H}_4\text{O}_4$ XSEYITBSKRUSNL-UHFFFAOYSA-N	4.7×10^6 1.2×10^6 3.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO1CO3CHO $\text{C}_4\text{H}_6\text{O}_3$ CUSSNCHZLYDUPJ-UHFFFAOYSA-N	1.2×10^5 4.0×10^4 6.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOCOC4DIAL $\text{C}_4\text{H}_4\text{O}_4$ JWBVDBDNUQOAG-UHFFFAOYSA-N	1.4×10^6 5.3×10^5 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4MCO2OH $\text{C}_5\text{H}_8\text{O}_3$ YKNUMNAVGAMCFT-UHFFFAOYSA-N	8.7×10^2 3.2×10^3 2.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C512OH $C_5H_8O_3$ ZSJOVUGBPPFONP-UHFFFAOYSA-N	1.1×10^5 1.5×10^5 5.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5134CO2OH $C_5H_6O_4$ UFXGMYHYMGNRSQ-UHFFFAOYSA-N	9.8×10^5 4.2×10^5 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C513CO $C_5H_6O_4$ GBFAZHBQBSKET-UHFFFAOYSA-N	7.1×10^7 5.9×10^6 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C513OH $C_5H_8O_4$ VLANIYKAIBISW-UHFFFAOYSA-N	3.6×10^6 8.9×10^7 4.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C513OOH $C_5H_8O_5$ FJRVRXOZJCMNIT-UHFFFAOYSA-N	8.9×10^9 2.5×10^8 5.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C514CO23OH $C_5H_8O_4$ JLVNMCMGUWUGCO-UHFFFAOYSA-N	4.3×10^5 4.5×10^6 4.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C520OH $C_5H_8O_4$ BXHDMMHJHUOSNS-UHFFFAOYSA-N	1.1×10^6 1.1×10^6 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C520OOH $C_5H_8O_5$ BCWSZSNCGSGOQJ-UHFFFAOYSA-N	7.1×10^9 3.0×10^6 2.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CO3OH $C_5H_6O_4$ UUUQEQLQOQXBA-UHFFFAOYSA-N	9.8×10^5 6.2×10^5 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5DICAROOH $C_5H_8O_5$ SXCXUVJXNGWYKY-UHFFFAOYSA-N	6.2×10^8 1.3×10^7 2.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO3H4CHO $C_5H_8O_3$ GHHQRUFNLVFPQ-UHFFFAOYSA-N	1.3×10^3 7.1×10^3 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H1C23C4CHO $C_5H_6O_4$ VBLXHDGHHJBCMK-UHFFFAOYSA-N	3.6×10^6 1.1×10^6 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HMKVBCO $C_5H_8O_3$ XYGGMZYIGPNCC-UHFFFAOYSA-N	3.6×10^5 1.1×10^5 1.3×10^5 2.5×10^2	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO2CO4CHO $\text{C}_5\text{H}_8\text{O}_3$ NSUJYXKDWMPFQ-UHFFFAOYSA-N	1.1×10^5 2.5×10^4 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOIPRGLYOX $\text{C}_5\text{H}_8\text{O}_3$ ROKGRLLJNHSUEOC-UHFFFAOYSA-N	1.1×10^5 3.2×10^4 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IEC2OOH $\text{C}_5\text{H}_8\text{O}_5$ KGZJHQJCDPZOFQ-UHFFFAOYSA-N	3.0×10^8 2.0×10^6 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MBOCOCO $\text{C}_5\text{H}_8\text{O}_3$ OCAJTNNCRSVJNU-UHFFFAOYSA-N	3.9×10^3 6.8×10^2 8.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C43OHCOCHO $\text{C}_6\text{H}_{10}\text{O}_3$ NMZPCKZSNUOBSC-UHFFFAOYSA-N	1.0×10^5 2.8×10^4 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C517CHO $\text{C}_6\text{H}_{10}\text{O}_3$ JGHPNZFTVGLKF-UHFFFAOYSA-N	9.5×10^2 1.0×10^5 7.8×10^5 2.8×10^3	13000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C519CHO $\text{C}_6\text{H}_{10}\text{O}_3$ PVAHQKAVPKMXGV-UHFFFAOYSA-N	2.8×10^6 1.0×10^5 2.6×10^5 6.9×10^3	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C5COOHCO3H $\text{C}_6\text{H}_6\text{O}_6$ DETDHNNYOALO-UHFFFAOYSA-N	4.7×10^9 3.2×10^9 8.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5MO132OH $\text{C}_6\text{H}_{10}\text{O}_3$ YVTXQDAOLHXGGS-UHFFFAOYSA-N	1.2×10^3 3.0×10^3 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6134CO2OH $\text{C}_6\text{H}_8\text{O}_4$ ZUSWTYLGZLTMD-UHFFFAOYSA-N	7.8×10^5 1.8×10^5 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C614CO23OH $\text{C}_6\text{H}_{10}\text{O}_4$ FTHGMBBEYTXWQT-UHFFFAOYSA-N	3.4×10^5 3.6×10^6 1.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C615CO2OH $\text{C}_6\text{H}_8\text{O}_3$ AEWAJJBQFQHEAB-UHFFFAOYSA-N	2.1×10^4 1.1×10^5 3.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C616OH $\text{C}_6\text{H}_8\text{O}_4$ VJOSQGBXCQMKDE-UHFFFAOYSA-N	9.3×10^5 7.4×10^6 8.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C617OH $C_6H_{10}O_3$ GSQCYSIEWGMUPC-UHFFFAOYSA-N	3.2×10^3 4.8×10^3 7.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C620OH $C_6H_8O_4$ SMLWDBHBBFROKP-UHFFFAOYSA-N	4.2×10^6 9.6×10^6 4.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C628OH $C_6H_{10}O_4$ XRZKKMNIWJFNJQ-UHFFFAOYSA-N	4.0×10^6 3.6×10^7 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C628OOH $C_6H_{10}O_5$ BGLGDSUTRZUMD-UHFFFAOYSA-N	6.3×10^9 5.4×10^7 3.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C629OH $C_6H_{10}O_4$ MIXLBBAGKJLCSO-UHFFFAOYSA-N	2.0×10^6 1.1×10^7 3.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C629OOH $C_6H_{10}O_5$ PARGUUHBPMBOS-UHFFFAOYSA-N	4.9×10^9 2.0×10^7 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C630CO $C_6H_8O_3$ AUMGTZPDEFNUMP-UHFFFAOYSA-N	2.0×10^5 3.4×10^5 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C65OH $C_6H_{10}O_3$ ZWRMEYSYDMGCIE-UHFFFAOYSA-N	3.2×10^3 3.4×10^4 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C67CHO $C_6H_{10}O_3$ BZFPZPOBVBFBEG-UHFFFAOYSA-N	3.2×10^3 6.2×10^3 8.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO2M2OH $C_6H_{10}O_4$ ZFPKEBYORKZJID-UHFFFAOYSA-N	2.3×10^5 4.4×10^6 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO2OHOH $C_6H_{10}O_5$ LMEOLDNWXVYVMAA-UHFFFAOYSA-N	3.4×10^8 3.3×10^6 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO3MOH $C_6H_8O_4$ WLLLOUAAGAGCV-UHFFFAOYSA-N	5.4×10^5 8.3×10^4 4.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6COHOCHO $C_6H_{10}O_3$ HJNIDOQIVMJXHS-UHFFFAOYSA-N	8.3×10^4 4.0×10^5 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6DICAROOH $C_6H_{10}O_5$ HIILQMKIFXFEHC-UHFFFAOYSA-N	5.5×10^8 9.6×10^6 2.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6O132OH $C_6H_{10}O_3$ GIDOBZXUXDNRDY-UHFFFAOYSA-N	1.2×10^3 3.6×10^3 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6TONOHOOH $C_6H_8O_6$ CIXJOARRJVUNUZ-UHFFFAOYSA-N	2.6×10^{11} 1.1×10^{10} 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M3CO4CHO $C_6H_{10}O_3$ MIIVJRGFVJVTGE-UHFFFAOYSA-N	1.1×10^5 2.6×10^4 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3C25C5CHO $C_6H_8O_4$ CLPDVMSDUESLY-UHFFFAOYSA-N	3.4×10^6 2.0×10^6 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM22COCHO $C_6H_{10}O_3$ UTYMQWKMYQTHJ-UHFFFAOYSA-N	6.2×10^4 1.8×10^4 6.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC52CO2OH $C_6H_{10}O_4$ LGFUKTGFFSPNKZ-UHFFFAOYSA-N	2.3×10^5 4.6×10^6 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC5COOHOOH $C_6H_{10}O_5$ XFHCIPDXRRXAPB-UHFFFAOYSA-N	3.4×10^8 6.0×10^6 8.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBKHO4CHO $C_6H_{10}O_3$ OYDFBAKICJVUQJ-UHFFFAOYSA-N	6.2×10^4 1.3×10^4 1.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C61CHO $C_7H_{10}O_4$ BDFRSVKDVGXKLG-UHFFFAOYSA-N	6.3×10^5 1.4×10^5 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C62CHO $C_7H_{10}O_4$ QCTBGQUOXZEIH-UHFFFAOYSA-N	7.3×10^5 1.3×10^5 4.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6COOHCO3H $C_7H_8O_6$ BNWBZUAKPODUMK-UHFFFAOYSA-N	3.0×10^9 2.4×10^9 3.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6M5CO2OH $C_7H_{10}O_3$ YAAUSHWRBSRFSJ-UHFFFAOYSA-N	1.1×10^4 2.2×10^4 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C715CO2OH $C_7H_{10}O_3$ KBBGTWJMXYAKIO-UHFFFAOYSA-N	1.7×10^4 7.6×10^4 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C716OH $C_7H_{10}O_4$ QFGSQPDLKNLDDS-UHFFFAOYSA-N	2.8×10^6 6.8×10^6 9.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C717OH $C_7H_{10}O_4$ SEENFYUXRQNHQ-UHFFFAOYSA-N	5.3×10^7 1.6×10^7 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C718OH $C_7H_{12}O_3$ ALYGFZDZOCWXM-UHFFFAOYSA-N	5.5×10^4 2.7×10^4 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C731OH $C_7H_{12}O_3$ KHEBQEUBDOAJRG-UHFFFAOYSA-N	8.0×10^4 1.7×10^6 8.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C733CO $C_7H_{10}O_4$ IRSIMXCKMCQRGW-UHFFFAOYSA-N	5.3×10^7 1.9×10^7 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C733OH $C_7H_{12}O_4$ WRHSSXYTISGZIA-UHFFFAOYSA-N	1.2×10^7 3.3×10^8 3.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C733OOH $C_7H_{12}O_5$ OWEUBRYSVXGVIC-UHFFFAOYSA-N	7.4×10^9 7.3×10^8 2.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C735OH $C_7H_{10}O_4$ PHOAHMZZKPNPAM-UHFFFAOYSA-N	2.2×10^6 1.7×10^7 4.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C736OH $C_7H_{10}O_3$ QWXLVLIZAXRZBR-UHFFFAOYSA-N	8.3×10^3 1.3×10^5 3.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7ADCOH $C_7H_{12}O_4$ SVQINHOHTZDOCH-UHFFFAOYSA-N	1.3×10^5 2.8×10^6 7.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7ADCOOH $C_7H_{12}O_5$ COQUITHNSRNVBJ-UHFFFAOYSA-N	1.9×10^8 5.1×10^6 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7CO3OHOH $C_7H_{10}O_6$ YAEIVOJGWQGWPS-UHFFFAOYSA-N	3.0×10^{11} 3.2×10^8 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C7DCOH $C_7H_{12}O_4$ VIPBNC DHLKDPDM-UHFFFAOYSA-N	2.8×10^5 1.9×10^6 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7DCOOH $C_7H_{12}O_5$ AVRZSWZUKXCJRK-UHFFFAOYSA-N	4.4×10^8 5.1×10^6 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7DDCOH $C_7H_{12}O_4$ HYCGRSOMYJQICU-UHFFFAOYSA-N	1.8×10^5 2.6×10^6 6.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7DDCOOH $C_7H_{12}O_5$ VSEOFSAKNXJKSZ-UHFFFAOYSA-N	3.0×10^8 1.4×10^6 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IC7DCOH $C_7H_{12}O_4$ DEDFQTYPJDBATI-UHFFFAOYSA-N	3.2×10^5 1.5×10^6 7.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IC7DCOOH $C_7H_{12}O_5$ ZVFWDEWSMKAAIM-UHFFFAOYSA-N	5.1×10^8 5.8×10^6 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC6CO2OH $C_7H_{10}O_3$ BNJUZVCUVNAPOM-UHFFFAOYSA-N	1.1×10^4 1.0×10^4 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5M2OHC03H $C_8H_{10}O_6$ BRIBGOXGRALVGI-UHFFFAOYSA-N	2.1×10^9 3.2×10^9 9.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7M15CO2OH $C_8H_{12}O_3$ OEJDBFGEAKTZGI-UHFFFAOYSA-N	1.6×10^4 3.0×10^4 6.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7M6CO2OH $C_8H_{12}O_3$ WXVOVBAGQNBDEE-UHFFFAOYSA-N	9.3×10^3 1.3×10^4 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7M03OHOOH $C_8H_{12}O_6$ UOUKTGYLQYQUAO-UHFFFAOYSA-N	3.0×10^{11} 2.2×10^8 4.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7OHO2CO3H $C_8H_{10}O_6$ AOHPTSIBUCEZIIY-UHFFFAOYSA-N	2.8×10^9 1.7×10^9 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C815CO2OH $C_8H_{12}O_3$ IPCSMQASRIZASM-UHFFFAOYSA-N	1.5×10^4 3.8×10^4 6.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C824CO $\text{C}_8\text{H}_{12}\text{O}_3$ BQDQKENHFIOJZ-UHFFFAOYSA-N	1.5×10^5 4.6×10^4 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C83COOHOH $\text{C}_8\text{H}_{12}\text{O}_6$ LBBMWNQJHPRLO-UHFFFAOYSA-N	2.7×10^{11} 2.0×10^8 6.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C87OH $\text{C}_8\text{H}_{12}\text{O}_4$ DFOLUFIWIMPWQH-UHFFFAOYSA-N	2.4×10^6 2.1×10^6 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC7CO2OH $\text{C}_8\text{H}_{12}\text{O}_3$ BSMWBPakWVVEKL-UHFFFAOYSA-N	9.3×10^3 6.6×10^3 1.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5MEJCO3H $\text{C}_9\text{H}_{12}\text{O}_6$ IZKMPGKTEBWFPK-UHFFFAOYSA-N	1.7×10^9 2.2×10^9 5.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8O2OHC03H $\text{C}_9\text{H}_{12}\text{O}_6$ MBOWYQZNYXRQR-UHFFFAOYSA-N	2.6×10^9 1.3×10^9 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8OHO2CO3H $\text{C}_9\text{H}_{12}\text{O}_6$ CJLPRBWVJFSMFP-UHFFFAOYSA-N	2.2×10^9 1.1×10^9 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C914OH $\text{C}_9\text{H}_{12}\text{O}_4$ LFDXAZOJHXEEGS-UHFFFAOYSA-N	5.1×10^6 8.3×10^7 2.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C915OH $\text{C}_9\text{H}_{14}\text{O}_3$ FAAQZCMVHKUUSB-UHFFFAOYSA-N	1.5×10^5 2.8×10^6 8.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C916OH $\text{C}_9\text{H}_{14}\text{O}_4$ MXDMOPCDPNEDIT-UHFFFAOYSA-N	3.6×10^7 1.4×10^7 6.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C918OH $\text{C}_9\text{H}_{14}\text{O}_3$ NFJZVEFTUBPOLY-UHFFFAOYSA-N	1.5×10^5 4.4×10^5 1.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C919OH $\text{C}_9\text{H}_{14}\text{O}_4$ ULXJXURNPDAXQL-UHFFFAOYSA-N	3.6×10^7 1.5×10^7 3.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C926OH $\text{C}_9\text{H}_{14}\text{O}_4$ DBPGQZSZWKEZHT-UHFFFAOYSA-N	1.4×10^6 7.3×10^6 1.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C930OH $\text{C}_9\text{H}_{14}\text{O}_4$ LNIVXHBNGGOOPM-UHFFFAOYSA-N	2.6×10^7 5.3×10^6 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMLKAOH $\text{C}_9\text{H}_{14}\text{O}_4$ XDMVMFNHBSPJDDJ-UHFFFAOYSA-N	2.3×10^6 2.6×10^7 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMLKBOH $\text{C}_9\text{H}_{14}\text{O}_4$ JSAHIYWZESQWRA-UHFFFAOYSA-N	2.0×10^6 3.0×10^7 1.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NORLIMOOH $\text{C}_9\text{H}_{16}\text{O}_5$ CUMGKBRSRBORIJ-UHFFFAOYSA-N	3.8×10^9 3.8×10^8 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1010OH $\text{C}_{10}\text{H}_{16}\text{O}_3$ NQWGMZMLCPYJCB-UHFFFAOYSA-N	6.8×10^4 5.3×10^5 8.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1012OH $\text{C}_{10}\text{H}_{18}\text{O}_3$ ZSBOFHQMMVQAKS-UHFFFAOYSA-N	3.3×10^4 5.6×10^5 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C106OH $\text{C}_{10}\text{H}_{16}\text{O}_4$ LWIDJJPVYZTGLI-UHFFFAOYSA-N	2.5×10^7 8.1×10^6 9.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C107OH $\text{C}_{10}\text{H}_{16}\text{O}_3$ DUMRJPJWTFZCT-UHFFFAOYSA-N	3.7×10^3 5.9×10^4 6.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C108OH $\text{C}_{10}\text{H}_{16}\text{O}_4$ ZDBVABFEYYIFLR-UHFFFAOYSA-N	2.5×10^7 3.2×10^6 5.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C109OH $\text{C}_{10}\text{H}_{16}\text{O}_3$ PUENXTSKKXKPMK-UHFFFAOYSA-N	6.0×10^3 4.3×10^4 2.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMALAOH $\text{C}_{10}\text{H}_{16}\text{O}_3$ VNYSFQVUCPNMDZ-UHFFFAOYSA-N	3.1×10^4 5.8×10^3 3.6×10^4 1.0×10^3	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:LIMALBOH $\text{C}_{10}\text{H}_{16}\text{O}_3$ SMXSHIAZMJGAE-UHFFFAOYSA-N	5.6×10^3 1.8×10^4 5.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMALOH $\text{C}_{10}\text{H}_{18}\text{O}_4$ ISUQLRVPDSRIP-UHFFFAOYSA-N	2.2×10^{10} 4.2×10^7 2.8×10^8 9.3×10^5	18000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:LIMALOOH	4.3×10^{10}	18000	Wieser et al. (2023)	Q	437
$C_{10}H_{18}O_5$	3.5×10^9		Wang et al. (2017)	Q	80, 238
OQLBLHLZVAPRGN-UHFFFAOYSA-N	4.0×10^8		Wang et al. (2017)	Q	80, 239
	9.6×10^5		Wang et al. (2017)	Q	80, 240
MCM:PINALOH	8.1×10^4		Wang et al. (2017)	Q	80, 238
$C_{10}H_{16}O_3$	6.0×10^5		Wang et al. (2017)	Q	80, 239
NGFXWFWYSYUSJM-UHFFFAOYSA-N	7.1×10^3		Wang et al. (2017)	Q	80, 240
MCM:C116OH	9.8×10^4		Wang et al. (2017)	Q	80, 238
$C_{11}H_{18}O_3$	2.6×10^5		Wang et al. (2017)	Q	80, 239
JMGXHRKRVWURTTA-UHFFFAOYSA-N	5.8×10^3		Wang et al. (2017)	Q	80, 240
MCM:C117OH	8.5×10^6		Wang et al. (2017)	Q	80, 238
$C_{11}H_{18}O_4$	4.9×10^8		Wang et al. (2017)	Q	80, 239
XYBUENVNXDXQKB-UHFFFAOYSA-N	4.7×10^3		Wang et al. (2017)	Q	80, 240
MCM:C117OOH	5.4×10^9		Wang et al. (2017)	Q	80, 238
$C_{11}H_{18}O_5$	2.0×10^8		Wang et al. (2017)	Q	80, 239
NUIUIELMTMWFB-UHFFFAOYSA-N	5.9×10^5		Wang et al. (2017)	Q	80, 240
MCM:C118CO	1.3×10^{10}		Wang et al. (2017)	Q	80, 238
$C_{11}H_{16}O_5$	5.6×10^8		Wang et al. (2017)	Q	80, 239
QFBAMJSHDLKQRE-UHFFFAOYSA-N	6.3×10^5		Wang et al. (2017)	Q	80, 240
MCM:C118OH	6.2×10^{10}		Wang et al. (2017)	Q	80, 238
$C_{11}H_{18}O_5$	3.6×10^{10}		Wang et al. (2017)	Q	80, 239
GQNPBTACCNTXDZ-UHFFFAOYSA-N	2.9×10^5		Wang et al. (2017)	Q	80, 240
MCM:C118OOH	1.6×10^{12}		Wang et al. (2017)	Q	80, 238
$C_{11}H_{18}O_6$	3.0×10^{10}		Wang et al. (2017)	Q	80, 239
DZELKNYJHUANPY-UHFFFAOYSA-N	1.4×10^5		Wang et al. (2017)	Q	80, 240
MCM:C1210OH	7.6×10^4		Wang et al. (2017)	Q	80, 238
$C_{12}H_{20}O_3$	2.6×10^6		Wang et al. (2017)	Q	80, 239
RDCPBXUNBHOYIW-UHFFFAOYSA-N	1.6×10^3		Wang et al. (2017)	Q	80, 240
MCM:C1214OH	7.6×10^6		Wang et al. (2017)	Q	80, 238
$C_{12}H_{20}O_4$	4.7×10^8		Wang et al. (2017)	Q	80, 239
LBONAAUBRWCFLLP-UHFFFAOYSA-N	2.1×10^3		Wang et al. (2017)	Q	80, 240
MCM:C1214OOH	4.4×10^9		Wang et al. (2017)	Q	80, 238
$C_{12}H_{20}O_5$	1.8×10^8		Wang et al. (2017)	Q	80, 239
RDWLNWMMPUJYPV-UHFFFAOYSA-N	8.3×10^4		Wang et al. (2017)	Q	80, 240
MCM:C1215CO	1.0×10^{10}		Wang et al. (2017)	Q	80, 238
$C_{12}H_{18}O_5$	3.2×10^9		Wang et al. (2017)	Q	80, 239
MFAMPSJMWGSBSP-UHFFFAOYSA-N	2.8×10^6		Wang et al. (2017)	Q	80, 240
MCM:C1215OH	4.8×10^{10}		Wang et al. (2017)	Q	80, 238
$C_{12}H_{20}O_5$	1.1×10^{11}		Wang et al. (2017)	Q	80, 239
ICTVPTJMPURCGE-UHFFFAOYSA-N	3.2×10^6		Wang et al. (2017)	Q	80, 240



Table A3.6: Ketones (RCOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C1215OOH $C_{12}H_{20}O_6$ PWIVJRAMQXZVCR-UHFFFAOYSA-N	1.3×10^{12} 4.6×10^{10} 5.1×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C128CO $C_{12}H_{18}O_4$ UGSIBTFJEGNWKQ-UHFFFAOYSA-N	3.3×10^7 8.3×10^7 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C128OH $C_{12}H_{20}O_4$ CFXREDIWINSYMD-UHFFFAOYSA-N	1.5×10^8 2.8×10^9 1.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C128OOH $C_{12}H_{20}O_5$ UJLXMZVGYRRHNB-UHFFFAOYSA-N	4.7×10^9 2.6×10^9 3.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C129OH $C_{12}H_{18}O_4$ LZLVFVPHHNPPPO-UHFFFAOYSA-N	4.1×10^6 3.8×10^7 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1312CO $C_{13}H_{20}O_4$ OXGUTNXNCKSGQJ-UHFFFAOYSA-N	2.9×10^7 5.9×10^7 6.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1312OH $C_{13}H_{22}O_4$ IOOAKPNHTHIGJB-UHFFFAOYSA-N	1.4×10^8 1.7×10^9 2.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1312OOH $C_{13}H_{22}O_5$ IMCVJRKOQRMDFG-UHFFFAOYSA-N	3.6×10^9 6.5×10^8 3.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCLKAOH $C_{14}H_{22}O_4$ OIHLVIMTKSRRQE-UHFFFAOYSA-N	2.1×10^6 4.2×10^7 5.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCLKBOH $C_{14}H_{22}O_4$ LFMWXXSOGPOZAN-UHFFFAOYSA-N	1.9×10^6 3.0×10^7 7.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCLKCOH $C_{14}H_{22}O_4$ WUCWLUFQNHHRAC-UHFFFAOYSA-N	2.1×10^6 3.6×10^7 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C144OOH $C_{14}H_{24}O_5$ GLUIAMUUMIPXJY-UHFFFAOYSA-N	4.2×10^9 6.2×10^8 5.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C146OH $C_{14}H_{22}O_4$ MRXVSIMJFRVPA-UHFFFAOYSA-N	2.1×10^6 3.2×10^7 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.6: Ketones (RCOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BCALAOH	6.3×10^3		Wang et al. (2017)	Q	80, 238
$C_{15}H_{24}O_3$	3.3×10^4		Wang et al. (2017)	Q	80, 239
SOICZPFVBOBSJ-UHFFFAOYSA-N	6.3×10^3		Wang et al. (2017)	Q	80, 240
MCM:BCALBOH	5.3×10^3		Wang et al. (2017)	Q	80, 238
$C_{15}H_{24}O_3$	2.1×10^4		Wang et al. (2017)	Q	80, 239
WYNIZHBHTSXQOC-UHFFFAOYSA-N	5.9×10^4		Wang et al. (2017)	Q	80, 240
MCM:BCALCOH	6.3×10^3		Wang et al. (2017)	Q	80, 238
$C_{15}H_{24}O_3$	3.4×10^4		Wang et al. (2017)	Q	80, 239
NQPQIVDLCLYNNZ-UHFFFAOYSA-N	1.1×10^4		Wang et al. (2017)	Q	80, 240
MCM:BCALOH	4.4×10^7		Wang et al. (2017)	Q	80, 238
$C_{15}H_{26}O_4$	4.2×10^8		Wang et al. (2017)	Q	80, 239
MPEWUZJEETZOEJ-UHFFFAOYSA-N	5.4×10^5		Wang et al. (2017)	Q	80, 240
MCM:BCALOOH	3.2×10^9		Wang et al. (2017)	Q	80, 238
$C_{15}H_{26}O_5$	8.7×10^8		Wang et al. (2017)	Q	80, 239
HSCKVTFOUFPNNB-UHFFFAOYSA-N	3.6×10^7		Wang et al. (2017)	Q	80, 240



A3.7 Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH)

Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methanoic acid	8.8×10^1	6100	Burkholder et al. (2019)	L	
HCOOH	8.8×10^1	6100	Burkholder et al. (2015)	L	
(formic acid)	8.8×10^1	6100	Sander et al. (2011)	L	
[64-18-6]	8.8×10^1	6100	Sander et al. (2006)	L	
BDAGIHXXWSANSR-UHFFFAOYSA-N	6.7×10^1	5900	Staudinger and Roberts (2001)	L	
	8.8×10^1	6100	Johnson et al. (1996)	M	
	5.4×10^1		Khan et al. (1995)	M	
	5.4×10^1	5600	Khan and Brimblecombe (1992)	M	
	1.3×10^2		Servant et al. (1991)	M	487
	1.5×10^1		Hwang et al. (1992)	V	
		5700	Abraham (1984)	V	
		5600	Abraham (1984)	R	488
		5700	Winiwarter et al. (1988)	T	489
	3.7×10^1	5700	Jacob (1986)	T	490
	5.5×10^1		Keene and Galloway (1986)	T	
	7.5×10^1		Johnson (1990)	X	63
	5.9×10^1		Gaffney and Senum (1984)	X	389, 491
	5.1×10^1		Johnson et al. (1996)	C	
	5.1×10^1		Keene et al. (1995)	C	
	5.3×10^1		Keene et al. (1995)	C	
	3.7×10^1	5700	Lelieveld and Crutzen (1991)	C	
	3.5×10^1	5700	Pandis and Seinfeld (1989)	C	
	2.1×10^2		Keshavarz et al. (2022)	Q	
	4.0×10^1		Duchowicz et al. (2020)	Q	184
	2.2×10^1		Wang et al. (2017)	Q	80, 238
	2.5×10^2		Wang et al. (2017)	Q	80, 239
	1.0×10^2		Wang et al. (2017)	Q	80, 240
	2.3×10^2		Hilal et al. (2008)	Q	
	1.2×10^1		Modarresi et al. (2007)	Q	67
		5800	Kühne et al. (2005)	Q	
	5.8×10^1		Yaffe et al. (2003)	Q	248, 249
	8.6×10^1		Abraham (2003)	Q	
	7.7		Katritzky et al. (1998)	Q	
	5.9×10^1		Duchowicz et al. (2020)	?	185, 21
		6500	Kühne et al. (2005)	?	
	1.3×10^1		Yaws (1999)	?	21
	8.9		Yaws and Yang (1992)	?	21
ethanoic acid	4.0×10^1	6200	Burkholder et al. (2019)	L	
CH ₃ COOH	4.0×10^1	6200	Burkholder et al. (2015)	L	
(acetic acid)	4.0×10^1	6200	Sander et al. (2011)	L	
[64-19-7]	4.0×10^1	6200	Sander et al. (2006)	L	
QTBSBXVTEAMEQO-UHFFFAOYSA-N	4.6×10^1	6300	Staudinger and Roberts (2001)	L	
	1.4×10^1		von Hartungen et al. (2004)	M	
	4.0×10^1	6300	Johnson et al. (1996)	M	



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.4×10^1		Khan et al. (1995)	M	
	5.4×10^1	8300	Khan and Brimblecombe (1992)	M	
	9.2×10^1		Servant et al. (1991)	M	487
			Fredenhagen and Liebster (1932)	M	328
	9.1		Hwang et al. (1992)	V	
		6300	Abraham (1984)	V	
		6200	Abraham (1984)	R	488
	4.8×10^1	6400	Plyasunov et al. (2001)	T	
	8.7×10^1	6400	Jacob et al. (1989)	T	
		6400	Winiwarter et al. (1988)	T	489
	8.7×10^1		Keene and Galloway (1986)	T	
	9.7	4900	Goldstein (1982)	X	298
	9.9×10^1		Gaffney and Senum (1984)	X	389, 491
	5.1×10^1		Johnson et al. (1996)	C	
	5.2×10^1		Keene et al. (1995)	C	
	8.5×10^1		Keene et al. (1995)	C	
	1.0×10^2		Keshavarz et al. (2022)	Q	
	3.1×10^1		Duchowicz et al. (2020)	Q	
	1.4×10^1		Wang et al. (2017)	Q	80, 238
	2.9×10^2		Wang et al. (2017)	Q	80, 239
	6.5×10^1		Wang et al. (2017)	Q	80, 240
	3.3×10^1		Li et al. (2014)	Q	241
	2.0×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^2		Raventos-Duran et al. (2010)	Q	244
	2.0×10^1		Raventos-Duran et al. (2010)	Q	245
	1.3×10^2		Hilal et al. (2008)	Q	
	3.2×10^1		Modarresi et al. (2007)	Q	67
		6100	Kühne et al. (2005)	Q	
	9.9×10^1		Yaffe et al. (2003)	Q	248, 249
	3.1×10^1		Abraham (2003)	Q	
	3.1×10^1		English and Carroll (2001)	Q	230, 231
	1.1×10^1		Katritzky et al. (1998)	Q	
	2.3×10^1		Russell et al. (1992)	Q	279
	3.1×10^1		Suzuki et al. (1992)	Q	232
	3.9×10^1		Nirmalakhandan and Speece (1988)	Q	
	9.9×10^1		Duchowicz et al. (2020)	?	185, 21
	1.1×10^1		Maniere et al. (2011)	?	241, 165
		6200	Kühne et al. (2005)	?	
	8.4		Yaws (1999)	?	21
	8.2		Yaws and Yang (1992)	?	21
	3.3×10^1		Abraham et al. (1990)	?	
	3.3×10^1		Hine and Mookerjee (1975)	?	



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
acetic anhydride $\text{C}_4\text{H}_6\text{O}_3$ [108-24-7] WFDIJRYMOXRFFG-UHFFFAOYSA-N	1.7		Duchowicz et al. (2020)	V	186
	3.6		Yaws (2003)	X	237
	6.3×10^{-1}		Duchowicz et al. (2020)	Q	
	1.4		Wang et al. (2017)	Q	80, 238
	5.3×10^1		Wang et al. (2017)	Q	80, 239
	1.7		Wang et al. (2017)	Q	80, 240
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^1		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.9		Gharagheizi et al. (2010)	Q	246
7.1×10^{-1}		Modarresi et al. (2007)	Q	67	
2.3		Yaws (1999)	?	21	
propanoic acid $\text{C}_2\text{H}_5\text{COOH}$ (propionic acid) [79-09-4] XBDQKXXIPTUBI-UHFFFAOYSA-N	7.1×10^1		Kim and Kim (2016)	M	
	1.5×10^1		von Hartungen et al. (2004)	M	
	5.6×10^1		Khan et al. (1995)	M	
	5.5×10^1		Khan and Brimblecombe (1992)	M	
	6.1×10^1		Servant et al. (1991)	M	487
	2.2×10^1		Butler and Ramchandani (1935)	M	
		6800	Abraham (1984)	V	
		6800	Abraham (1984)	R	488
	3.7×10^1	6800	Plyasunov et al. (2001)	T	
	2.6×10^1		Keshavarz et al. (2022)	Q	
	4.2×10^1		Duchowicz et al. (2020)	Q	299
	1.2×10^1		Wang et al. (2017)	Q	80, 238
	2.6×10^2		Wang et al. (2017)	Q	80, 239
	1.6×10^1		Wang et al. (2017)	Q	80, 240
	1.6×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^2		Raventos-Duran et al. (2010)	Q	244
	1.2×10^1		Raventos-Duran et al. (2010)	Q	245
	7.0×10^1		Hilal et al. (2008)	Q	
	2.8×10^1		Modarresi et al. (2007)	Q	67
	2.4×10^1		Yaffe et al. (2003)	Q	248, 249
	2.2×10^1		Abraham (2003)	Q	
	2.3×10^1		English and Carroll (2001)	Q	230, 231
	2.4		Katritzky et al. (1998)	Q	
5.6		Russell et al. (1992)	Q	358	
2.4×10^1		Suzuki et al. (1992)	Q	232	
3.4×10^1		Nirmalakhandan and Speece (1988)	Q		
2.2×10^1		Duchowicz et al. (2020)	?	185, 21	
1.1×10^1		Yaws (1999)	?	21	
2.2×10^1		Abraham et al. (1990)	?		
2.2×10^1		Hine and Mookerjee (1975)	?		



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
methoxyacetic acid $\text{C}_3\text{H}_6\text{O}_3$ [625-45-6] RMIODHQZRUFFF-UHFFFAOYSA-N	1.5×10^3		Duchowicz et al. (2020)	V	186	
	3.0×10^2		Duchowicz et al. (2020)	Q		
	3.0×10^2		Wang et al. (2017)	Q	80, 238	
	6.6×10^2		Wang et al. (2017)	Q	80, 239	
	1.0×10^3		Wang et al. (2017)	Q	80, 240	
butanoic acid $\text{C}_3\text{H}_7\text{COOH}$ (butyric acid) [107-92-6] FERIUCNNQJTOY-UHFFFAOYSA-N	4.3×10^1		Kim and Kim (2016)	M		
	9.7		von Hartungen et al. (2004)	M		
	4.7×10^1		Khan et al. (1995)	M		
	4.5×10^1		Khan and Brimblecombe (1992)	M		
	1.8×10^1		Butler and Ramchandani (1935)	M		
	9.4		Hwang et al. (1992)	V		
			7100 7300	Abraham (1984)	V	
			Abraham (1984)	R	488	
	2.5×10^1		Keshavarz et al. (2022)	Q		
	5.0×10^1		Duchowicz et al. (2020)	Q		
	9.1		Wang et al. (2017)	Q	80, 238	
	1.3×10^2		Wang et al. (2017)	Q	80, 239	
	1.4×10^1		Wang et al. (2017)	Q	80, 240	
	1.2×10^1		Raventos-Duran et al. (2010)	Q	271, 243	
	6.2×10^1		Raventos-Duran et al. (2010)	Q	244	
	9.9		Raventos-Duran et al. (2010)	Q	245	
	4.4×10^1		Hilal et al. (2008)	Q		
	2.5×10^1		Modarresi et al. (2007)	Q	67	
	1.7×10^1		Abraham (2003)	Q		
1.8×10^1		English and Carroll (2001)	Q	230, 274		
2.8		Russell et al. (1992)	Q	279		
1.8×10^1		Suzuki et al. (1992)	Q	232		
2.7×10^1		Nirmalakhandan and Speece (1988)	Q			
1.8×10^1		Duchowicz et al. (2020)	?	185, 21		
1.8×10^1		Abraham et al. (1990)	?			
1.8×10^1		Hine and Mookerjee (1975)	?			
2-methylpropanoic acid $(\text{CH}_3)_2\text{CHCOOH}$ (isobutyric acid) [79-31-2] KQNPFFTWSNSAP-UHFFFAOYSA-N	4.6×10^1		Kim and Kim (2016)	M		
	9.6		von Hartungen et al. (2004)	M		
	1.1×10^1		Khan et al. (1995)	M		
	1.1×10^1		Khan and Brimblecombe (1992)	M		
	5.6×10^1		Servant et al. (1991)	M	487	
	1.4		Mackay et al. (2006c)	V		
	2.5×10^1		Keshavarz et al. (2022)	Q		
	1.9×10^1		Duchowicz et al. (2020)	Q		
	1.1×10^1		Wang et al. (2017)	Q	80, 238	
	6.3×10^1		Wang et al. (2017)	Q	80, 239	
	1.7×10^1		Wang et al. (2017)	Q	80, 240	
	2.0×10^1		Gharagheizi et al. (2012)	Q		
	1.2×10^1		Raventos-Duran et al. (2010)	Q	242, 243	
3.1×10^1		Raventos-Duran et al. (2010)	Q	244		
9.9		Raventos-Duran et al. (2010)	Q	245		



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^1		Hilal et al. (2008)	Q	
	4.7×10^1		Modarresi et al. (2007)	Q	67
	1.1×10^1		Duchowicz et al. (2020)	?	185, 21
	1.1×10^1		Yaws (1999)	?	21, 12
pentanoic acid C_4H_9COOH (valeric acid) [109-52-4] NQPDZGIKBWPEJ-UHFFFAOYSA-N	2.3×10^1	6900	Staudinger and Roberts (2001)	L	
	2.4×10^1		Kim and Kim (2016)	M	
	1.2×10^1		von Hartungen et al. (2004)	M	
	2.3×10^1	6600	Khan et al. (1995)	M	
	2.1×10^1	6900	Khan and Brimblecombe (1992)	M	
	1.2×10^1		Mackay et al. (2006c)	V	
	1.2×10^1		Mackay et al. (1995)	V	
	1.6×10^1		Brimblecombe et al. (1992)	V	
		7500	Abraham (1984)	V	
	1.3×10^1		Amoore and Buttery (1978)	V	
		7700	Abraham (1984)	R	488
	7.7		Yaws (2003)	X	237
	1.2×10^1		Keshavarz et al. (2022)	Q	
	5.5×10^1		Duchowicz et al. (2020)	Q	184
	8.5		Wang et al. (2017)	Q	80, 238
	6.6×10^1		Wang et al. (2017)	Q	80, 239
	1.4×10^1		Wang et al. (2017)	Q	80, 240
	9.9		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^1		Raventos-Duran et al. (2010)	Q	244
	7.8		Raventos-Duran et al. (2010)	Q	245
	1.6×10^1		Gharagheizi et al. (2010)	Q	246
	3.3×10^1		Hilal et al. (2008)	Q	
	1.8×10^1		Modarresi et al. (2007)	Q	67
		7200	Kühne et al. (2005)	Q	
	1.4×10^1		Yaffe et al. (2003)	Q	248, 272
	1.1×10^1		Abraham (2003)	Q	
	1.4×10^1		English and Carroll (2001)	Q	230, 231
	2.9		Katritzky et al. (1998)	Q	
	2.2×10^1		Nirmalakhandan et al. (1997)	Q	
	2.1×10^1		Duchowicz et al. (2020)	?	185, 21
		6900	Kühne et al. (2005)	?	
	7.4		Yaws (1999)	?	21
	1.3×10^1		Abraham et al. (1990)	?	
2-methylbutanoic acid $C_5H_{10}O_2$ [116-53-0] WLAMNBDJUVNPU-UHFFFAOYSA-N	6.7		Duchowicz et al. (2020)	V	186
	4.9		Yaws (2003)	X	237
	2.1×10^1		Duchowicz et al. (2020)	Q	
	8.5		Wang et al. (2017)	Q	80, 238
	3.3×10^1		Wang et al. (2017)	Q	80, 239
	1.6×10^1		Wang et al. (2017)	Q	80, 240
	8.3		Gharagheizi et al. (2010)	Q	246
	1.6×10^1		Hilal et al. (2008)	Q	
	4.4×10^1		Modarresi et al. (2007)	Q	67



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methylbutanoic acid	2.7×10^1		Kim and Kim (2016)	M	
(CH ₃) ₂ CHCH ₂ COOH	1.1×10^1		von Hartungen et al. (2004)	M	
(isovaleric acid)	1.2×10^1		Khan et al. (1995)	M	
[503-74-2]	1.2×10^1		Khan and Brimblecombe (1992)	M	
GWYFCOCPABKNJV-UHFFFAOYSA-N	1.2×10^1		Amoore and Buttery (1978)	M	
	1.6		Mackay et al. (2006c)	V	
	1.6		Mackay et al. (1995)	V	
	7.3		Amoore and Buttery (1978)	V	
	1.1×10^1		Yaws (2003)	X	237, 12
	1.2×10^1		Keshavarz et al. (2022)	Q	
	2.1×10^1		Duchowicz et al. (2020)	Q	299
	8.5		Wang et al. (2017)	Q	80, 238
	6.8×10^1		Wang et al. (2017)	Q	80, 239
	1.7×10^1		Wang et al. (2017)	Q	80, 240
	2.2×10^1		Gharagheizi et al. (2012)	Q	
	9.9		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^1		Raventos-Duran et al. (2010)	Q	244
	7.8		Raventos-Duran et al. (2010)	Q	245
	8.4		Gharagheizi et al. (2010)	Q	246
	2.8×10^1		Hilal et al. (2008)	Q	
	2.0×10^1		Modarresi et al. (2007)	Q	67
	4.8×10^1		Yao et al. (2002)	Q	229
	1.4×10^1		English and Carroll (2001)	Q	230, 231
	1.2×10^1		Duchowicz et al. (2020)	?	185, 21
	7.0		Yaws (1999)	?	21, 12
	1.2×10^1		Abraham et al. (1990)	?	
2,2-dimethylpropanoic acid	3.5		Khan et al. (1995)	M	
(CH ₃) ₃ CCOOH	3.5		Khan and Brimblecombe (1992)	M	
(pivalic acid)	8.4		Yaws (2003)	X	237
[75-98-9]	1.2×10^1		Keshavarz et al. (2022)	Q	
IUGYQRQAERSCNH-UHFFFAOYSA-N	9.4		Duchowicz et al. (2020)	Q	
	9.9		Raventos-Duran et al. (2010)	Q	242, 243
	9.9		Raventos-Duran et al. (2010)	Q	244
	7.8		Raventos-Duran et al. (2010)	Q	245
	6.9		Gharagheizi et al. (2010)	Q	246
	1.2×10^1		Hilal et al. (2008)	Q	
	1.6×10^1		Modarresi et al. (2007)	Q	67
	3.8		Yaffe et al. (2003)	Q	248, 249
	9.0×10^{-1}		Katritzky et al. (1998)	Q	
	3.6		Duchowicz et al. (2020)	?	185, 21



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.1		Yaffe et al. (2003)	Q	248, 249
	7.9×10^{-1}		Katritzky et al. (1998)	Q	
heptanoic acid $C_7H_{14}O_2$ [111-14-8] MNWFXJYAQYHMED-UHFFFAOYSA-N	1.5×10^1		Kim and Kim (2016)	M	
	1.5×10^1		Duchowicz et al. (2020)	V	186
	9.6		Brimblecombe et al. (1992)	V	
		8500	Abraham (1984)	V	
		8500	Abraham (1984)	R	488
	6.1×10^1		Duchowicz et al. (2020)	Q	
	5.5		Wang et al. (2017)	Q	80, 238
	2.9×10^1		Wang et al. (2017)	Q	80, 239
	2.0×10^1		Wang et al. (2017)	Q	80, 240
	1.0×10^1		Gharagheizi et al. (2012)	Q	
	1.7×10^1		Hilal et al. (2008)	Q	
	1.6×10^1		Modarresi et al. (2007)	Q	67
		7800	Kühne et al. (2005)	Q	
	3.0×10^1		Yaffe et al. (2003)	Q	248, 249
	6.4		Abraham (2003)	Q	
	2.9×10^1		Yao et al. (2002)	Q	229
	4.3		Katritzky et al. (1998)	Q	
		7900	Kühne et al. (2005)	?	
	2.5×10^1		Yaws (1999)	?	21, 12
	1.3×10^1		Abraham et al. (1990)	?	
4,4-dimethylpentanoic acid $C_7H_{14}O_2$ [95823-36-2] HMMSZUQCCUWXRA-UHFFFAOYSA-N	4.3		Zhang et al. (2010)	Q	287, 288
	1.4×10^1		Zhang et al. (2010)	Q	287, 289
	1.6×10^3		Zhang et al. (2010)	Q	287, 290
	1.6		Zhang et al. (2010)	Q	287, 291
2-ethyl-2-methylbutanoic acid $C_7H_{14}O_2$ [19889-37-3] LHJPKLWGGMAUAN-UHFFFAOYSA-N	4.3		Zhang et al. (2010)	Q	287, 288
	5.4		Zhang et al. (2010)	Q	287, 289
	2.3×10^2		Zhang et al. (2010)	Q	287, 290
	1.6		Zhang et al. (2010)	Q	287, 291
octanoic acid $C_8H_{16}O_2$ (caprylic acid) [124-07-2] WWZKQHOCKIZLMA-UHFFFAOYSA-N	1.1×10^1		Duchowicz et al. (2020)	V	186
	1.5×10^{-1}		Mackay et al. (2006c)	V	
	1.5×10^{-1}		Mackay et al. (1995)	V	
	7.6		Brimblecombe et al. (1992)	V	
		9600	Abraham (1984)	V	
		8900	Abraham (1984)	R	488
	1.9×10^1		Yaws (2003)	X	237, 12
	6.4×10^1		Duchowicz et al. (2020)	Q	
	6.5		Gharagheizi et al. (2012)	Q	
	1.2×10^1		Gharagheizi et al. (2010)	Q	246
	1.3×10^1		Hilal et al. (2008)	Q	
	1.2×10^1		Modarresi et al. (2007)	Q	67
		8200	Kühne et al. (2005)	Q	
	1.2×10^1		Yaffe et al. (2003)	Q	248, 249
	5.7		Abraham (2003)	Q	



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.7×10^1		Yao et al. (2002)	Q	229
	5.8	8400	Katritzky et al. (1998)	Q	
	1.0×10^1		Kühne et al. (2005)	?	
	1.1×10^1		Yaws (1999)	?	21, 12
			Abraham et al. (1990)	?	
2-ethylhexanoic acid $C_8H_{16}O_2$ [149-57-5] OBETXYAYXDNJHR-UHFFFAOYSA-N	3.5		HSDB (2015)	V	
	3.4		Hilal et al. (2008)	Q	
	2.4×10^1		Modarresi et al. (2007)	Q	67
endothal $C_8H_{10}O_5$ [145-73-3] GXEKYRXVRRROBEV-UHFFFAOYSA-N	2.6×10^{10}		Duchowicz et al. (2020)	V	186
	1.4×10^6		Duchowicz et al. (2020)	Q	
nonanoic acid $C_9H_{18}O_2$ (pelargic acid) [112-05-0] FBUKVWPVBMHYJY-UHFFFAOYSA-N	6.1		Duchowicz et al. (2020)	V	186
	3.8		Brimblecombe et al. (1992)	V	
	2.0×10^1		Yaws (2003)	X	237, 12
	6.9		Hilal et al. (2008)	C	
	6.5×10^1		Duchowicz et al. (2020)	Q	
	4.0		Gharagheizi et al. (2012)	Q	
	1.3×10^1		Gharagheizi et al. (2010)	Q	246
	9.9		Hilal et al. (2008)	Q	
	1.2×10^1		Modarresi et al. (2007)	Q	67
	1.2×10^1		Yaffe et al. (2003)	Q	248, 272
	4.2		Abraham (2003)	Q	
	2.3×10^1		Yao et al. (2002)	Q	229
	5.6		Katritzky et al. (1998)	Q	
	3.0		Maniere et al. (2011)	?	12, 165
	1.1×10^1		Yaws (1999)	?	21, 12
decanoic acid $C_{10}H_{20}O_2$ [334-48-5] GHVNFZFCNZKVNT-UHFFFAOYSA-N	7.4		Duchowicz et al. (2020)	V	186
	6.5		Hilal et al. (2008)	C	
	6.7×10^1		Duchowicz et al. (2020)	Q	
	7.7		Hilal et al. (2008)	Q	
	1.0×10^1		Modarresi et al. (2007)	Q	67
	3.0		Abraham (2003)	Q	
	1.9×10^2		Yaws (1999)	?	21, 12
3,3,5,5-tetramethylhexanoic acid $C_{10}H_{20}O_2$ [1135681-77-4] WRPPDRMFGQJMAR-UHFFFAOYSA-N	1.9		Zhang et al. (2010)	Q	287, 288
	3.5		Zhang et al. (2010)	Q	287, 289
	1.0×10^3		Zhang et al. (2010)	Q	287, 290
	6.1×10^{-1}		Zhang et al. (2010)	Q	287, 291
pinonic acid $C_{10}H_{16}O_3$ [473-72-3] SIZDUQQDBXJXLQ-UHFFFAOYSA-N	6.2×10^3		Wang et al. (2017)	Q	80, 238
	3.0×10^5		Wang et al. (2017)	Q	80, 239
	6.2×10^5		Wang et al. (2017)	Q	80, 240
	5.9×10^4		Isaacman-VanWertz et al. (2016)	Q	441



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
undecanoic acid $C_{11}H_{22}O_2$ [112-37-8] ZDPHROEEOARMN-UHFFFAOYSA-N	7.7 1.8×10^1 5.8 2.2		Yaws (2003) Gharagheizi et al. (2010) Hilal et al. (2008) Abraham (2003)	X Q Q Q	237 246
dodecanoic acid $C_{12}H_{24}O_2$ [143-07-7] POULHZVOKOAJMA-UHFFFAOYSA-N	4.5 1.7 1.7×10^1 8.4×10^1		Hilal et al. (2008) Abraham (2003) Yao et al. (2002) Yaws (1999)	Q Q Q ?	229 21, 12
tridecanoic acid $C_{13}H_{26}O_2$ [638-53-9] SZHOJFHSIKHZHA-UHFFFAOYSA-N	8.0 3.8×10^1 1.2		Yaws (2003) Gharagheizi et al. (2010) Abraham (2003)	X Q Q	237 246
tetradecanoic acid $C_{14}H_{28}O_2$ [544-63-8] TUNFSRHWTWDNC-UHFFFAOYSA-N	2.0×10^1 7.1×10^1 9.4×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) Abraham (2003)	V Q Q	186
pentadecanoic acid $C_{15}H_{30}O_2$ [1002-84-2] WQEPLUUGTLDZJY-UHFFFAOYSA-N	7.1×10^{-1}		Abraham (2003)	Q	
hexadecanoic acid $C_{16}H_{32}O_2$ (palmitic acid) [57-10-3] IPCSVZSSVZVIGE-UHFFFAOYSA-N	4.9×10^{-1} 7.2×10^1 3.0 5.2×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) Gharagheizi et al. (2012) Abraham (2003)	V Q Q Q	186
heptadecanoic acid $C_{17}H_{34}O_2$ (margaric acid) [506-12-7] KEMQGTRYUADPNZ-UHFFFAOYSA-N	3.8×10^{-1}		Abraham (2003)	Q	
octadecanoic acid $C_{18}H_{36}O_2$ (stearic acid) [57-11-4] QIQXTHQIDYTFRH-UHFFFAOYSA-N	2.1×10^1 2.5×10^5 7.3×10^1 8.4×10^{-1} 3.5 3.0×10^{-1}		Duchowicz et al. (2020) Mackay et al. (1995) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Abraham (2003)	V V Q Q Q Q	186 67
nonadecanoic acid $C_{19}H_{38}O_2$ [646-30-0] ISYWECDDZWTKFF-UHFFFAOYSA-N	2.3×10^{-1}		Abraham (2003)	Q	



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
eicosanoic acid $C_{20}H_{40}O_2$ (arachidic acid) [506-30-9] VKOBVWXKNCXXDE-UHFFFAOYSA-N	1.7×10^{-1}		Abraham (2003)	Q	
heneicosanoic acid $C_{21}H_{42}O_2$ [2363-71-5] CKDDRHZIAZRDBW-UHFFFAOYSA-N	1.3×10^{-1}		Abraham (2003)	Q	
docosanoic acid $C_{22}H_{44}O_2$ (behenic acid) [112-85-6] UKMSUNONTOPOIO-UHFFFAOYSA-N	9.5×10^{-2}		Abraham (2003)	Q	
tricosanoic acid $C_{23}H_{46}O_2$ [2433-96-7] XEZVDURJDFGERA-UHFFFAOYSA-N	7.2×10^{-2}		Abraham (2003)	Q	
tetracosanoic acid $C_{24}H_{48}O_2$ (lignoceric acid) [557-59-5] QZZGJDVWLFXDLK-UHFFFAOYSA-N	5.4×10^{-2}		Abraham (2003)	Q	
propenoic acid $C_3H_4O_2$ (acrylic acid) [79-10-7] NIXOWILDQLNWCW-UHFFFAOYSA-N	2.7×10^1 3.1×10^1 1.2×10^2 3.3×10^1 2.2×10^1 4.6×10^1 1.6×10^1 9.9 3.1×10^1 2.2×10^1 9.4×10^2 2.4×10^1 2.4×10^1		Duchowicz et al. (2020) Lide and Frederikse (1995) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999) Yaws and Yang (1992)	V V Q Q Q Q Q Q Q Q Q ? ?	186 80, 238 80, 239 80, 240 242, 243 244 245 67 21 21
2-butenic acid $C_4H_6O_2$ (crotonic acid) [3724-65-0] LDHQCZJRKDOVOX-UHFFFAOYSA-N	2.3×10^1 5.1×10^1 4.2×10^1 2.2×10^1 5.0×10^1 2.3×10^1 1.1×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q	186 80, 238 80, 239 80, 240 67



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.1×10^1 1.5×10^3	6200	Meylan and Howard (1991)	Q	
	2.4×10^2		Maniere et al. (2011)	?	12, 165
			Kühne et al. (2005)	?	
			Yaws and Yang (1992)	?	21
sorbic acid $C_6H_8O_2$ [110-44-1] WSWCOQWTEOXDQX-MQQKCMAXSA-N	3.3×10^1 2.0×10^2		Abraham et al. (2019)	Q	
			HSDB (2015)	Q	99
<i>D</i> (-)-isoascorbic acid $C_6H_8O_6$ (erythorbic acid) [89-65-6] CIWBSSHSHKDKBQ-DUZGATOHSA-N	2.4×10^2		HSDB (2015)	Q	99
shikimic acid $C_7H_{10}O_5$ [138-59-0] JXOHGGNKMLTUBP-UHFFFAOYSA-N	3.7×10^8		HSDB (2015)	Q	99
4-hydroxybenzoic acid $C_7H_6O_3$ [99-96-7] FJKROLUGYXJWQN-UHFFFAOYSA-N	1.4×10^6 1.4×10^6 2.7×10^6		Duchowicz et al. (2020)	V	186
			HSDB (2015)	V	
			Duchowicz et al. (2020)	Q	
3,4,5-trihydroxybenzoic acid $C_7H_6O_5$ (gallic acid) [149-91-7] LNTHITQWFMADLM-UHFFFAOYSA-N	1.2×10^{14}		HSDB (2015)	Q	99
2-methylbenzoic acid $C_8H_8O_2$ (<i>o</i> -toluic acid) [118-90-1] ZWLPLYKEWSWPD-UHFFFAOYSA-N	9.7 2.7×10^2 8.0×10^1 9.3×10^1 8.2×10^1		Abraham et al. (2019)	Q	
	3.2×10^1		Wang et al. (2017)	Q	80, 238
	9.9×10^1		Wang et al. (2017)	Q	80, 239
	1.1×10^2		Wang et al. (2017)	Q	80, 240
			Zhang et al. (2010)	Q	287, 288
			Zhang et al. (2010)	Q	287, 289
			Zhang et al. (2010)	Q	287, 290
			Zhang et al. (2010)	Q	287, 291
3-methylbenzoic acid $C_8H_8O_2$ (<i>m</i> -toluic acid) [99-04-7] GPSDUZXPYCFOSQ-UHFFFAOYSA-N	6.6 1.4×10^{-1} 3.9×10^1 2.7×10^2 3.7×10^2 3.6×10^2 8.2×10^1 1.2×10^2 5.1×10^2 1.1×10^2		Mackay et al. (2006c)	V	
			Mackay et al. (1995)	V	
			Abraham et al. (2019)	Q	
			Wang et al. (2017)	Q	80, 238
			Wang et al. (2017)	Q	80, 239
			Wang et al. (2017)	Q	80, 240
			Zhang et al. (2010)	Q	287, 288
			Zhang et al. (2010)	Q	287, 289
			Zhang et al. (2010)	Q	287, 290
			Zhang et al. (2010)	Q	287, 291



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methylbenzoic acid $C_8H_8O_2$	2.7×10^2		Wang et al. (2017)	Q	80, 238
(<i>p</i> -toluic acid) [99-94-5]	4.2×10^2		Wang et al. (2017)	Q	80, 239
	4.7×10^2		Wang et al. (2017)	Q	80, 240
	8.2×10^1		Zhang et al. (2010)	Q	287, 288
LPNBBFKOUUSUDB-UHFFFAOYSA-N	1.4×10^2		Zhang et al. (2010)	Q	287, 289
	8.8×10^2		Zhang et al. (2010)	Q	287, 290
	1.1×10^2		Zhang et al. (2010)	Q	287, 291
		7000	Kühne et al. (2005)	Q	
		7500	Kühne et al. (2005)	?	
2-hydroxy-benzoic acid $C_7H_6O_3$	1.3×10^3		Duchowicz et al. (2020)	V	186
(salicylic acid) [69-72-7]	8.0×10^2		Mackay et al. (2006c)	V	
	6.9×10^2		Mackay et al. (1995)	V	
	1.8		Mackay et al. (1995)	V	
YGSDEFMJLZEOE-UHFFFAOYSA-N	9.0×10^1		Yaws (2003)	X	237
	1.5×10^3		Duchowicz et al. (2020)	Q	
	1.6×10^3		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^2		Raventos-Duran et al. (2010)	Q	244
	6.2×10^2		Raventos-Duran et al. (2010)	Q	245
	8.9×10^1		Gharagheizi et al. (2010)	Q	246
benzeneethanoic acid $C_8H_8O_2$	2.4×10^2		Duchowicz et al. (2020)	V	186
(phenylacetic acid) [103-82-2]	1.5×10^2		Mackay et al. (2006c)	V	
	1.8×10^2		Mackay et al. (1995)	V	
	1.4×10^1		Mackay et al. (1995)	V	
WLJVXDMOQOGPHL-UHFFFAOYSA-N	3.4×10^2		Duchowicz et al. (2020)	Q	
	4.1×10^2		Wang et al. (2017)	Q	80, 238
	2.1×10^3		Wang et al. (2017)	Q	80, 239
	3.6×10^3		Wang et al. (2017)	Q	80, 240
	1.2×10^3		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^3		Raventos-Duran et al. (2010)	Q	244
	2.0×10^2		Raventos-Duran et al. (2010)	Q	245
	9.9×10^2		Hilal et al. (2008)	Q	
	3.2×10^2		Modarresi et al. (2007)	Q	67
	2.4×10^2		Yaffe et al. (2003)	Q	248, 249
	5.1×10^1		Katritzky et al. (1998)	Q	
phthalic anhydride $C_8H_4O_3$	6.1×10^2		Duchowicz et al. (2020)	V	186
[85-44-9]	1.6×10^3		Lide and Frederikse (1995)	V	
	1.2×10^1		Yaws (2003)	X	237
LGRFSURHDFAFJT-UHFFFAOYSA-N	4.4×10^1		Duchowicz et al. (2020)	Q	
	1.2×10^1		Gharagheizi et al. (2010)	Q	246
1,2-benzenedicarboxylic acid $C_8H_6O_4$	4.9×10^5		Duchowicz et al. (2020)	V	186
(phthalic acid) [88-99-3]	4.9×10^5		HSDB (2015)	V	
	8.2×10^6		Duchowicz et al. (2020)	Q	
XNGIFLGASWRNHJ-UHFFFAOYSA-N					



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
terephthalic acid $\text{C}_8\text{H}_6\text{O}_4$ [100-21-0] KKEYFWRCBNTPAC-UHFFFAOYSA-N	2.5×10^7 4.8×10^9		HSDB (2015) Gharagheizi et al. (2012)	Q Q	447
isophthalic acid $\text{C}_8\text{H}_6\text{O}_4$ [121-91-5] QQVIHTHCMHWDBS-UHFFFAOYSA-N	4.0×10^9 7.3×10^4 4.5×10^6 7.1×10^8 3.7×10^9		Yaws (2003) Abraham et al. (2019) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q Q	237 99 246
dehydroacetic acid $\text{C}_8\text{H}_8\text{O}_4$ [520-45-6] PGRHXDWITVMQBC-UHFFFAOYSA-N	2.9×10^1		HSDB (2015)	V	
2-methoxybenzoic acid $\text{C}_8\text{H}_8\text{O}_3$ [579-75-9] ILUJQPXNXACGAN-UHFFFAOYSA-N	2.5×10^3		Abraham et al. (2019)	Q	
4-methoxybenzoic acid $\text{C}_8\text{H}_8\text{O}_3$ [100-09-4] ZEYHEAKUIGZSGI-UHFFFAOYSA-N	1.8×10^3		Abraham et al. (2019)	Q	
caffeic acid $\text{C}_9\text{H}_8\text{O}_4$ [331-39-5] QAIPRVGONGVQAS-DUXPYHPUSA-N	7.0×10^{10}		HSDB (2015)	Q	99
4-methylphthalic anhydride $\text{C}_9\text{H}_6\text{O}_3$ [19438-61-0] ZOXBWJMCXHTKNU-UHFFFAOYSA-N	1.4 6.4×10^4 3.5×10^1 3.6×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3-phenyl-2-propenoic acid $\text{C}_9\text{H}_8\text{O}_2$ (cinnamic acid) [621-82-9] WBYWAXJHAXSJNI-UHFFFAOYSA-N	5.8×10^2 4.1×10^2 9.9×10^2 1.6×10^2 7.8×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q	186 242, 243 244 245
<i>trans</i> -cinnamic acid $\text{C}_9\text{H}_8\text{O}_2$ [140-10-3] WBYWAXJHAXSJNI-VOTSOKGWSA-N	2.8×10^{11}		Abraham et al. (2019)	Q	
<i>p</i> -coumaric acid $\text{C}_9\text{H}_8\text{O}_3$ [501-98-4] NGSWKAQJJWESNS-ZZXKWWIFSA-N	7.2×10^5		Abraham et al. (2019)	Q	



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4-dimethoxybenzoic acid $C_9H_{10}O_4$ (veratric acid) [93-07-2] DAUAQNGYDASHRET-UHFFFAOYSA-N	1.1×10^5		Abraham et al. (2019)	Q	
3,4,5-trimethoxybenzoic acid $C_{10}H_{12}O_5$ (eudesmic acid) [118-41-2] SJSOFNCYXJUNBT-UHFFFAOYSA-N	7.3×10^5		Abraham et al. (2019)	Q	
1-naphthaleneacetic acid $C_{12}H_{10}O_2$ [86-87-3] PRPINYUDVPFIRX-UHFFFAOYSA-N	3.3×10^2		Maniere et al. (2011)	?	12, 493, 165
	7.9×10^3		Maniere et al. (2011)	?	12, 494, 165
2-naphthoxyacetic acid $C_{12}H_{10}O_3$ [120-23-0] RZCJYMOBWWJQGV-UHFFFAOYSA-N	3.5×10^5		Ebert et al. (2023)	?	318
<i>p-tert</i> -butylbenzoic acid $C_{11}H_{14}O_2$ [98-73-7] KDVYCTOWXSLNNI-UHFFFAOYSA-N	3.5×10^1 4.5×10^1 3.6×10^2 4.2×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
trinexapac $C_{11}H_{12}O_5$ [104273-73-6] DFFWZNDNCNBOKDI-UHFFFAOYSA-N	3.9×10^6 4.3×10^8		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
benzoic acid, anhydride $C_{14}H_{10}O_3$ [93-97-0] CHIHQLCVLOXUJW-UHFFFAOYSA-N	7.0 3.7×10^2 6.5×10^3 6.4×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
pyromellitic acid $C_{10}H_6O_8$ [89-05-4] CYIDZMCFTVVTJO-UHFFFAOYSA-N	1.6×10^{13} 3.0×10^{13} 1.6×10^{13}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237, 495 246
pyromellitic dianhydride $C_{10}H_2O_6$ [89-32-7] ANSXAPJVJOKRDJ-UHFFFAOYSA-N	1.3×10^3 1.3×10^3 1.4×10^{11} 4.8×10^4 9.7×10^5		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
naproxen $C_{14}H_{14}O_3$ [22204-53-1] CMWTZPSULFXJA-VIFPVBQESA-N	2.5×10^5		Abraham et al. (2019)	Q	
(<i>Z,Z</i>)-9,12-octadecadienoic acid $C_{18}H_{32}O_2$ (linoleic acid) [60-33-3] OYHQOLUKZRVURQ-HZJYTTTNSA-N	4.9×10^1		HSDB (2015)	V	
rosmarinic acid $C_{18}H_{16}O_8$ [537-15-5] DOUMFZQKYFQNTF-WUTVXBCWSA-N	3.7×10^{21}		HSDB (2015)	Q	447
abietic acid $C_{20}H_{30}O_2$ [514-10-3] RSWGJHLUYNHMPX-ONCXSQPRSA-N	1.5×10^5 1.7×10^5		Yaws (2003) Gharagheizi et al. (2010)	X Q	237, 12 246
ethanedioic acid HOOC ² COOH (oxalic acid) [144-62-7] MUBZPKHOEPUJKR-UHFFFAOYSA-N	6.1×10^6 6.1×10^6 6.1×10^6 7.1×10^6 3.1×10^4 4.2×10^5 6.9×10^4 1.6×10^4 1.6×10^3 3.7×10^7 4.9×10^4 2.0×10^4 3.9×10^5 4.2×10^5 2.4×10^3 2.3×10^5 4.1×10^5 4.9×10^6 6.9×10^4	9800 7300	Burkholder et al. (2019) Burkholder et al. (2015) Compernelle and Müller (2014a) Clegg et al. (1996) Brimblecombe et al. (1992) Yaws (2003) Gaffney and Senum (1984) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991) Saxena and Hildemann (1996) Duchowicz et al. (2020)	L L V V V X X Q Q Q Q Q Q Q Q Q Q E ?	237, 12 389, 491 242, 243 244 245 246 246 244 245 246 67 401 185, 21
propanedioic acid HOOCCH ₂ COOH (malonic acid) [141-82-2] OFUBLEOULBTSOW-UHFFFAOYSA-N	2.4×10^8 2.4×10^8 3.7×10^4 3.8×10^8 9.3×10^7 2.1×10^1 2.5×10^5 6.2×10^6 2.5×10^6	11000 14000	Burkholder et al. (2019) Burkholder et al. (2015) Duchowicz et al. (2020) Compernelle and Müller (2014a) Compernelle and Müller (2014a) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L L V V V Q Q Q Q Q	186 242, 243 244 245



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^5		Modarresi et al. (2007)	Q	67
	3.9×10^6		Saxena and Hildemann (1996)	E	401
butanedioic acid HOOC(CH ₂) ₂ COOH (succinic acid) [110-15-6] KDYFGRWQOYBRFD-UHFFFAOYSA-N	3.1×10^7 3.1×10^7 2.8×10^7 2.7×10^7 4.1×10^7 2.0×10^7 7.2×10^5 6.5×10^4 1.4×10^7 4.9×10^6 2.5×10^6 2.0×10^6 3.2×10^5 3.0×10^6	11000 12000	Burkholder et al. (2019) Burkholder et al. (2015) Duchowicz et al. (2020) HSDB (2015) Compernelle and Müller (2014a) Compernelle and Müller (2014a) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Saxena and Hildemann (1996)	L L V V V V X Q Q Q Q Q Q E	186 237 242, 243 244 245 246 401
pentanedioic acid HOOC(CH ₂) ₃ COOH (glutaric acid) [110-94-1] JFCQEDHGNNZCLN-UHFFFAOYSA-N	3.8×10^7 3.8×10^7 1.9×10^7 5.1×10^7 2.4×10^7 1.0×10^5 5.0×10^6 4.9×10^6 3.9×10^7 1.2×10^6 3.5×10^5 2.2×10^7 2.3×10^5 2.0×10^6	12000 13000	Burkholder et al. (2019) Burkholder et al. (2015) Mentel et al. (2004) Compernelle and Müller (2014a) Compernelle and Müller (2014a) Yaws (2003) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Saxena and Hildemann (1996)	L L M V V X Q Q Q Q Q Q Q E	237, 496 271, 243 244 245 246 67 401
3-hydroxy glutaric acid C ₅ H ₈ O ₅ [638-18-6] ZQHYXNSQOIDNTL-UHFFFAOYSA-N	6.7×10^8		Isaacman-VanWertz et al. (2016)	Q	441
hexanedioic acid HOOC(CH ₂) ₄ COOH (adipic acid) [124-04-9] WNLRTBMBVRJNCN-UHFFFAOYSA-N	6.6×10^7 6.6×10^7 2.1×10^6 2.1×10^6 6.6×10^7 1.1×10^1 1.8×10^5 3.3×10^6 2.2×10^6 3.9×10^6 4.9×10^7	13000 11000	Burkholder et al. (2019) Burkholder et al. (2015) Duchowicz et al. (2020) HSDB (2015) Compernelle and Müller (2014a) Lide and Frederikse (1995) Goldstein (1982) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L L V V V V X Q Q Q Q	186 298 242, 243 244



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.9×10^5		Raventos-Duran et al. (2010)	Q	245
	2.5×10^7		Hilal et al. (2008)	Q	
	2.5×10^5		Modarresi et al. (2007)	Q	67
	2.0×10^6		Saxena and Hildemann (1996)	E	401
tricarballic acid $C_6H_8O_6$ [99-14-9] KQTHICEAUMSDG-UHFFFAOYSA-N	1.9×10^9		Isaacman-VanWertz et al. (2016)	Q	441
heptanedioic acid $C_7H_{12}O_4$ (pimelic acid) [111-16-0] WLJVNTCWHIRURA-UHFFFAOYSA-N	2.6×10^7 8.1×10^7 4.1×10^6	15000	Duchowicz et al. (2020) Compernelle and Müller (2014a) Duchowicz et al. (2020)	V V Q	186
3-acetyl pentanedioic acid $C_7H_{10}O_5$ [149474-71-5] TZPGYCKKEMNHRS-UHFFFAOYSA-N	4.5×10^9		Isaacman-VanWertz et al. (2016)	Q	441
octanedioic acid $C_8H_{14}O_4$ (suberic acid) [505-48-6] TYFQFVWCELRYAO-UHFFFAOYSA-N	1.8×10^6 7.7×10^7 4.8×10^6	14000	Duchowicz et al. (2020) Compernelle and Müller (2014a) Duchowicz et al. (2020)	V V Q	186
3-methyl-1,2,3-butanetricarboxylic acid $C_8H_{12}O_6$ [77370-41-3] VMWJGTKDJFMTFZ-UHFFFAOYSA-N	1.9×10^8		Isaacman-VanWertz et al. (2016)	Q	441
nonanedioic acid $C_9H_{16}O_4$ (azelaic acid) [123-99-9] BDJRBEXGGNYIS-UHFFFAOYSA-N	8.9×10^7 3.6×10^6 1.9×10^5 9.3×10^5	17000	Compernelle and Müller (2014a) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	237, 12 246
decanedioic acid $C_{10}H_{18}O_4$ (sebacic acid) [111-20-6] CXMXPBPHNRROMY-UHFFFAOYSA-N	7.6×10^7 1.7×10^6 1.6×10^5 1.4×10^6		Compernelle and Müller (2014a) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	237, 12 246
dodecanedioic acid $C_{12}H_{22}O_4$ [693-23-2] TVIDDXQYHWJXFK-UHFFFAOYSA-N	9.9×10^5		Ebert et al. (2023)	?	316



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>cis</i> -butenedioic acid HOOC(CH ₂) ₂ COOH (maleic acid) [110-16-7] VZCYOOQTPOCHF-L-UPHRSURJSA-N	1.4×10^8		Lide and Frederikse (1995)	V	
	1.3×10^6		Yaws (2003)	X	237
	6.8×10^6		Gharagheizi et al. (2012)	Q	
	1.3×10^6		Gharagheizi et al. (2010)	Q	246
	9.9×10^6		Saxena and Hildemann (1996)	E	401
citraconic acid C ₅ H ₆ O ₄ [498-23-7] HNEGQIOMVPPMNR-IHWYPQMZSA-N	3.6×10^7		Yaws (2003)	X	237
	4.0×10^6		Gharagheizi et al. (2012)	Q	
	3.7×10^7		Gharagheizi et al. (2010)	Q	246
itaconic acid C ₅ H ₆ O ₄ [97-65-4] LVHBZANLWSRM-UHFFFAOYSA-N	1.3×10^6		Yaws (2003)	X	237, 12
	1.3×10^7		Gharagheizi et al. (2012)	Q	
	1.3×10^6		Gharagheizi et al. (2010)	Q	246
1,4-cyclohexanedicarboxylic acid C ₈ H ₁₂ O ₄ [619-82-9] PXGZQGDTEZPERC-UHFFFAOYSA-N	1.1×10^6		Yaws (2003)	X	237, 154
	2.3×10^6		Gharagheizi et al. (2012)	Q	
	1.1×10^6		Gharagheizi et al. (2010)	Q	246
pinic acid C ₉ H ₁₄ O ₄ [473-73-4] LEVONNIFUFSRKZ-UHFFFAOYSA-N	1.4×10^6		Wang et al. (2017)	Q	80, 238
	7.1×10^7		Wang et al. (2017)	Q	80, 239
	3.2×10^7		Wang et al. (2017)	Q	80, 240
	1.0×10^7		Isaacman-VanWertz et al. (2016)	Q	441
methanoic peroxyacid HCOOOH (peroxyformic acid) [107-32-4] SCKXCAADGDDQCS-UHFFFAOYSA-N	2.9×10^1		Sauer (1997)	M	449
	5.2		HSDB (2015)	Q	99
ethanoic peroxyacid CH ₃ COOOH (peroxyacetic acid) [79-21-0] KFSLWBXXFJQRDL-UHFFFAOYSA-N	8.3	5300	Burkholder et al. (2019)	L	
	8.3	5300	Burkholder et al. (2015)	L	
	8.3	5300	Sander et al. (2011)	L	
	7.3	5600	Staudinger and Roberts (2001)	L	
	2.4×10^1		Sauer (1997)	M	449
	8.3	5300	O'Sullivan et al. (1996)	M	
	6.5	5900	Lind and Kok (1994)	M	52
	1.1×10^2		Wang et al. (2017)	Q	80, 238
	9.6		Wang et al. (2017)	Q	80, 239
	1.3×10^{-1}		Wang et al. (2017)	Q	80, 240
	7.8		Raventos-Duran et al. (2010)	Q	242, 243
	2.5		Raventos-Duran et al. (2010)	Q	244
	7.8		Raventos-Duran et al. (2010)	Q	245
1.8×10^1		Hilal et al. (2008)	Q		
9.3×10^1		Modarresi et al. (2007)	Q	67	
		6100	Kühne et al. (2005)	Q	
		5300	Kühne et al. (2005)	?	



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:M2C43CO2H	8.0		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₂ O ₂	1.7 × 10 ¹		Wang et al. (2017)	Q	80, 239
XFOASZQZPWEJAA-UHFFFAOYSA-N	1.6 × 10 ¹		Wang et al. (2017)	Q	80, 240
MCM:M33C3CO2H	4.9		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₂ O ₂	1.7 × 10 ¹		Wang et al. (2017)	Q	80, 239
VUAXHMRKOTJKP-UHFFFAOYSA-N	9.6		Wang et al. (2017)	Q	80, 240
MCM:C721OOH	1.2 × 10 ⁶		Wang et al. (2017)	Q	80, 238
C ₇ H ₁₂ O ₄	2.8 × 10 ⁶		Wang et al. (2017)	Q	80, 239
ZLURETBBUKLNQX-UHFFFAOYSA-N	6.2 × 10 ⁵		Wang et al. (2017)	Q	80, 240
MCM:C721CO3H	1.4 × 10 ⁷		Wang et al. (2017)	Q	80, 238
C ₈ H ₁₂ O ₅	5.5 × 10 ⁶		Wang et al. (2017)	Q	80, 239
HYEGRGIGVZWWFM-UHFFFAOYSA-N	1.0 × 10 ⁴		Wang et al. (2017)	Q	80, 240
MCM:C811OOH	9.8 × 10 ⁵		Wang et al. (2017)	Q	80, 238
C ₈ H ₁₄ O ₄	3.3 × 10 ⁶		Wang et al. (2017)	Q	80, 239
RYDSGVXCHLRTGT-UHFFFAOYSA-N	2.5 × 10 ⁶		Wang et al. (2017)	Q	80, 240
MCM:C823OOH	8.7 × 10 ⁵		Wang et al. (2017)	Q	80, 238
C ₈ H ₁₄ O ₄	3.0 × 10 ⁶		Wang et al. (2017)	Q	80, 239
KIIRSRLFRXTUMU-UHFFFAOYSA-N	2.9 × 10 ⁴		Wang et al. (2017)	Q	80, 240
MCM:NORPINIC	1.7 × 10 ⁶		Wang et al. (2017)	Q	80, 238
C ₈ H ₁₂ O ₄	2.0 × 10 ⁷		Wang et al. (2017)	Q	80, 239
KLKGVMWWRDYKJM-UHFFFAOYSA-N	6.3 × 10 ⁶		Wang et al. (2017)	Q	80, 240
MCM:C811CO3H	1.1 × 10 ⁷		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₄ O ₅	3.7 × 10 ⁶		Wang et al. (2017)	Q	80, 239
ZVOGBTSHONFRIW-UHFFFAOYSA-N	2.9 × 10 ⁴		Wang et al. (2017)	Q	80, 240
MCM:C823CO3H	1.0 × 10 ⁷		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₄ O ₅	1.6 × 10 ⁶		Wang et al. (2017)	Q	80, 239
IESQFENJEQJSTC-UHFFFAOYSA-N	3.2 × 10 ⁴		Wang et al. (2017)	Q	80, 240
MCM:LIMONIC	1.2 × 10 ⁶		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₄ O ₄	6.6 × 10 ⁷		Wang et al. (2017)	Q	80, 239
JUCWCJYNDRRZKR-UHFFFAOYSA-N	1.8 × 10 ⁷		Wang et al. (2017)	Q	80, 240
MCM:C137OOH	8.5 × 10 ⁵		Wang et al. (2017)	Q	80, 238
C ₁₃ H ₂₂ O ₄	3.7 × 10 ⁶		Wang et al. (2017)	Q	80, 239
RDYPCLKIKFUKHY-UHFFFAOYSA-N	4.3 × 10 ⁵		Wang et al. (2017)	Q	80, 240
MCM:C137CO2H	1.2 × 10 ⁶		Wang et al. (2017)	Q	80, 238
C ₁₄ H ₂₂ O ₄	1.7 × 10 ⁸		Wang et al. (2017)	Q	80, 239
IYTMEDMFNUFPT-UHFFFAOYSA-N	1.7 × 10 ⁸		Wang et al. (2017)	Q	80, 240
MCM:C137CO3H	9.8 × 10 ⁶		Wang et al. (2017)	Q	80, 238
C ₁₄ H ₂₂ O ₅	2.4 × 10 ⁶		Wang et al. (2017)	Q	80, 239
WIBVBPZGNYNCKK-UHFFFAOYSA-N	1.8 × 10 ⁵		Wang et al. (2017)	Q	80, 240



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TM123BCO2H $\text{C}_9\text{H}_{10}\text{O}_2$ RIZUCYSQUWMQLX-UHFFFAOYSA-N	1.6×10^2 9.1×10^1 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124BCO2H $\text{C}_9\text{H}_{10}\text{O}_2$ OPVAJFQBSDUNQA-UHFFFAOYSA-N	1.6×10^2 4.1×10^2 5.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TMBCO2H $\text{C}_9\text{H}_{10}\text{O}_2$ UMVOQQDNEYOJOK-UHFFFAOYSA-N	1.6×10^2 2.6×10^2 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C2OHOCO2H $\text{C}_3\text{H}_6\text{O}_4$ RBNPOMFGQQGHHO-UHFFFAOYSA-N	2.1×10^6 2.0×10^7 2.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOC2H4CO2H $\text{C}_3\text{H}_6\text{O}_3$ ALRHLSYJTWAHJZ-UHFFFAOYSA-N	3.2×10^4 1.1×10^5 7.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HC3CO2H $\text{C}_4\text{H}_6\text{O}_3$ RMQJECWPWQIIPW-UHFFFAOYSA-N	1.0×10^5 3.6×10^5 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HMACO2H $\text{C}_4\text{H}_6\text{O}_3$ AAMTXHVZOHPPQR-UHFFFAOYSA-N	6.2×10^4 8.3×10^2 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2C3CO2H $\text{C}_4\text{H}_8\text{O}_3$ WHBMMWSBFZVSSR-UHFFFAOYSA-N	3.0×10^4 6.9×10^4 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOC3H6CO2H $\text{C}_4\text{H}_8\text{O}_3$ SJZRECIVHVDYJC-UHFFFAOYSA-N	2.6×10^4 1.4×10^5 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOIPRCO2H $\text{C}_4\text{H}_8\text{O}_3$ DBXBTMSZEOQQDU-UHFFFAOYSA-N	3.0×10^4 4.5×10^4 6.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRHOCO2H $\text{C}_4\text{H}_8\text{O}_3$ BWLBMIXKSTLSX-UHFFFAOYSA-N	9.6×10^2 2.3×10^4 5.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C46CO2H $\text{C}_5\text{H}_8\text{O}_3$ NJMYQRVWBCSLEU-UHFFFAOYSA-N	4.9×10^4 1.5×10^5 5.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HC4ACO2H $\text{C}_5\text{H}_8\text{O}_3$ BERUOTKXCOOJIM-UHFFFAOYSA-N	6.9×10^4 2.3×10^5 6.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HC4CCO2H $C_5H_8O_3$ NCQCQZXQBYAHBZ-UHFFFAOYSA-N	6.9×10^4 2.0×10^5 6.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM22CO2H $C_5H_{10}O_3$ RDFQSFQGVZWKU-UHFFFAOYSA-N	1.7×10^4 2.1×10^4 1.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2C43CO2H $C_5H_{10}O_3$ VEXDRERIMPLZLU-UHFFFAOYSA-N	2.8×10^4 1.6×10^4 3.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2C4CO2H $C_5H_{10}O_3$ FMHKPLXYWVCLME-UHFFFAOYSA-N	2.3×10^4 8.0×10^4 8.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOBUT2CO2H $C_5H_{10}O_3$ JYTYEGKJKIXWQJ-UHFFFAOYSA-N	2.3×10^4 3.5×10^4 7.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C518CO2H $C_6H_{10}O_3$ COPVWTGWVHHSRKH-UHFFFAOYSA-N	4.6×10^4 2.8×10^4 2.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M2C4CO2H $C_6H_{12}O_3$ PQJUMPXLDZULJ-UHFFFAOYSA-N	1.4×10^4 3.0×10^4 3.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M3C4CO2H $C_6H_{12}O_3$ BNTHHYUWQILHSA-UHFFFAOYSA-N	2.2×10^4 2.9×10^4 2.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM22C3CO2H $C_6H_{12}O_3$ WLKUATLKPJGHKX-UHFFFAOYSA-N	1.4×10^4 2.3×10^4 1.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM2C43CO2H $C_6H_{12}O_3$ QSMSJHRQUBQMKD-UHFFFAOYSA-N	2.2×10^4 2.3×10^4 4.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM33C3CO2H $C_6H_{12}O_3$ NGRPJQCQYDOJX-UHFFFAOYSA-N	1.4×10^4 1.7×10^4 6.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2C54CO2H $C_6H_{12}O_3$ IOXPMKQXROCYFL-UHFFFAOYSA-N	2.2×10^4 1.6×10^4 6.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C5CO2H $C_6H_{12}O_3$ ABIKNKURIGPIRJ-UHFFFAOYSA-N	2.0×10^4 3.7×10^4 6.2×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C622CO2H $C_7H_{12}O_3$ PHVXTLWKDLVJPT-UHFFFAOYSA-N	3.6×10^4 4.7×10^4 2.7×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C624CO2H $C_7H_{12}O_3$ IOGKLPXZHQWIC-UHFFFAOYSA-N	3.6×10^4 3.0×10^4 4.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3M3C5CO2H $C_7H_{14}O_3$ BHWOTLCMMUBASI-UHFFFAOYSA-N	1.1×10^4 1.7×10^4 2.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C811OH $C_8H_{14}O_3$ UVNHICQQCWWSMK-UHFFFAOYSA-N	3.6×10^4 1.7×10^6 9.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C812OH $C_8H_{14}O_4$ VFUDATRQVLCLSF-UHFFFAOYSA-N	3.4×10^6 2.9×10^8 1.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C812OOH $C_8H_{14}O_5$ TXANCYYWZQZPGK-UHFFFAOYSA-N	1.8×10^9 4.9×10^8 1.5×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C823OH $C_8H_{14}O_3$ HTVBHPNLVQCQSI-UHFFFAOYSA-N	3.3×10^4 2.0×10^6 9.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C825OH $C_8H_{14}O_4$ GZVYHBJSBFFIIL-UHFFFAOYSA-N	5.5×10^6 3.7×10^7 5.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C825OOH $C_8H_{14}O_5$ XYVJCWMMBMSFSM-UHFFFAOYSA-N	2.8×10^9 7.8×10^8 1.8×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C137OH $C_{13}H_{22}O_3$ GRQGSRLPJOOBF-UHFFFAOYSA-N	3.1×10^4 1.7×10^6 2.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C139OH $C_{13}H_{22}O_4$ RQGWJIBQKBQFEC-UHFFFAOYSA-N	6.0×10^7 7.6×10^9 1.4×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C139OOH $C_{13}H_{22}O_5$ MQHLLQJIDGKDCT-UHFFFAOYSA-N	1.8×10^9 1.7×10^{10} 9.8×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C44OOH $C_4H_6O_5$ RIVXGQNRQYOWAN-UHFFFAOYSA-N	7.3×10^8 4.1×10^7 1.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MALDALCO2H $\text{C}_4\text{H}_4\text{O}_3$ ZOIRMVZWRDLJPI-UHFFFAOYSA-N	3.4×10^4 6.0×10^3 5.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRPAL2CO2H $\text{C}_4\text{H}_6\text{O}_3$ VOKUMXABRRXHAR-UHFFFAOYSA-N	9.8×10^3 5.0×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3MCOCO2H $\text{C}_5\text{H}_6\text{O}_3$ VXAWORVMCLXEKH-UHFFFAOYSA-N	2.3×10^4 9.6×10^3 7.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO1M22CO2H $\text{C}_5\text{H}_8\text{O}_3$ SUMZWDXUXTFFX-UHFFFAOYSA-N	5.4×10^3 1.3×10^3 6.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC3ODBCO2H $\text{C}_5\text{H}_6\text{O}_3$ QPFVAKLVWFPTSX-UHFFFAOYSA-N	2.3×10^4 9.3×10^3 3.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3EODBCO2H $\text{C}_6\text{H}_8\text{O}_3$ XIZBOUDCWHEQCF-UHFFFAOYSA-N	2.0×10^4 8.3×10^3 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3M2COCO2H $\text{C}_6\text{H}_8\text{O}_3$ HLFIROOBCUFLFC-UHFFFAOYSA-N	1.6×10^4 9.1×10^3 5.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C522CO2H $\text{C}_6\text{H}_8\text{O}_3$ NSMTVDIDRFOALU-UHFFFAOYSA-N	1.3×10^4 2.3×10^4 9.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:RGDCO2H $\text{C}_6\text{H}_8\text{O}_3$ HNXWTHGWCGDLKB-UHFFFAOYSA-N	2.0×10^4 8.5×10^3 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C615CO2H $\text{C}_7\text{H}_{10}\text{O}_4$ BRDQYLNZHVUNQF-UHFFFAOYSA-N	3.6×10^6 5.4×10^5 2.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C722OOH $\text{C}_7\text{H}_{12}\text{O}_5$ XJSSOLXEKAZFKL-UHFFFAOYSA-N	3.0×10^8 1.6×10^7 8.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IP3ODBCO2H $\text{C}_7\text{H}_{10}\text{O}_3$ HLXOYOZOZOGAJW-UHFFFAOYSA-N	1.9×10^4 4.5×10^3 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PC3ODBCO2H $\text{C}_7\text{H}_{10}\text{O}_3$ SHOOYBDWMZRKO-UHFFFAOYSA-N	1.7×10^4 5.4×10^3 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C721CHO	1.2×10^4		Wang et al. (2017)	Q	80, 238
$C_8H_{12}O_3$	2.8×10^5		Wang et al. (2017)	Q	80, 239
MQTHUXQLMJSVGN-UHFFFAOYSA-N	2.9×10^4		Wang et al. (2017)	Q	80, 240
MCM:C729CO2H	1.0×10^4		Wang et al. (2017)	Q	80, 238
$C_8H_{12}O_3$	1.1×10^5		Wang et al. (2017)	Q	80, 239
NHNJUKWYLMFOQP-UHFFFAOYSA-N	1.7×10^4		Wang et al. (2017)	Q	80, 240
MCM:C823CO	1.0×10^4		Wang et al. (2017)	Q	80, 238
$C_8H_{12}O_3$	2.2×10^5		Wang et al. (2017)	Q	80, 239
KUOQBJGRIDTXEZ-UHFFFAOYSA-N	7.1×10^3		Wang et al. (2017)	Q	80, 240
MCM:C822CO2H	4.4×10^4	15000	Wieser et al. (2023)	Q	437
$C_9H_{14}O_3$	8.5×10^3		Wang et al. (2017)	Q	80, 238
ADULCIYKWVJSFE-UHFFFAOYSA-N	9.3×10^4		Wang et al. (2017)	Q	80, 239
	3.0×10^4		Wang et al. (2017)	Q	80, 240
MCM:C830CO2H	9.1×10^3		Wang et al. (2017)	Q	80, 238
$C_9H_{14}O_3$	1.9×10^5		Wang et al. (2017)	Q	80, 239
NWNQYPOMHUZLML-UHFFFAOYSA-N	2.3×10^4		Wang et al. (2017)	Q	80, 240
MCM:C89CO2H	9.1×10^3		Wang et al. (2017)	Q	80, 238
$C_9H_{14}O_3$	2.0×10^5		Wang et al. (2017)	Q	80, 239
RFGXRYLTBBFIG-UHFFFAOYSA-N	7.4×10^4		Wang et al. (2017)	Q	80, 240
MCM:C126CO2H	1.0×10^4		Wang et al. (2017)	Q	80, 238
$C_{13}H_{20}O_3$	2.4×10^5		Wang et al. (2017)	Q	80, 239
FRZAETYQWIEERW-UHFFFAOYSA-N	2.6×10^5		Wang et al. (2017)	Q	80, 240
MCM:C137CO	1.0×10^4		Wang et al. (2017)	Q	80, 238
$C_{13}H_{20}O_3$	2.2×10^5		Wang et al. (2017)	Q	80, 239
FQUQDHNCRLRZNB-UHFFFAOYSA-N	7.8×10^4		Wang et al. (2017)	Q	80, 240
MCM:C136CO2H	8.9×10^3		Wang et al. (2017)	Q	80, 238
$C_{14}H_{22}O_3$	1.5×10^5		Wang et al. (2017)	Q	80, 239
MUFZWTUKICSBHZ-UHFFFAOYSA-N	7.8×10^3		Wang et al. (2017)	Q	80, 240
MCM:COHM2CO2H	2.0×10^5		Wang et al. (2017)	Q	80, 238
$C_4H_6O_4$	7.1×10^5		Wang et al. (2017)	Q	80, 239
DDNPKLYNPFAIEE-UHFFFAOYSA-N	2.0×10^2		Wang et al. (2017)	Q	80, 240
MCM:C1H4C5CO2H	1.8×10^7		Wang et al. (2017)	Q	80, 238
$C_6H_{10}O_4$	3.4×10^7		Wang et al. (2017)	Q	80, 239
NIVGPRREFKECGM-UHFFFAOYSA-N	3.2×10^6		Wang et al. (2017)	Q	80, 240
MCM:ECOCO2H	7.3×10^3		Wang et al. (2017)	Q	80, 238
$C_4H_6O_3$	4.1×10^1		Wang et al. (2017)	Q	80, 239
TYEYBOSBBHJIV-UHFFFAOYSA-N	5.8		Wang et al. (2017)	Q	80, 240
MCM:C41CO2H	6.5×10^3		Wang et al. (2017)	Q	80, 238
$C_5H_8O_3$	4.6×10^3		Wang et al. (2017)	Q	80, 239
GCXJINGJZAOJHR-UHFFFAOYSA-N	3.0×10^3		Wang et al. (2017)	Q	80, 240



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C5CO14OH $C_5H_6O_3$ XGTKSWVCNVUVHG-UHFFFAOYSA-N	2.3×10^4 1.6×10^4 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2C4CO2H $C_5H_8O_3$ JOOXCMJARBKPKM-UHFFFAOYSA-N	5.6×10^3 4.6×10^5 7.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO3C4CO2H $C_5H_8O_3$ FHSUFDYFOHSYHI-UHFFFAOYSA-N	5.6×10^3 1.5×10^4 5.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPGLYOXOH $C_5H_8O_3$ QHKABHOEWYVLI-UHFFFAOYSA-N	6.5×10^3 1.7×10^1 5.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PGLYOXOH $C_5H_8O_3$ KDVFRMMRZOCFLS-UHFFFAOYSA-N	5.6×10^3 2.0×10^1 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C51CO2H $C_6H_{10}O_3$ NFIWUVRBASXMGK-UHFFFAOYSA-N	5.3×10^3 1.6×10^5 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CODBCO2H $C_6H_8O_3$ YUICRCSHEOZHST-UHFFFAOYSA-N	1.6×10^4 1.6×10^4 2.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5DBCOCO2H $C_6H_8O_3$ LRRPKULXSQVRRZ-UHFFFAOYSA-N	1.6×10^4 1.4×10^4 2.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6DCRBBOH $C_6H_8O_3$ VUZJUOKMOGBDH-UHFFFAOYSA-N	2.0×10^4 1.4×10^4 4.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2C54CO2H $C_6H_{10}O_3$ UZTJTTKEYGHTNM-UHFFFAOYSA-N	5.3×10^3 8.7×10^4 3.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2M33CO2H $C_6H_{10}O_3$ CBZZWRQRPKSEKI-UHFFFAOYSA-N	3.6×10^3 8.5×10^2 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO3C5CO2H $C_6H_{10}O_3$ CLJBDUIEHLLEN-UHFFFAOYSA-N	4.5×10^3 2.6×10^5 3.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C732OOH $C_7H_{12}O_5$ ASSSOSHEUJWVOL-UHFFFAOYSA-N	3.2×10^8 1.8×10^9 2.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C7ADCCO2H $C_7H_{10}O_3$ GJIWJSZYGVZNC-UHFFFAOYSA-N	1.0×10^4 1.3×10^4 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7CDCCO2H $C_7H_{10}O_3$ OAGXHOMWGVMDLP-UHFFFAOYSA-N	1.4×10^4 7.8×10^3 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7DCCO2H $C_7H_{10}O_3$ LUXOYEZTEWTGMD-UHFFFAOYSA-N	1.7×10^4 8.5×10^3 4.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7DDCCO2H $C_7H_{10}O_3$ MDDQAVHYGMRQB-UHFFFAOYSA-N	1.4×10^4 8.5×10^3 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO25C6CO2H $C_7H_{10}O_4$ WUQQVFQGWMLD-UHFFFAOYSA-N	2.7×10^6 2.2×10^7 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IC7DCCO2H $C_7H_{10}O_3$ TZKNMZPMBZQSMV-UHFFFAOYSA-N	1.9×10^4 6.9×10^3 3.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C732CO3H $C_8H_{12}O_6$ IARLEAIRRLVEZ-UHFFFAOYSA-N	3.6×10^9 2.2×10^9 2.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:KLIMONIC $C_8H_{12}O_5$ POLIOAJLCGQOOTJ-UHFFFAOYSA-N	4.5×10^8 3.4×10^{10} 1.1×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C827CO2H $C_9H_{14}O_4$ UOMMGFNPUVSKTE-UHFFFAOYSA-N	1.4×10^6 1.3×10^6 4.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C88CO2H $C_9H_{12}O_4$ LOFCXTWTTIFNLN-UHFFFAOYSA-N	4.5×10^6 6.6×10^7 3.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:KLIMONONIC $C_9H_{14}O_4$ RRLKTDJWPWHS-UHFFFAOYSA-N	2.0×10^6 5.4×10^7 8.5×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C928CO2H $C_{10}H_{16}O_4$ SANKOOWGNYBKOU-UHFFFAOYSA-N	1.1×10^6 5.6×10^7 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMONONIC $C_{10}H_{16}O_3$ NJOIWWRMLFSDTM-UHFFFAOYSA-N	5.7×10^4 5.8×10^3 5.9×10^4 2.4×10^5	15000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C1011CO2H $C_{11}H_{18}O_3$ IUOPXZCJHJMHP-UHFFFAOYSA-N	4.9×10^3 1.5×10^5 2.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1211OOH $C_{12}H_{20}O_5$ PTZJPBFCQIPAZ-UHFFFAOYSA-N	3.5×10^8 1.7×10^9 8.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1211CO2H $C_{13}H_{20}O_5$ QUEDJGCZCJPFDA-UHFFFAOYSA-N	4.7×10^8 9.3×10^{10} 2.8×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1211CO3H $C_{13}H_{20}O_6$ DVDQWECWXWLOQZ-UHFFFAOYSA-N	3.6×10^9 4.5×10^9 8.1×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C131CO2H $C_{14}H_{22}O_4$ QDUXHZZYSCMHPK-UHFFFAOYSA-N	2.2×10^6 1.4×10^8 5.9×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C147CO $C_{14}H_{20}O_5$ MMRJODLWTRWRNH-UHFFFAOYSA-N	1.4×10^9 3.2×10^8 2.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C147OOH $C_{14}H_{22}O_6$ MOUQEZXKHGSYER-UHFFFAOYSA-N	1.7×10^{11} 1.0×10^9 3.0×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C141CO2H $C_{15}H_{24}O_3$ VGNFSPHIKPNED-UHFFFAOYSA-N	5.4×10^3 2.1×10^5 3.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOCH2COCO2H $C_3H_4O_4$ HHDDCCUIIUWNGJ-UHFFFAOYSA-N	1.1×10^6 5.3×10^2 4.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3C2C4CO2H $C_5H_8O_4$ IQZXDCQZNRIRW-UHFFFAOYSA-N	8.5×10^5 2.0×10^6 2.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HMVKBCO2H $C_5H_8O_4$ ISMQTZHDHOVB-UHFFFAOYSA-N	1.7×10^7 2.1×10^6 6.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C517CO2H $C_6H_{10}O_4$ APPVMSIJNZFGHP-UHFFFAOYSA-N	1.4×10^7 1.3×10^7 2.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C519CO2H $C_6H_{10}O_4$ ULHNCRHSCMPZGW-UHFFFAOYSA-N	1.4×10^7 3.8×10^6 3.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C732OH $C_7H_{12}O_4$ PKQMWBBXJKPID-UHFFFAOYSA-N	1.1×10^7 4.7×10^8 4.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C734CO $C_7H_{10}O_5$ CPJVKYXUMUTCGW-UHFFFAOYSA-N	8.0×10^9 6.6×10^7 3.2×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C734OH $C_7H_{12}O_5$ RDRUHSRUZHRAFB-UHFFFAOYSA-N	1.9×10^9 8.7×10^{10} 4.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C734OOH $C_7H_{12}O_6$ ABEMFUWOTMEDPB-UHFFFAOYSA-N	1.1×10^{12} 2.0×10^{11} 1.3×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3C25CCO2H $C_7H_{10}O_5$ FMZPEVNVWACALO-UHFFFAOYSA-N	4.1×10^8 4.1×10^9 2.7×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C813OH $C_8H_{14}O_5$ UHMOZKUUXAVADP-UHFFFAOYSA-N	2.1×10^{10} 6.5×10^8 2.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C813OOH $C_8H_{14}O_6$ FNGYAHKKJFMZCA-UHFFFAOYSA-N	6.2×10^{11} 1.7×10^8 4.3×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C825CO $C_8H_{12}O_4$ PGSQVIJDIYGHPF-UHFFFAOYSA-N	2.2×10^7 2.6×10^5 4.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOPINONIC $C_{10}H_{16}O_4$ MZHKOIVHCBFXJV-UHFFFAOYSA-N	8.9×10^5 6.0×10^7 1.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1211OH $C_{12}H_{20}O_4$ JNTJQAWMLAKHDW-UHFFFAOYSA-N	1.1×10^7 2.7×10^8 2.8×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1212OH $C_{12}H_{20}O_5$ OINCQTVJDDYTJ-UHFFFAOYSA-N	1.2×10^9 4.7×10^{11} 8.9×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1212OOH $C_{12}H_{20}O_6$ KZNQDAPBLSOIR-UHFFFAOYSA-N	6.5×10^{11} 1.8×10^{11} 1.8×10^{10}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1213CO $C_{12}H_{18}O_6$ IKFUCIVDZJUEZ-UHFFFAOYSA-N	1.5×10^{12} 3.3×10^{12} 2.1×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C1213OH $C_{12}H_{20}O_6$ DPGLQQDGNMDDAAZ-UHFFFAOYSA-N	7.1×10^{12} 9.8×10^{11} 1.3×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1213OOH $C_{12}H_{20}O_7$ ZUGVXCQEOPRNFT-UHFFFAOYSA-N	1.9×10^{14} 1.3×10^{13} 3.9×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1310CO $C_{13}H_{20}O_5$ NHYXXXJOGAKHPV-UHFFFAOYSA-N	4.3×10^9 3.9×10^{11} 2.6×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1310OH $C_{13}H_{22}O_5$ PXEJSKZGVMTSCR-UHFFFAOYSA-N	2.0×10^{10} 1.0×10^{11} 1.7×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1310OOH $C_{13}H_{22}O_6$ HXUMLFGRLLCICH-UHFFFAOYSA-N	5.4×10^{11} 1.1×10^{12} 5.9×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C147OH $C_{14}H_{22}O_5$ IPYASLZXSOHCRG-UHFFFAOYSA-N	3.3×10^8 5.6×10^8 7.8×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C151OH $C_{15}H_{26}O_5$ RRTATIWWWPYIIC-UHFFFAOYSA-N	6.3×10^9 2.4×10^{10} 3.7×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C151OOH $C_{15}H_{26}O_6$ FDHNLWUJMDRLQD-UHFFFAOYSA-N	4.7×10^{11} 1.9×10^{11} 2.8×10^{10}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO13C3CO2H $C_4H_4O_4$ YEZSWHPLZBZVLH-UHFFFAOYSA-N	6.2×10^6 1.5×10^4 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C512CO2H $C_6H_8O_4$ CGRSCFNOTZUXCX-UHFFFAOYSA-N	4.0×10^6 6.3×10^7 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6COALCO2H $C_6H_8O_4$ TWNJAPRLIZAXHA-UHFFFAOYSA-N	4.0×10^6 2.3×10^7 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C617CO2H $C_7H_{10}O_4$ ZXMACHDUAJJJBQ-UHFFFAOYSA-N	2.6×10^6 9.6×10^5 2.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C618CO2H $C_7H_{10}O_4$ MXMJWVQRGMMLRI-UHFFFAOYSA-N	2.6×10^6 2.3×10^5 5.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.7: Carboxylic acids (RCOOH) and peroxy carboxylic acids (RCOOOH) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C626CO2H $C_7H_{10}O_4$ JCTYMUINHCVDEP-UHFFFAOYSA-N	3.7×10^6 8.3×10^7 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C732CO $C_7H_{10}O_4$ ATXVRLJHWCSFDB-UHFFFAOYSA-N	3.7×10^6 5.0×10^7 2.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C718CO2H $C_8H_{12}O_4$ OBYKYHDGLQUNDK-UHFFFAOYSA-N	2.0×10^6 1.6×10^7 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C731CO2H $C_8H_{12}O_4$ URWVDUFOGQNELZ-UHFFFAOYSA-N	3.5×10^6 2.0×10^8 3.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C87CO2H $C_9H_{12}O_5$ GZPOIVSRXTZTQZ-UHFFFAOYSA-N	1.7×10^9 3.6×10^8 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C116CO2H $C_{12}H_{18}O_4$ HWWVGCXKFWUOCT-UHFFFAOYSA-N	4.1×10^6 1.8×10^8 1.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1211CO $C_{12}H_{18}O_4$ VVPUBXPESADLR-UHFFFAOYSA-N	4.1×10^6 4.2×10^7 8.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1210CO2H $C_{13}H_{20}O_4$ MERIWEKKXYNHSHZ-UHFFFAOYSA-N	3.2×10^6 2.8×10^8 8.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



A3.8 Esters (RCOOR)

Table A3.8: Esters (RCOOR)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
1,3-dioxolan-2-one $\text{C}_3\text{H}_4\text{O}_3$ (ethylene carbonate) [96-49-1] KMTRUDSVKNLOMY-UHFFFAOYSA-N	3.6×10^{-2}		HSDB (2015)	Q	99	
carbonic acid, dimethyl ester $\text{C}_3\text{H}_6\text{O}_3$ (dimethyl carbonate) [616-38-6] IEJIGPNLZYLBP-UHFFFAOYSA-N	1.6×10^{-1}	4900	Burkholder et al. (2019)	L		
	1.6×10^{-1}	4900	Burkholder et al. (2015)	L		
	1.5×10^{-1}	5000	Brockbank (2013)	L	1	
	1.6×10^{-1}	4900	Böhme et al. (2008)	M		
	1.6×10^{-1}	5000	Dohnal et al. (2010)	V	1	
	2.5×10^{-1}		Wang et al. (2017)	Q	80, 238	
	2.1×10^{-1}		Wang et al. (2017)	Q	80, 239	
dimethyl dicarbonate $\text{C}_4\text{H}_6\text{O}_5$ [4525-33-1] GZDFHIJNHMHENY-UHFFFAOYSA-N	2.1×10^{-1}		Wang et al. (2017)	Q	80, 240	
	1.6×10^{-2}		HSDB (2015)	Q	99	
	2.2×10^{-2}		HSDB (2015)	Q	99	
	carbonic acid, diethyl ester $\text{C}_5\text{H}_{10}\text{O}_3$ (diethyl carbonate) [105-58-8] OIFBSDVJPJOWBCH-UHFFFAOYSA-N	1.0×10^{-1}	6000	Burkholder et al. (2019)	L	
		1.0×10^{-1}	6000	Burkholder et al. (2015)	L	
1.0×10^{-1}		6400	Brockbank (2013)	L	1	
1.1×10^{-1}		6100	Böhme et al. (2008)	M		
1.1×10^{-1}			Duchowicz et al. (2020)	V	186	
1.1×10^{-1}			HSDB (2015)	V		
1.0×10^{-1}		6100	Dohnal et al. (2010)	V	1	
1.5×10^{-2}			Duchowicz et al. (2020)	Q		
1.6×10^{-1}			Gharagheizi et al. (2012)	Q		
6.2×10^{-1}			Raventos-Duran et al. (2010)	Q	242, 243	
3.9×10^{-2}			Raventos-Duran et al. (2010)	Q	244	
9.9×10^{-3}			Raventos-Duran et al. (2010)	Q	245	
6.9×10^{-2}			Hilal et al. (2008)	Q		
2.8×10^{-2}		Modarresi et al. (2007)	Q	67		
1.1×10^{-1}		Yaws (1999)	?	21, 12		
methyl methanoate HCOOCH_3 (methyl formate) [107-31-3] TZIHFWKZFHZASV-UHFFFAOYSA-N	4.1×10^{-2}	4000	Burkholder et al. (2019)	L		
	4.1×10^{-2}	4000	Burkholder et al. (2015)	L		
	4.2×10^{-2}	3800	Brockbank (2013)	L	1	
	4.1×10^{-2}	4000	Sander et al. (2011)	L		
	4.2×10^{-2}	3900	Plyasunov et al. (2004)	L		
	4.1×10^{-2}	4000	Kutsuna et al. (2005)	M		
	4.6×10^{-2}		Wittig et al. (2001)	M		
	4.1×10^{-2}		Hoff et al. (1993)	M		
	3.9×10^{-2}	4100	Hartkopf and Karger (1973)	M		
	4.9×10^{-2}		Mackay et al. (2006c)	V		



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.9×10^{-2}		Mackay et al. (1995)	V	
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	3.8×10^{-1}		Duchowicz et al. (2020)	Q	
	5.3×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.0×10^{-1}		Wang et al. (2017)	Q	80, 239
	8.7×10^{-2}		Wang et al. (2017)	Q	80, 240
	4.4×10^{-2}		Li et al. (2014)	Q	241
	5.4×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	5.8×10^{-2}		Hilal et al. (2008)	Q	
	5.8×10^{-2}		Modarresi et al. (2007)	Q	67
		4100	Kühne et al. (2005)	Q	
	4.6×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	3.4×10^{-2}		English and Carroll (2001)	Q	230, 231
	2.9×10^{-2}		Katritzky et al. (1998)	Q	
	8.0×10^{-2}		Suzuki et al. (1992)	Q	232
	6.4×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	4.4×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		4200	Kühne et al. (2005)	?	
	5.2×10^{-3}		Yaws (1999)	?	21, 12
	4.4×10^{-2}		Betterton (1992)	?	497
	4.4×10^{-2}		Abraham et al. (1990)	?	
	4.4×10^{-2}		Hine and Mookerjee (1975)	?	497
ethyl methanoate	3.4×10^{-2}	4600	Burkholder et al. (2019)	L	
HCOOC ₂ H ₅	3.4×10^{-2}	4600	Burkholder et al. (2015)	L	
(ethyl formate)	3.3×10^{-2}	4000	Brockbank (2013)	L	1
[109-94-4]	3.4×10^{-2}	4600	Sander et al. (2011)	L	
WBJINCZRORDGAQ-UHFFFAOYSA-N	3.5×10^{-2}	4600	Plyasunov et al. (2004)	L	
	3.4×10^{-2}	4600	Kutsuna et al. (2005)	M	
	4.0×10^{-2}		Wittig et al. (2001)	M	
	2.3×10^{-2}		Richon et al. (1985)	M	38
	1.9×10^{-3}	4600	Hartkopf and Karger (1973)	M	
	4.9×10^{-2}		Mackay et al. (2006c)	V	
	4.9×10^{-2}		Mackay et al. (1995)	V	
	3.1×10^{-2}		Abraham (1984)	V	
	3.5×10^{-2}		Hine and Mookerjee (1975)	V	
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.8×10^{-1}		Duchowicz et al. (2020)	Q	184
	4.1×10^{-2}		Wang et al. (2017)	Q	80, 238
	4.8×10^{-2}		Wang et al. (2017)	Q	80, 239
	5.0×10^{-2}		Wang et al. (2017)	Q	80, 240
	4.7×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1×10^{-2}		Hilal et al. (2008)	Q	
	5.5×10^{-2}		Modarresi et al. (2007)	Q	67
	2.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.6×10^{-2}		English and Carroll (2001)	Q	230, 231
	3.5×10^{-2}		Katritzky et al. (1998)	Q	
	6.2×10^{-2}		Suzuki et al. (1992)	Q	232
	5.7×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.6×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	4.5×10^{-2}		Yaws (1999)	?	21, 28
	1.7×10^{-2}		Abraham and Weathersby (1994)	?	21
	1.4×10^{-3}		Hoff et al. (1993)	?	21
	3.1×10^{-2}		Abraham et al. (1990)	?	
propyl methanoate HCOOC_3H_7 (propyl formate) [110-74-7] KFNNILCVOLYIR-UHFFFAOYSA-N	2.6×10^{-2}	5100	Burkholder et al. (2019)	L	
	2.6×10^{-2}	5100	Burkholder et al. (2015)	L	
	3.1×10^{-2}	4800	Brockbank (2013)	L	1
	2.6×10^{-2}	5100	Sander et al. (2011)	L	
	2.8×10^{-2}	4900	Plyasunov et al. (2004)	L	
	2.6×10^{-2}	5100	Kutsuna et al. (2005)	M	
	2.3×10^{-2}		Duchowicz et al. (2020)	V	186
	2.1×10^{-2}		Mackay et al. (2006c)	V	
	2.7×10^{-2}		Hine and Mookerjee (1975)	V	
	2.7×10^{-2}		Yaws (2003)	X	237, 87
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	
	2.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.9×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.3×10^{-2}		Hilal et al. (2008)	Q	
	4.5×10^{-2}		Modarresi et al. (2007)	Q	67
	1.3×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	1.9×10^{-2}		English and Carroll (2001)	Q	230, 231
	3.5×10^{-2}		Katritzky et al. (1998)	Q	
	4.7×10^{-2}		Suzuki et al. (1992)	Q	232
	4.4×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.3×10^{-2}		Yaws (1999)	?	21, 87
	2.7×10^{-2}		Abraham et al. (1990)	?	
isopropyl methanoate HCOOC_3H_7 (isopropyl formate) [625-55-8] RMOUBSOVHSONPZ-UHFFFAOYSA-N	1.9×10^{-2}		Plyasunov et al. (2004)	L	
	1.3×10^{-2}		Duchowicz et al. (2020)	V	186
	1.2×10^{-2}		Hine and Mookerjee (1975)	V	
	8.2×10^{-2}		Duchowicz et al. (2020)	Q	
	4.4×10^{-2}		Wang et al. (2017)	Q	80, 238
	3.1×10^{-2}		Wang et al. (2017)	Q	80, 239
	7.8×10^{-2}		Wang et al. (2017)	Q	80, 240
	4.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.1×10^{-2}		Hilal et al. (2008)	Q	



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.0×10^{-2}		English and Carroll (2001)	Q	230, 274
	3.8×10^{-2}		Katritzky et al. (1998)	Q	
	4.3×10^{-2}		Suzuki et al. (1992)	Q	232
	3.9×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	1.2×10^{-2}		Abraham et al. (1990)	?	
butyl methanoate HCOOC ₄ H ₉ (butyl formate) [592-84-7] NMJJFJNHVMGPGM-UHFFFAOYSA-N	2.6×10^{-2}	3700	Brockbank (2013)	L	1
	1.9×10^{-2}		Plyasunov et al. (2004)	L	
	1.9×10^{-2}		Wittig et al. (2001)	M	
	1.9×10^{-2}		Duchowicz et al. (2020)	V	186
	1.7×10^{-2}		Yaws (2003)	X	237, 402
	2.3×10^{-1}		Duchowicz et al. (2020)	Q	
	3.0×10^{-2}		Wang et al. (2017)	Q	80, 238
	2.1×10^{-2}		Wang et al. (2017)	Q	80, 239
	3.5×10^{-2}		Wang et al. (2017)	Q	80, 240
	1.4×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.9×10^{-2}		Gharagheizi et al. (2010)	Q	246
	4.1×10^{-2}		Modarresi et al. (2007)	Q	67
	2.0×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	3.5×10^{-2}		Katritzky et al. (1998)	Q	
	1.9×10^{-2}		Yaws (1999)	?	21, 402
(1-methylpropyl)-methanoate C ₅ H ₁₀ O ₂ (sec-butyl formate) [589-40-2] OAEQYDZVVPONKW-UHFFFAOYSA-N	1.9×10^{-2}		Gharagheizi et al. (2012)	Q	
(2-methylpropyl)-methanoate HCOOC ₄ H ₉ (isobutyl formate) [542-55-2] AVMSWPWPYJVYKY-UHFFFAOYSA-N	1.6×10^{-2}	5200	Brockbank (2013)	L	1
	1.6×10^{-2}	5200	Plyasunov et al. (2004)	L	
	1.9×10^{-2}		Duchowicz et al. (2020)	V	186
	1.8×10^{-2}		Mackay et al. (2006c)	V	
	1.8×10^{-2}		Mackay et al. (1995)	V	
	1.7×10^{-2}		Hine and Mookerjee (1975)	V	
	1.8×10^{-2}		Yaws (2003)	X	237
	9.1×10^{-2}		Duchowicz et al. (2020)	Q	
	9.5×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	3.3×10^{-2}		Modarresi et al. (2007)	Q	67
	2.0×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.5×10^{-2}		English and Carroll (2001)	Q	230, 260
	3.9×10^{-2}		Katritzky et al. (1998)	Q	
	3.3×10^{-2}		Suzuki et al. (1992)	Q	232
	3.1×10^{-2}		Nirmalakhandan and Speece (1988)	Q	



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.3×10^{-2}		Yaws (1999)	?	21
	1.7×10^{-2}		Abraham et al. (1990)	?	
(1,1-dimethylethyl)-methanoate HCOOC_4H_9 (<i>tert</i> -butyl formate; TBF) [762-75-4] RUPAXCPQAAOIPB-UHFFFAOYSA-N	1.4×10^{-2}	3600	Brockbank (2013)	L	1
	1.4×10^{-2}	3600	Arp and Schmidt (2004)	M	
	2.5×10^{-2}		Yaws (2003)	X	258
	2.5×10^{-2}		Yaws (2003)	X	237
	7.3×10^{-2}		Dupeux et al. (2022)	Q	259
	2.9×10^{-2}		Keshavarz et al. (2022)	Q	
	4.0×10^{-2}		Duchowicz et al. (2020)	Q	299
	2.3×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.1×10^{-2}		Wang et al. (2017)	Q	80, 239
	6.6×10^{-2}		Wang et al. (2017)	Q	80, 240
	4.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.6×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-2}		Duchowicz et al. (2020)	?	185, 21
pentyl methanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (pentyl formate) [638-49-3] DIQMPQMYFZXDAX-UHFFFAOYSA-N	1.7×10^{-2}	6000	Brockbank (2013)	L	1
	1.6×10^{-2}	5800	Plyasunov et al. (2004)	L	
	1.5×10^{-2}		Yaws (2003)	X	237
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-2}		Hilal et al. (2008)	Q	
	7.5×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	2.8×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.5×10^{-2}		Yaws (1999)	?	21
3-pentyl methanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (3-pentyl formate) [58368-67-5] YMJOAYHERILFIM-UHFFFAOYSA-N	1.2×10^{-2}		Gharagheizi et al. (2012)	Q	
1,1-dimethylpropyl methanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (1,1-dimethylpropyl formate) [757-88-0] SVZIJXUUTNJSEJ-UHFFFAOYSA-N	1.7×10^{-2}		Yaws (2003)	X	237
	3.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-2}		Gharagheizi et al. (2010)	Q	246
1,2-dimethylpropyl methanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (1,2-dimethylpropyl formate) [66794-46-5] XEQSPMCFJQDHFU-UHFFFAOYSA-N	1.7×10^{-2}		Yaws (2003)	X	237
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.7×10^{-2}		Gharagheizi et al. (2010)	Q	246
1-methylbutyl methanoate $\text{C}_6\text{H}_{12}\text{O}_2$ (1-methylbutyl formate) [58368-66-4] JNRQSKFTIYCDIP-UHFFFAOYSA-N	1.7×10^{-2}		Yaws (2003)	X	237
	1.7×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-2}		Gharagheizi et al. (2010)	Q	246



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Table A3.8: Esters (RCOOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethylpropyl methanoate $C_6H_{12}O_2$ (2,2-dimethylpropyl formate) [23361-67-3] DGMIPKNXUDSQGI-UHFFFAOYSA-N	1.5×10^{-2} 3.1×10^{-3} 1.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2-methylbutyl methanoate $C_6H_{12}O_2$ (2-methylbutyl formate) [35073-27-9] DWORILFBIRYUDC-UHFFFAOYSA-N	1.6×10^{-2} 5.2×10^{-3} 1.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
3-methylbutyl methanoate $HCOOC_5H_{11}$ (isoamyl formate) [110-45-2] XKYICAQFSCFURC-UHFFFAOYSA-N	1.2×10^{-2} 1.5×10^{-2} 1.2×10^{-2} 3.9×10^{-2} 9.7×10^{-2} 8.5×10^{-3} 1.5×10^{-2} 1.7×10^{-2} 3.3×10^{-2} 1.6×10^{-2} 1.1×10^{-2} 3.4×10^{-2} 2.5×10^{-2} 2.4×10^{-2} 1.5×10^{-2} 1.5×10^{-2}	5700	Plyasunov et al. (2004) Hine and Mookerjee (1975) Yaws (2003) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Suzuki et al. (1992) Nirmalakhandan and Speece (1988) Duchowicz et al. (2020) Abraham et al. (1990)	L V X Q Q Q Q Q Q Q Q Q Q Q Q ?	237 299 246 67 248, 249 230, 231 232 185, 21
hexyl methanoate $C_7H_{14}O_2$ (hexyl formate) [629-33-4] OUGPMNMLWKS BRI-UHFFFAOYSA-N	1.0×10^{-2} 1.0×10^{-2} 8.0×10^{-3} 8.2×10^{-3} 1.1×10^{-2} 1.6×10^{-2}		Plyasunov et al. (2004) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Nirmalakhandan et al. (1997)	L X Q Q Q Q	237 246
heptyl methanoate $C_8H_{16}O_2$ (heptyl formate) [112-23-2] XEAMDSXSXYAICO-UHFFFAOYSA-N	6.7×10^{-3} 5.9×10^{-3} 5.2×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
octyl methanoate $C_9H_{18}O_2$ (octyl formate) [112-32-3] AVBRYQRTMPHARE-UHFFFAOYSA-N	1.7×10^{-3} 3.3×10^{-3} 5.1×10^{-3}		Yaws (2003) Gharagheizi et al. (2010) Yaws (1999)	X Q ?	237 246 21



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nonyl methanoate $C_{10}H_{20}O_2$ (nonyl formate) [5451-92-3] MOGJOLMSQWGXPA-UHFFFAOYSA-N	2.3×10^{-3} 3.9×10^{-3} 2.1×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
decyl methanoate $C_{11}H_{22}O_2$ (decyl formate) [5451-52-5] BCLJZFLDSCTULJ-UHFFFAOYSA-N	1.5×10^{-3} 4.8×10^{-3} 1.4×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
undecyl methanoate $C_{12}H_{24}O_2$ (undecyl formate) [5454-24-0] OASFNORBKVGDRW-UHFFFAOYSA-N	9.3×10^{-4} 6.0×10^{-3} 9.3×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dodecyl methanoate $C_{13}H_{26}O_2$ (dodecyl formate) [28303-42-6] WPSGFSPBRBRLIQ-UHFFFAOYSA-N	6.2×10^{-4} 6.6×10^{-4}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
vinyl methanoate $C_3H_4O_2$ (vinyl formate) [692-45-5] GFJVXXWOPWLRNU-UHFFFAOYSA-N	5.2×10^{-2} 5.2×10^{-2} 1.2×10^{-2} 5.3×10^{-2}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2010)	X X Q Q	258 237 259 246
benzyl methanoate $C_8H_8O_2$ (benzyl formate) [104-57-4] UYWQUFXKFGHYNT-UHFFFAOYSA-N	2.0	7100	Brockbank (2013)	L	1
methyl ethanoate CH_3COOCH_3 (methyl acetate) [79-20-9] KXXVLQRXCPHEJC-UHFFFAOYSA-N	8.5×10^{-2} 2.0×10^{-2} 8.5×10^{-2} 8.1×10^{-2} 8.1×10^{-2} 1.2×10^{-1} 6.6×10^{-2} 8.3×10^{-2} 4.2×10^{-2} 7.7×10^{-2} 7.7×10^{-2} 8.6×10^{-2} 1.1×10^{-1} 8.7×10^{-2}	5900 5000 5900 4800 4900 7500 4500 4900 4900 4900 5000 4800	Burkholder et al. (2019) Burkholder et al. (2015) Brockbank (2013) Plyasunov et al. (2004) Fenclová et al. (2014) Hiatt (2013) Arp and Schmidt (2004) Hovorka et al. (2002) Kaneko et al. (1994) Ioffe et al. (1984) Kieckbusch and King (1979b) Buttery et al. (1969) Butler and Ramchandani (1935) McKeown and Stowell (1927)	L L L L M M M M M M M M M M	498, 1 499, 500 1 1 1 1 14 501



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-1}		Mackay et al. (2006c)	V	
	1.1×10^{-1}		Mackay et al. (1995)	V	
	4.8×10^{-2}	3300	Djerki and Laub (1988)	V	
	1.1×10^{-1}	4800	Bagno et al. (1991)	T	473
	1.8×10^{-1}		Yaws (2003)	X	258
	9.6×10^{-2}		Dupeux et al. (2022)	Q	259
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.7×10^{-1}		Duchowicz et al. (2020)	Q	
	3.4×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.2×10^{-1}		Wang et al. (2017)	Q	80, 239
	2.5×10^{-1}		Wang et al. (2017)	Q	80, 240
	7.3×10^{-2}		Li et al. (2014)	Q	241
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.4×10^{-2}		Hilal et al. (2008)	Q	
	6.0×10^{-2}		Modarresi et al. (2007)	Q	67
		4500	Kühne et al. (2005)	Q	
	8.6×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	5.4×10^{-2}		Yao et al. (2002)	Q	229
	7.0×10^{-2}		English and Carroll (2001)	Q	230, 231
	3.8×10^{-2}		Katritzky et al. (1998)	Q	
	5.6×10^{-2}		Suzuki et al. (1992)	Q	232
	3.9×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	8.6×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		4900	Kühne et al. (2005)	?	
	1.4×10^{-1}		Yaws (1999)	?	21, 12
	8.0×10^{-2}		Abraham et al. (1990)	?	
ethyl ethanoate	6.5×10^{-2}	5600	Burkholder et al. (2019)	L	502, 1
CH ₃ COOC ₂ H ₅	5.9×10^{-2}	5900	Burkholder et al. (2015)	L	
(ethyl acetate)	6.5×10^{-2}	5600	Brockbank (2013)	L	1
[141-78-6]	5.9×10^{-2}	5900	Sander et al. (2011)	L	
XEKOWRVHYACXOJ-UHFFFAOYSA-N	6.3×10^{-2}	5500	Plyasunov et al. (2004)	L	
	5.9×10^{-2}	5200	Kutsuna and Kaneyasu (2021)	M	
	5.2×10^{-2}	4800	Ammari and Schroen (2019)	M	11
	6.2×10^{-2}	5500	Fenclová et al. (2014)	M	1
	5.1×10^{-2}		Apra et al. (2007)	M	
	5.9×10^{-2}	5900	Kutsuna et al. (2005)	M	
	3.9×10^{-2}		van Ruth et al. (2002)	M	14
	4.1×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 361
	3.0×10^{-2}		van Ruth et al. (2001)	M	14
			Dewulf et al. (1999)	M	362
	6.6×10^{-2}		Druaux et al. (1998)	M	
	3.4×10^{-2}		Welke et al. (1998)	M	
	5.7×10^{-2}		Landy et al. (1995)	M	
	2.8×10^{-2}		Kaneko et al. (1994)	M	14
	4.4×10^{-2}	3900	Kolb et al. (1992)	M	277



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-1}		Pividal et al. (1992)	M	80
	4.3×10^{-2}		Guitart et al. (1989)	M	14
	6.2×10^{-2}		Jones et al. (1988)	M	
	4.3×10^{-2}		Richon et al. (1985)	M	38
	1.3×10^{-1}		Ioffe et al. (1984)	M	80
	5.8×10^{-2}	5300	Kieckbusch and King (1979b)	M	501
	5.7×10^{-2}		Nelson and Hoff (1968)	M	297
	7.4×10^{-2}		Butler and Ramchandani (1935)	M	
	7.3×10^{-2}		Mackay et al. (2006c)	V	
	3.1×10^{-2}		Philippe et al. (2003)	V	14
	7.3×10^{-2}		Mackay et al. (1995)	V	
	3.6×10^{-1}		Hwang et al. (1992)	V	
	7.1×10^{-2}		Yaws (2003)	X	258
	4.7×10^{-2}	5700	Janini and Quaddora (1986)	X	298
	3.9×10^{-2}		Nahon et al. (2000)	C	14
	7.8×10^{-2}		Dupeux et al. (2022)	Q	259
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	6.9×10^{-2}		Duchowicz et al. (2020)	Q	299
	2.8×10^{-2}		Wang et al. (2017)	Q	80, 238
	6.2×10^{-2}		Wang et al. (2017)	Q	80, 239
	2.5×10^{-1}		Wang et al. (2017)	Q	80, 240
	5.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.6×10^{-2}		Hilal et al. (2008)	Q	
	4.9×10^{-2}		Modarresi et al. (2007)	Q	67
		4800	Kühne et al. (2005)	Q	
	7.3×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	5.4×10^{-2}		Yao et al. (2002)	Q	229
	5.3×10^{-2}		English and Carroll (2001)	Q	230, 231
	4.5×10^{-2}		Katritzky et al. (1998)	Q	
	1.6×10^{-1}		Russell et al. (1992)	Q	279
	4.3×10^{-2}		Suzuki et al. (1992)	Q	232
	4.1×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	7.4×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		5200	Kühne et al. (2005)	?	
	7.1×10^{-2}		Yaws (1999)	?	21
	8.8×10^{-2}		Hoff et al. (1993)	?	21
	5.8×10^{-2}		Abraham et al. (1990)	?	
ethyl ethanoate-1-13C CH ₃ COOC ₂ H ₅ (ethyl acetate-1-13C) [3424-59-7] XEKOWRVHYACXOJ-AZXPZELESA-N	7.1×10^{-2}	6500	Hiatt (2013)	M	



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propyl ethanoate $\text{CH}_3\text{COOC}_2\text{H}_5$	4.4×10^{-2}	6100	Burkholder et al. (2019)	L	503, 1
(propyl acetate) [109-60-4] YKYONYBAJNKHLG-UHFFFAOYSA-N	4.4×10^{-2}	6000	Brockbank (2013)	L	1
	4.5×10^{-2}	5900	Plyasunov et al. (2004)	L	
	4.5×10^{-2}	5900	Fenclová et al. (2014)	M	1
	3.9×10^{-2}		van Ruth et al. (2002)	M	14
	3.0×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 361
	1.8×10^{-2}		van Ruth et al. (2001)	M	14
	3.7×10^{-2}		Welke et al. (1998)	M	
	2.1×10^{-2}		Kaneko et al. (1994)	M	14
	3.1×10^{-2}		Richon et al. (1985)	M	38
	4.5×10^{-2}	5500	Kieckbusch and King (1979b)	M	501
	4.6×10^{-2}		Mackay et al. (2006c)	V	
	4.6×10^{-2}		Mackay et al. (1995)	V	
	5.0×10^{-2}		Hine and Mookerjee (1975)	V	
	5.0×10^{-2}		Butler and Ramchandani (1935)	V	
	3.7×10^{-2}		Yaws (2003)	X	258
	3.7×10^{-2}		Yaws (2003)	X	237
	4.4×10^{-2}	6000	Janini and Quaddora (1986)	X	298
	5.0×10^{-2}		Dupeux et al. (2022)	Q	259
	2.9×10^{-2}		Keshavarz et al. (2022)	Q	
	7.7×10^{-2}		Duchowicz et al. (2020)	Q	
	2.5×10^{-2}		Wang et al. (2017)	Q	80, 238
	3.9×10^{-2}		Wang et al. (2017)	Q	80, 239
	2.1×10^{-1}		Wang et al. (2017)	Q	80, 240
	2.4×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.2×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.9×10^{-2}		Hilal et al. (2008)	Q	
	4.2×10^{-2}		Modarresi et al. (2007)	Q	67
	4.6×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	2.6×10^{-2}		Yao et al. (2002)	Q	229
	4.0×10^{-2}		English and Carroll (2001)	Q	230, 231
	4.1×10^{-2}		Katritzky et al. (1998)	Q	
	9.9×10^{-2}		Russell et al. (1992)	Q	279
	3.3×10^{-2}		Suzuki et al. (1992)	Q	232
	3.3×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	4.5×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	3.4×10^{-2}		Yaws (1999)	?	21
	4.5×10^{-2}		Abraham et al. (1990)	?	
methyl methoxyacetate $\text{C}_4\text{H}_8\text{O}_3$ [6290-49-9] QRMHG DWGLNLHMN-UHFFFAOYSA-N	2.5		Hovorka et al. (2002)	M	38



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-propenyl ethanoate $C_5H_8O_2$ [591-87-7] FWZUNOYOVVKUNF-UHFFFAOYSA-N	7.6×10^{-2}		HSDB (2015)	V	
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	7.0×10^{-2}		Hilal et al. (2008)	Q	
	8.4×10^{-2}		Modarresi et al. (2007)	Q	67
2-propyl ethanoate $CH_3COOC_3H_7$ (isopropyl acetate) [108-21-4] JMMWKPVZQRWSS-UHFFFAOYSA-N	3.3×10^{-2}	6100	Brockbank (2013)	L	1
	3.3×10^{-2}	5600	Plyasunov et al. (2004)	L	
	1.3×10^{-2}		Kaneko et al. (1994)	M	14
	3.5×10^{-2}		Hine and Mookerjee (1975)	V	
	3.7×10^{-2}		Yaws (2003)	X	258
	2.9×10^{-2}	5500	Janini and Quaddora (1986)	X	298
	4.5×10^{-2}		Dupeux et al. (2022)	Q	259
	2.9×10^{-2}		Keshavarz et al. (2022)	Q	
	3.0×10^{-2}		Duchowicz et al. (2020)	Q	184
	2.6×10^{-2}		Wang et al. (2017)	Q	80, 238
	3.9×10^{-2}		Wang et al. (2017)	Q	80, 239
	1.7×10^{-1}		Wang et al. (2017)	Q	80, 240
	6.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Hilal et al. (2008)	Q	
	2.8×10^{-2}		Modarresi et al. (2007)	Q	67
	4.6×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	3.3×10^{-2}		Yao et al. (2002)	Q	229
3.9×10^{-2}		English and Carroll (2001)	Q	230, 274	
4.2×10^{-2}		Katritzky et al. (1998)	Q		
2.9×10^{-2}		Suzuki et al. (1992)	Q	232	
2.9×10^{-2}		Nirmalakhandan and Speece (1988)	Q		
3.6×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
3.6×10^{-2}		Yaws (1999)	?	21	
3.5×10^{-2}		Abraham et al. (1990)	?		
2-methoxyethyl ethanoate $C_5H_{10}O_3$ (methyl cellosolve acetate) [110-49-6] XLLIQLLCWZCATF-UHFFFAOYSA-N	3.0		Hovorka et al. (2002)	M	38
	9.0		HSDB (2015)	V	
glycerol monoacetate $C_5H_{10}O_4$ (acetin) [26446-35-5] KMZHZAEOEWWPSE-UHFFFAOYSA-N	2.4×10^4		HSDB (2015)	Q	99
1-propen-2-ol, acetate $C_5H_8O_2$ (isopropenyl acetate) [108-22-5] HETCEQQFVDFGSY-UHFFFAOYSA-N	5.5×10^{-3}		HSDB (2015)	Q	99



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butyl ethanoate	3.8×10^{-2}	6300	Brockbank (2013)	L	1
CH ₃ COOC ₄ H ₉ (butyl acetate)	3.5×10^{-2}	6300	Plyasunov et al. (2004)	L	
[123-86-4] DKPFZGUDAPQIHT-UHFFFAOYSA-N	2.4×10^{-2}		Kim and Kim (2014)	M	
	3.5×10^{-2}	6300	Fenclová et al. (2014)	M	1
	2.1×10^{-2}		Helburn et al. (2008)	M	
	2.8×10^{-2}		van Ruth et al. (2002)	M	14
	2.3×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 361
	1.7×10^{-2}		van Ruth et al. (2001)	M	14
	2.7×10^{-2}		Welke et al. (1998)	M	
	1.3×10^{-2}		Kaneko et al. (1994)	M	14
	2.3×10^{-2}	4300	Kolb et al. (1992)	M	277
	3.5×10^{-2}	7100	Ioffe et al. (1984)	M	
	3.5×10^{-2}	6000	Kieckbusch and King (1979b)	M	501
	3.2×10^{-2}		Mackay et al. (2006c)	V	
	3.2×10^{-2}		Mackay et al. (1995)	V	
	2.7×10^{-2}		Hwang et al. (1992)	V	
	3.0×10^{-2}		Hine and Mookerjee (1975)	V	
	4.2×10^{-2}		Yaws (2003)	X	258
	3.5×10^{-2}	7500	Janini and Quaddora (1986)	X	298
	2.1×10^{-2}	3200	Goldstein (1982)	X	298
	4.3×10^{-2}		Dupeux et al. (2022)	Q	259
	3.9×10^{-2}		Keshavarz et al. (2022)	Q	
	8.2×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Wang et al. (2017)	Q	80, 238
	2.9×10^{-2}		Wang et al. (2017)	Q	80, 239
	1.7×10^{-1}		Wang et al. (2017)	Q	80, 240
	1.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.3×10^{-2}		Hilal et al. (2008)	Q	
	3.0×10^{-2}		Modarresi et al. (2007)	Q	67
		5500	Kühne et al. (2005)	Q	
	3.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.4×10^{-2}		Yao et al. (2002)	Q	229, 267
	3.1×10^{-2}		English and Carroll (2001)	Q	230, 231
	4.1×10^{-2}		Katritzky et al. (1998)	Q	
	5.3×10^{-2}		Russell et al. (1992)	Q	358
	1.6×10^{-2}		Suzuki et al. (1992)	Q	232
	2.6×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	3.5×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		5300	Kühne et al. (2005)	?	
	3.8×10^{-2}		Yaws (1999)	?	21
	3.5×10^{-2}		Abraham et al. (1990)	?	



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-butyl ethanoate $C_6H_{12}O_2$ (<i>sec</i> -butyl acetate) [105-46-4] DCKVNWZUADLDEH-UHFFFAOYSA-N	2.3×10^{-2}	6000	Brockbank (2013)	L	1
	2.3×10^{-2}	6200	Plyasunov et al. (2004)	L	
	2.3×10^{-2}		HSDB (2015)	V	
	2.4×10^{-2}		Yaws (2003)	X	258
	2.4×10^{-2}		Yaws (2003)	X	237, 12
	2.5×10^{-2}		Dupeux et al. (2022)	Q	259
	2.3×10^{-2}		Wang et al. (2017)	Q	80, 238
	2.6×10^{-2}		Wang et al. (2017)	Q	80, 239
	1.2×10^{-1}		Wang et al. (2017)	Q	80, 240
	2.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.9×10^{-2}		Modarresi et al. (2007)	Q	67
	2.4×10^{-2}		Yaffe et al. (2003)	Q	248, 249
1.7×10^{-2}		Yao et al. (2002)	Q	229	
1.8×10^{-2}		Katritzky et al. (1998)	Q	504	
1.8×10^{-2}		Yaws (1999)	?	21, 12	
1,1-dimethylethyl ethanoate $C_6H_{12}O_2$ (<i>tert</i> -butyl acetate) [540-88-5] WMOVHXAZOJBABW-UHFFFAOYSA-N	1.2×10^{-2}	6100	Brockbank (2013)	L	1
	1.1×10^{-2}	5600	Plyasunov et al. (2004)	L	
	1.1×10^{-2}		Duchowicz et al. (2020)	V	186
	3.2×10^{-2}		Yaws (2003)	X	258
	3.2×10^{-2}		Yaws (2003)	X	237
	2.6×10^{-2}		Dupeux et al. (2022)	Q	259
	1.4×10^{-2}		Duchowicz et al. (2020)	Q	
	1.4×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.6×10^{-2}		Wang et al. (2017)	Q	80, 239
	7.4×10^{-2}		Wang et al. (2017)	Q	80, 240
	2.4×10^{-2}		HSDB (2015)	Q	99
	5.8×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.6×10^{-2}		Gharagheizi et al. (2010)	Q	246
2.2×10^{-2}		Modarresi et al. (2007)	Q	67	
1.9×10^{-2}		Yao et al. (2002)	Q	229	
2.9×10^{-2}		Yaws (1999)	?	21	
2-methylpropyl ethanoate $CH_3COOC_4H_9$ (isobutyl acetate) [110-19-0] GJRQTCIYDGPES-UHFFFAOYSA-N	2.6×10^{-2}	6000	Brockbank (2013)	L	1
	2.4×10^{-2}	6200	Plyasunov et al. (2004)	L	
	1.0×10^{-2}		Kaneko et al. (1994)	M	14
	1.9×10^{-2}		Mackay et al. (2006c)	V	
	1.9×10^{-2}		Mackay et al. (1995)	V	
	2.2×10^{-2}		Hine and Mookerjee (1975)	V	
	3.7×10^{-2}		Yaws (2003)	X	258
	2.3×10^{-2}		Yaws (2003)	X	237
	3.7×10^{-2}		Dupeux et al. (2022)	Q	259
	3.9×10^{-2}		Keshavarz et al. (2022)	Q	
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
2.7×10^{-2}		Hilal et al. (2008)	Q		



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.2×10^{-2}	5500	Modarresi et al. (2007)	Q	67
	1.8×10^{-2}		Kühne et al. (2005)	Q	
	3.1×10^{-2}		Yao et al. (2002)	Q	229
	9.5×10^{-2}		English and Carroll (2001)	Q	230, 231
	2.3×10^{-2}		Russell et al. (1992)	Q	279
	2.2×10^{-2}		Suzuki et al. (1992)	Q	232
	2.2×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.2×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	2.3×10^{-2}		Kühne et al. (2005)	?	
	2.2×10^{-2}		Yaws (1999)	?	21
	2.2×10^{-2}	Abraham et al. (1990)	?		
pentyl ethanoate	2.5×10^{-2}	7200	Brockbank (2013)	L	1
$\text{CH}_3\text{COOC}_5\text{H}_{11}$	2.7×10^{-2}	6700	Plyasunov et al. (2004)	L	
(amyl acetate)	1.3×10^{-1}	5000	Meynier et al. (2003)	M	38
[628-63-7]	9.3×10^{-3}		Kaneko et al. (1994)	M	14
PGMYKACGEOXYJE-UHFFFAOYSA-N	3.4×10^{-2}		Hellmann (1987)	M	87
	2.8×10^{-2}	6500	Kieckbusch and King (1979b)	M	501
	2.4×10^{-2}		Mackay et al. (2006c)	V	
	2.4×10^{-2}		Mackay et al. (1995)	V	
	2.5×10^{-2}		Hine and Mookerjee (1975)	V	
	2.8×10^{-2}		Yaws (2003)	X	258
	2.8×10^{-2}		Yaws (2003)	X	237
	2.5×10^{-2}		Meynier et al. (2003)	C	
	3.3×10^{-2}		Dupeux et al. (2022)	Q	259
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	8.6×10^{-2}		Duchowicz et al. (2020)	Q	
	1.4×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.3×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	2.8×10^{-2}		Modarresi et al. (2007)	Q	67
	2.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.1×10^{-2}		Yao et al. (2002)	Q	229, 267
	2.3×10^{-2}		English and Carroll (2001)	Q	230, 260
	3.8×10^{-2}		Katritzky et al. (1998)	Q	
	2.1×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.6×10^{-2}		Russell et al. (1992)	Q	279
	1.9×10^{-2}		Suzuki et al. (1992)	Q	232
	2.1×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.3×10^{-2}		Taft et al. (1985)	Q	
	2.5×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	2.9×10^{-2}		Yaws (1999)	?	21
	2.8×10^{-2}		Abraham et al. (1990)	?	



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylbutyl ethanoate $C_7H_{14}O_2$ (2-methylbutyl acetate) [624-41-9] XHIUFYZDOBSEMF-UHFFFAOYSA-N	2.8×10^{-2} 7.4×10^{-3} 2.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1,2-dimethylpropyl ethanoate $C_7H_{14}O_2$ (1,2-dimethylpropyl acetate) [5343-96-4] ZLSXRPTWWRGMTJ-UHFFFAOYSA-N	2.9×10^{-2} 1.2×10^{-2} 2.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
1-ethylpropyl ethanoate $C_7H_{14}O_2$ (1-ethylpropyl acetate) [620-11-1] PBKYSIMDORTIEU-UHFFFAOYSA-N	1.3×10^{-2}		Gharagheizi et al. (2012)	Q	
1,1-dimethylpropyl ethanoate $C_7H_{14}O_2$ (<i>tert</i> -pentyl acetate) [625-16-1] JCCIFDCPHCKATH-UHFFFAOYSA-N	2.9×10^{-2} 2.9×10^{-2} 2.0×10^{-2} 3.3×10^{-2} 2.8×10^{-2}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X X Q Q Q	258 237 259 246
2,2-dimethylpropyl ethanoate $C_7H_{14}O_2$ (neopentyl acetate) [926-41-0] QLNYTCSELYEPPV-UHFFFAOYSA-N	2.6×10^{-2} 2.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
1,2-propanediol, diacetate $C_7H_{12}O_4$ [623-84-7] MLHOXUWWKVQEJB-UHFFFAOYSA-N	7.0×10^1		HSDB (2015)	Q	99
2-pentanol, acetate $C_7H_{14}O_2$ [626-38-0] GQKZRWSUJHVIPE-UHFFFAOYSA-N	1.2×10^{-2} 1.9×10^{-2}		HSDB (2015) Gharagheizi et al. (2012)	Q Q	99
3-methylbutyl ethanoate $CH_3COOC_5H_{11}$ (isoamyl acetate) [123-92-2] MLFHJEHSLIIPHL-UHFFFAOYSA-N	2.1×10^{-2} 2.0×10^{-2} 2.2×10^{-2} 8.8×10^{-2} 8.8×10^{-3} 2.6×10^{-2} 2.6×10^{-2} 2.1×10^{-2} 1.7×10^{-2} 2.2×10^{-2} 2.4×10^{-2}	6700 6500 6600 4300	Brockbank (2013) Plyasunov et al. (2004) Ammari and Schroen (2019) Meynier et al. (2003) Kaneko et al. (1994) Mackay et al. (2006c) Mackay et al. (1995) Meylan and Howard (1991) Hine and Mookerjee (1975) Yaws (2003) Goldstein (1982)	L L M M M V V V V X X	1 11 38 14 237 298



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.7×10^{-2}		Meynier et al. (2003)	C	
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	7.0		Abney (2021)	Q	399
	3.3×10^{-2}		Duchowicz et al. (2020)	Q	299
	1.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.7×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.6×10^{-2}		Hilal et al. (2008)	Q	
	3.2×10^{-2}		Modarresi et al. (2007)	Q	67
	1.8×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.6×10^{-2}		Yao et al. (2002)	Q	229
	2.4×10^{-2}		English and Carroll (2001)	Q	230, 231
	3.8×10^{-2}		Katritzky et al. (1998)	Q	
	1.7×10^{-2}		Suzuki et al. (1992)	Q	232
	1.8×10^{-2}		Meylan and Howard (1991)	Q	
	1.8×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	1.7×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	2.1×10^{-2}		Yaws (1999)	?	21
	1.7×10^{-2}		Abraham et al. (1990)	?	
hexyl ethanoate	2.0×10^{-2}	7100	Brockbank (2013)	L	1, 505
CH ₃ COOC ₆ H ₁₃	1.7×10^{-2}	7300	Plyasunov et al. (2004)	L	
(hexyl acetate)	1.4×10^{-2}		Souchon et al. (2004)	M	
[142-92-7]	1.5×10^{-2}		Karl et al. (2003)	M	
AOGQPLXWSUTHQB-UHFFFAOYSA-N	5.2×10^{-3}		Mackay et al. (2006c)	V	
	5.2×10^{-3}		Mackay et al. (1995)	V	
	1.8×10^{-2}		Hine and Mookerjee (1975)	V	
	2.0×10^{-2}		Yaws (2003)	X	258
	2.0×10^{-2}		Yaws (2003)	X	237
	3.6×10^{-2}		Dupeux et al. (2022)	Q	259
	7.1×10^{-2}		Keshavarz et al. (2022)	Q	
	8.9×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.7×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	67
	2.0×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.0×10^{-2}		Yao et al. (2002)	Q	229, 267
	1.7×10^{-2}		English and Carroll (2001)	Q	230, 231
	3.6×10^{-2}		Katritzky et al. (1998)	Q	
	9.9×10^{-3}		Russell et al. (1992)	Q	279
	1.5×10^{-2}		Suzuki et al. (1992)	Q	232
	2.2×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	1.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	2.0×10^{-2}		Yaws (1999)	?	21
	1.8×10^{-2}		Abraham et al. (1990)	?	



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-2-pentyl ethanoate $C_8H_{16}O_2$ (4-methyl-2-pentyl acetate) [108-84-9] CPIVYSAVIPTCCX-UHFFFAOYSA-N	1.7×10^{-2} 2.0×10^{-2} 1.2×10^{-2} 1.2×10^{-2} 1.1×10^{-2} 2.2×10^{-2} 1.8×10^{-2} 3.4×10^{-2}		HSDB (2015) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	V Q Q Q Q Q Q Q	242, 243 244 245 67 248, 249
cyclohexyl ethanoate $C_8H_{14}O_2$ (cyclohexyl acetate) [622-45-7] YLLIJHXUHJATK-UHFFFAOYSA-N	1.0×10^{-1} 8.2×10^{-2}	7000	Brockbank (2013) HSDB (2015)	L Q	1, 506 99
ethanol, 2-(2-ethoxyethoxy)-, acetate $C_8H_{16}O_4$ (diethylene glycol monoethyl ether acetate) [112-15-2] FPZWZCWUIYYBU-UHFFFAOYSA-N	4.3×10^2		HSDB (2015)	V	
phenyl ethanoate $C_8H_8O_2$ (phenyl acetate) [122-79-2] IPBVNPXQWGGJP-UHFFFAOYSA-N	1.3 1.5×10^{-1}	7200	Brockbank (2013) HSDB (2015)	L Q	1 99
heptyl ethanoate $C_9H_{18}O_2$ (heptyl acetate) [112-06-1] ZCSIDMEHXZRLG-UHFFFAOYSA-N	1.2×10^{-2} 1.1×10^{-2} 2.4×10^{-2} 1.1×10^{-2} 1.3×10^{-2}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Brockbank (2013)	X X Q Q Q W	258 237 259 246 507
phenylmethyl ethanoate $C_9H_{10}O_2$ (benzyl acetate) [140-11-4] OUKGYKBLRGFE-UHFFFAOYSA-N	8.5×10^{-1} 8.7×10^{-1} 9.0×10^{-1} 7.6×10^{-1} 5.2×10^{-1} 7.0×10^{-1} 9.2×10^{-1} 5.4×10^{-1}	6800	Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Dupeux et al. (2022) Duchowicz et al. (2020) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	L V V Q Q Q Q Q	1 186 259 67 248, 249



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
octyl ethanoate $\text{CH}_3\text{COOC}_8\text{H}_{17}$ (octyl acetate) [112-14-1] YLYBTZIQSIBWLI-UHFFFAOYSA-N	8.6×10^{-3} 8.6×10^{-3} 1.8×10^{-2} 1.2×10^{-2} 1.0×10^{-2}		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Brockbank (2013)	X X Q Q Q W	258 237 259 246 508
2-ethylhexyl ethanoate $\text{C}_{10}\text{H}_{20}\text{O}_2$ (2-ethylhexyl acetate) [103-09-3] WOYWLLHHWAMFCB-UHFFFAOYSA-N	1.1×10^{-2} 1.1×10^{-2} 1.3×10^{-2} 6.6×10^{-3} 2.6×10^{-3} 1.0×10^{-2} 9.8×10^{-3} 1.3×10^{-2}		Mackay et al. (2006c) Mackay et al. (1995) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	V V X Q Q Q Q ?	 237 99 246 229 21
nonyl ethanoate $\text{C}_{11}\text{H}_{22}\text{O}_2$ (nonyl acetate) [143-13-5] GJQIMXVRFNLTB-UHFFFAOYSA-N	4.1×10^{-2} 2.1×10^{-2}		Yaws (2003) Dupeux et al. (2022)	X Q	258 259
decyl ethanoate $\text{C}_{12}\text{H}_{24}\text{O}_2$ (decyl acetate) [112-17-4] NUPSHWCALHZGOV-UHFFFAOYSA-N	2.8×10^{-3} 1.2×10^{-2} 8.0×10^{-3}		Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012)	X Q Q	258 259
undecyl ethanoate $\text{C}_{13}\text{H}_{26}\text{O}_2$ (undecyl acetate) [1731-81-3] CKQGCFFDQIFZFA-UHFFFAOYSA-N	1.5×10^{-2}		Gharagheizi et al. (2012)	Q	
ethanol, 2,2'-[1,2-ethanediylbis(oxy)]bis-, diacetate $\text{C}_{10}\text{H}_{18}\text{O}_6$ (triethylene glycol, diacetate) [111-21-7] OVOUKWFJRHALLDD-UHFFFAOYSA-N	3.7×10^7		HSDB (2015)	Q	99
1-methoxy-2-propyl ethanoate $\text{C}_6\text{H}_{12}\text{O}_3$ (1-methoxy-2-propyl acetate) [108-65-6] LLHKCFNBLRBOGN-UHFFFAOYSA-N	2.9 8.7×10^{-1} 2.5 1.6 2.5 9.9×10^{-1} 6.3×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q	186 242, 243 244 245 67



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-ethoxyethyl ethanoate $C_6H_{12}O_3$ (2-ethoxyethyl acetate) [111-15-9] SVONRAPFKPVNKG-UHFFFAOYSA-N	3.0		Brockbank (2013)	L	
	3.0		Hovorka et al. (2002)	M	38
	1.5		Johanson and Dynésius (1988)	M	14
	3.4		Keshavarz et al. (2022)	Q	
	7.5×10^{-1}		Duchowicz et al. (2020)	Q	184
	2.5		Raventos-Duran et al. (2010)	Q	242, 243
	2.5		Raventos-Duran et al. (2010)	Q	244
	2.5		Raventos-Duran et al. (2010)	Q	245
	1.9		Hilal et al. (2008)	Q	
7.2×10^{-1}		Modarresi et al. (2007)	Q	67	
3.1		Duchowicz et al. (2020)	?	185, 21	
7.0		Yaws (1999)	?	21, 12	
2-butoxyethyl ethanoate $C_8H_{16}O_3$ (butyl cellosolve acetate) [112-07-2] NQBXSWAWVZHKBZ-UHFFFAOYSA-N	1.8		Brockbank (2013)	L	
	1.8	25000	Kim et al. (2000)	M	
	6.1		Keshavarz et al. (2022)	Q	
	9.6×10^{-1}		Duchowicz et al. (2020)	Q	299
	1.2		Raventos-Duran et al. (2010)	Q	242, 243
	1.6		Raventos-Duran et al. (2010)	Q	244
	1.6		Raventos-Duran et al. (2010)	Q	245
	1.3		Hilal et al. (2008)	Q	
	5.2×10^{-1}		Modarresi et al. (2007)	Q	67
1.8		Duchowicz et al. (2020)	?	185, 21	
2-(2-butoxyethoxy)-ethanol, ethanoate $C_{10}H_{20}O_4$ [124-17-4] VXQBJTKSVGFQOL-UHFFFAOYSA-N	2.8×10^1		Duchowicz et al. (2020)	V	186
	2.8×10^1		HSDB (2015)	V	
	1.1×10^1		Duchowicz et al. (2020)	Q	
	6.2×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^1		Raventos-Duran et al. (2010)	Q	244
	9.9×10^1		Raventos-Duran et al. (2010)	Q	245
	4.1×10^1		Hilal et al. (2008)	Q	
7.2		Modarresi et al. (2007)	Q	67	
1,2-ethanediol, diethanoate $C_6H_{10}O_4$ [111-55-7] JTXMVBXSTHSMVQF-UHFFFAOYSA-N	1.2×10^2		Duchowicz et al. (2020)	V	186
	1.2×10^2		HSDB (2015)	V	
	1.3×10^2		Yaws (2003)	X	237, 87
	6.4		Duchowicz et al. (2020)	Q	
	1.6×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^1		Raventos-Duran et al. (2010)	Q	244
	2.0×10^1		Raventos-Duran et al. (2010)	Q	245
	1.4×10^2		Gharagheizi et al. (2010)	Q	246
	1.3×10^1		Hilal et al. (2008)	Q	
9.3×10^1		Yaws (1999)	?	21, 87	
geranyl acetate $C_{12}H_{20}O_2$ [105-87-3] HIGQPQRQIQDZMP-DHZHZOJOSA-N	4.1×10^{-3}		HSDB (2015)	Q	99



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl propanoate $\text{C}_2\text{H}_5\text{COOC}_2\text{H}_5$ (ethyl propionate) [105-37-3] FKRCODPIKNYEAC-UHFFFAOYSA-N	3.8×10^{-2}	5900	Brockbank (2013)	L	1
	4.1×10^{-2}	6000	Plyasunov et al. (2004)	L	
	4.1×10^{-2}	5900	Fenclová et al. (2014)	M	1
	3.9×10^{-2}		Duchowicz et al. (2020)	V	186
	3.9×10^{-2}		HSDB (2015)	V	
	3.8×10^{-2}		Mackay et al. (2006c)	V	
	3.8×10^{-2}		Mackay et al. (1995)	V	
	3.7×10^{-2}		Abraham (1984)	V	
	4.5×10^{-2}		Hine and Mookerjee (1975)	V	
	4.5×10^{-2}		Yaws (2003)	X	258
	4.5×10^{-2}		Yaws (2003)	X	237
	4.1×10^{-2}		Dupeux et al. (2022)	Q	259
	7.7×10^{-2}		Duchowicz et al. (2020)	Q	
	4.5×10^{-2}		Li et al. (2014)	Q	241
	2.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.7×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.6×10^{-2}		Hilal et al. (2008)	Q	
	4.4×10^{-2}		Modarresi et al. (2007)	Q	67
	4.6×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	3.5×10^{-2}		Yao et al. (2002)	Q	229
	4.0×10^{-2}		English and Carroll (2001)	Q	230, 231
	3.9×10^{-2}		Katritzky et al. (1998)	Q	
	3.4×10^{-2}		Suzuki et al. (1992)	Q	232
	3.5×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	4.5×10^{-2}		Yaws (1999)	?	21
	3.8×10^{-2}		Abraham et al. (1990)	?	
propyl propanoate $\text{C}_2\text{H}_5\text{COOC}_3\text{H}_7$ (propyl propionate) [106-36-5] MCSINKKTEDDPNK-UHFFFAOYSA-N	2.6×10^{-2}	6400	Brockbank (2013)	L	1, 510
	2.9×10^{-2}	6200	Plyasunov et al. (2004)	L	
	2.5×10^{-2}		Duchowicz et al. (2020)	V	186
	2.5×10^{-2}		Abraham (1984)	V	
	2.5×10^{-2}		Hine and Mookerjee (1975)	V	
	8.2×10^{-2}		Duchowicz et al. (2020)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	3.6×10^{-2}		Modarresi et al. (2007)	Q	67
	2.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.6×10^{-2}		Yao et al. (2002)	Q	229
	3.1×10^{-2}		English and Carroll (2001)	Q	230, 274
	3.9×10^{-2}		Katritzky et al. (1998)	Q	
	2.6×10^{-2}		Suzuki et al. (1992)	Q	232
	2.8×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.1×10^{-2}		Yaws (1999)	?	21



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-2}		Abraham et al. (1990)	?	
isopropyl propanoate $C_2H_5COOC_3H_7$ (isopropyl propionate) [637-78-5] IJMWOMHMSDKGK-UHFFFAOYSA-N	1.8×10^{-2} 1.7×10^{-2} 1.7×10^{-2} 1.7×10^{-2} 3.2×10^{-2} 1.7×10^{-2} 3.1×10^{-2} 2.3×10^{-2} 2.4×10^{-2} 2.5×10^{-2} 1.7×10^{-2}		Plyasunov et al. (2004) Duchowicz et al. (2020) Meylan and Howard (1991) Hine and Mookerjee (1975) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Suzuki et al. (1992) Meylan and Howard (1991) Nirmalakhandan and Speece (1988) Abraham et al. (1990)	L V V V Q Q Q Q Q Q ?	186 67 232
butyl propanoate $C_7H_{14}O_2$ (butyl propionate) [590-01-2] BTMVHUNTONAYDX-UHFFFAOYSA-N	2.2×10^{-2} 2.0×10^{-2} 2.0×10^{-2} 3.3×10^{-2} 3.3×10^{-2} 2.6×10^{-2} 8.6×10^{-2} 8.9×10^{-3} 2.7×10^{-2} 3.2×10^{-2} 6.2×10^{-3} 2.3×10^{-2} 3.7×10^{-2} 1.4×10^{-2}	6900 7000	Brockbank (2013) Plyasunov et al. (2004) Duchowicz et al. (2020) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2007) Yaffe et al. (2003) Yao et al. (2002) Katritzky et al. (1998) Yaws (1999)	L L V X X Q Q Q Q Q Q Q Q ?	1 186 258 237, 12 259 246 67 248, 272 229 21
(2-methylpropyl)-propanoate $C_7H_{14}O_2$ (isobutyl propionate) [540-42-1] FZXRXKLUIMKDEL-UHFFFAOYSA-N	1.5×10^{-2} 1.5×10^{-2} 3.3×10^{-2} 1.8×10^{-2} 6.2×10^{-3} 1.9×10^{-2}	6600 5900 7300	Plyasunov et al. (2004) Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Kühne et al. (2005) Yaffe et al. (2003) Nirmalakhandan et al. (1997) Kühne et al. (2005)	L V Q Q Q Q Q ?	186 248, 249
<i>tert</i> -butyl propanoate $C_7H_{14}O_2$ [20487-40-5] JAELLITIZHOGQ-UHFFFAOYSA-N	7.5×10^{-3}		Ebert et al. (2023)	?	365
pentyl propanoate $C_2H_5COOC_5H_{11}$ (amyl propionate) [624-54-4] TWSRVQVEYJNFQK-UHFFFAOYSA-N	1.9×10^{-2} 1.2×10^{-2} 1.4×10^{-2} 1.2×10^{-2} 8.9×10^{-2} 2.0×10^{-2} 1.2×10^{-2}		Plyasunov et al. (2004) Duchowicz et al. (2020) Abraham (1984) Hine and Mookerjee (1975) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L V V V Q Q Q	186 242, 243 244



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	2.6×10^{-2}		Modarresi et al. (2007)	Q	67
	1.2×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.7×10^{-2}		English and Carroll (2001)	Q	230, 231
	3.4×10^{-2}		Katritzky et al. (1998)	Q	
	2.2×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	1.5×10^{-2}		Suzuki et al. (1992)	Q	232
	1.8×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	1.4×10^{-2}		Abraham et al. (1990)	?	
propanoic acid, 2-hydroxy-, ethyl ester $C_5H_{10}O_3$ (ethyl lactate) [97-64-3] LZCLXQDLBQLTDK-UHFFFAOYSA-N	1.7×10^1		Duchowicz et al. (2020)	V	186
	1.7×10^1		HSDB (2015)	V	
	3.1		Duchowicz et al. (2020)	Q	
ethyl 3-ethoxypropanoate $C_7H_{14}O_3$ (ethyl 3-ethoxypropionate) [763-69-9] BHXIWUJLHYHGSJ-UHFFFAOYSA-N	1.5×10^{-2}		Yaws (1999)	?	21
propanoic acid, 2-phenylethyl ester $C_{11}H_{14}O_2$ [122-70-3] HVGZQCSMLUDISR-UHFFFAOYSA-N	3.9×10^{-1}		HSDB (2015)	Q	99
methyl butanoate $C_3H_7COOCH_3$ (methyl butyrate) [623-42-7] UUIQMZJEGPQKFD-UHFFFAOYSA-N	3.9×10^{-2}	5700	Brockbank (2013)	L	1, 511
	4.2×10^{-2}	5700	Plyasunov et al. (2004)	L	
	3.7×10^{-2}		Aprea et al. (2007)	M	
	3.6×10^{-2}		Ioffe et al. (1984)	M	
	4.8×10^{-2}		Buttery et al. (1969)	M	
	3.6×10^{-1}	4400	Djerki and Laub (1988)	V	
	3.7×10^{-2}		Amoore and Buttery (1978)	V	
		5800	Della Gatta et al. (1981)	T	
	3.5×10^{-2}		Yaws (2003)	X	258
	3.6×10^{-2}		Nahon et al. (2000)	C	14
	4.4×10^{-2}		Dupeux et al. (2022)	Q	259
	2.9×10^{-2}		Keshavarz et al. (2022)	Q	
	2.3×10^{-1}		Duchowicz et al. (2020)	Q	299
	4.8×10^{-2}		Li et al. (2014)	Q	241
	1.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.8×10^{-2}		Hilal et al. (2008)	Q	
	4.0×10^{-2}		Modarresi et al. (2007)	Q	67



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.6×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	3.2×10^{-2}		Yao et al. (2002)	Q	229
	4.0×10^{-2}		English and Carroll (2001)	Q	230, 231
	3.9×10^{-2}		Katritzky et al. (1998)	Q	
	1.5×10^{-1}		Russell et al. (1992)	Q	279
	3.4×10^{-2}		Suzuki et al. (1992)	Q	232
	3.2×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	4.8×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	3.5×10^{-2}		Yaws (1999)	?	21
	4.8×10^{-2}		Abraham et al. (1990)	?	
ethyl butanoate	2.5×10^{-2}	6100	Brockbank (2013)	L	1
$C_3H_7COOC_2H_5$	2.9×10^{-2}	6300	Plyasunov et al. (2004)	L	
(ethyl butyrate)	2.9×10^{-2}	6400	Fenclová et al. (2014)	M	1
[105-54-4]	2.4×10^{-2}		Aprea et al. (2007)	M	
OBNCKNCVKJDNBVB-UHFFFAOYSA-N	2.6×10^{-2}		Souchon et al. (2004)	M	
	2.1×10^{-2}		van Ruth et al. (2002)	M	14
	2.1×10^{-2}		van Ruth and Villeneuve (2002)	M	14, 361
	1.6×10^{-2}		van Ruth et al. (2001)	M	14
	4.0×10^{-2}		Landy et al. (1996)	M	
	2.4×10^{-2}		Landy et al. (1995)	M	
	2.5×10^{-2}		HSDB (2015)	V	
	2.4×10^{-2}		Mackay et al. (2006c)	V	
	1.2×10^{-2}		Philippe et al. (2003)	V	14
	2.4×10^{-2}		Mackay et al. (1995)	V	
	2.8×10^{-2}		Abraham (1984)	V	
	2.7×10^{-2}		Hine and Mookerjee (1975)	V	
	2.8×10^{-2}		Yaws (2003)	X	258
	2.8×10^{-2}		Yaws (2003)	X	237, 87
	2.7×10^{-2}		Nahon et al. (2000)	C	14
	4.5×10^{-2}		Dupeux et al. (2022)	Q	259
	3.4		Abney (2021)	Q	399
	2.4×10^{-2}		Savary et al. (2014)	Q	
	1.6×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.5×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	3.1×10^{-2}		Modarresi et al. (2007)	Q	67
	2.7×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	2.8×10^{-2}		Yao et al. (2002)	Q	229
	3.1×10^{-2}		English and Carroll (2001)	Q	230, 231
	3.9×10^{-2}		Katritzky et al. (1998)	Q	
	2.6×10^{-2}		Suzuki et al. (1992)	Q	232
	2.8×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.4×10^{-2}		Yaws (1999)	?	21, 87
	2.7×10^{-2}		Abraham et al. (1990)	?	



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propyl butanoate $\text{C}_3\text{H}_7\text{COOC}_3\text{H}_7$ (propyl butyrate) [105-66-8] HUAZGNHGCJGYNP-UHFFFAOYSA-N	1.8×10^{-2}	6400	Brockbank (2013)	L	1
	2.2×10^{-2}	6600	Plyasunov et al. (2004)	L	
	1.6×10^{-2}		Duchowicz et al. (2020)	V	186
	1.6×10^{-2}		Meylan and Howard (1991)	V	
	1.9×10^{-2}		Hine and Mookerjee (1975)	V	
	2.6×10^{-2}		Yaws (2003)	X	237, 154
	8.6×10^{-2}		Duchowicz et al. (2020)	Q	
	8.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.7×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-2}		Hilal et al. (2008)	Q	
	2.8×10^{-2}		Modarresi et al. (2007)	Q	67
	2.2×10^{-2}		Yao et al. (2002)	Q	229
	2.3×10^{-2}		English and Carroll (2001)	Q	230, 260
	3.6×10^{-2}		Katritzky et al. (1998)	Q	
2.0×10^{-2}		Suzuki et al. (1992)	Q	232	
1.8×10^{-2}		Meylan and Howard (1991)	Q		
2.2×10^{-2}		Nirmalakhandan and Speece (1988)	Q		
1.6×10^{-2}		Yaws (1999)	?	21, 154	
1.9×10^{-2}		Abraham et al. (1990)	?		
2-propyl butanoate $\text{C}_7\text{H}_{14}\text{O}_2$ (isopropyl butyrate) [638-11-9] FFOPEPMHKILNIT-UHFFFAOYSA-N	1.8×10^{-2}		Plyasunov et al. (2004)	L	
	1.9×10^{-2}		Dupeux et al. (2022)	Q	259
butyl butanoate $\text{C}_8\text{H}_{16}\text{O}_2$ (butyl butyrate) [109-21-7] XUPYJHCZDLZNFU-UHFFFAOYSA-N	1.7×10^{-2}	7600	Brockbank (2013)	L	1
	1.6×10^{-2}	7600	Plyasunov et al. (2004)	L	
	1.4×10^{-2}		Duchowicz et al. (2020)	V	186
	1.0×10^{-2}		Dupeux et al. (2022)	Q	259
	8.9×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.3×10^{-2}		Modarresi et al. (2007)	Q	67
3.4×10^{-2}		Katritzky et al. (1998)	Q		
1.1×10^{-2}		Yaws (1999)	?	21	
2-methylpropyl butanoate $\text{C}_8\text{H}_{16}\text{O}_2$ (2-methylpropyl butyrate) [539-90-2] RGFNRWTWDVHDD-UHFFFAOYSA-N	1.3×10^{-2}		Hilal et al. (2008)	Q	



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylpropyl 2-methylpropanoate $C_8H_{16}O_2$ (isobutyl isobutyrate) [97-85-8] RXGUIWHIADMCFU-UHFFFAOYSA-N	7.4×10^{-3}	6900	Brockbank (2013)	L	1, 512
pentyl butanoate $C_9H_{18}O_2$ (pentyl butyrate) [540-18-1] CFNJLPHOBMVMS-UHFFFAOYSA-N	7.8×10^{-3}	6400	Plyasunov et al. (2004)	L	
	1.0×10^{-2}		Amoore and Buttery (1978)	M	
	1.2×10^{-2}		Duchowicz et al. (2020)	V	186
	7.2×10^{-3}		Amoore and Buttery (1978)	V	
	1.4×10^{-2}		Duchowicz et al. (2020)	Q	
	1.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	1.0×10^{-2}		Modarresi et al. (2007)	Q	67
	7.5×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.4×10^{-2}		English and Carroll (2001)	Q	230, 231
1.3×10^{-2}	Nirmalakhandan et al. (1997)	Q			
6.9×10^{-3}	Yaws (1999)	?	21		
7.0×10^{-3}	Abraham et al. (1990)	?			
3-methylbutyl butanoate $C_9H_{18}O_2$ (isopentyl butyrate) [106-27-4] PQLMXFQTAMDIZ-UHFFFAOYSA-N	1.7×10^{-2}	7500	Brockbank (2013)	L	1
	9.8×10^{-3}		Dupeux et al. (2022)	Q	259
methyl 2-methylpropanoate $C_5H_{10}O_2$ (methyl isobutyrate) [547-63-7] BHIWKHZACMVKOJ-UHFFFAOYSA-N	1.1×10^{-2}	5600	Brockbank (2013)	L	1
	2.6×10^{-2}		Plyasunov et al. (2004)	L	
	3.3×10^{-2}		Bagno et al. (1991)	T	473
			5700	Della Gatta et al. (1981)	T
ethyl 2-methylpropanoate $C_6H_{12}O_2$ (ethyl isobutyrate) [97-62-1] WDAXFOBOLVPLU-UHFFFAOYSA-N	1.5×10^{-2}	6000	Brockbank (2013)	L	1
	1.7×10^{-2}		Plyasunov et al. (2004)	L	
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	1.8×10^{-2}		Yao et al. (2002)	Q	229
	2.4×10^{-2}		Yaws (1999)	?	21
hexyl butanoate $C_{10}H_{20}O_2$ (hexyl butyrate) [2639-63-6] XAPCMTMOBXLDBB-UHFFFAOYSA-N	1.1×10^{-2}		Dupeux et al. (2022)	Q	259



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyclohexyl butanoate $C_{10}H_{18}O_2$ (cyclohexyl butyrate) [1551-44-6] VZHUBBUZNIULNM-UHFFFAOYSA-N		6500	Kühne et al. (2005)	Q	
		5600	Kühne et al. (2005)	?	
3-oxobutanoic acid, methyl ester $C_5H_8O_3$ (methylacetoacetate) [105-45-3] WRQNANDWMGAFTP-UHFFFAOYSA-N	6.4 3.6×10^1 3.7×10^1 1.2×10^1 1.2×10^1		Hovorka et al. (2002) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	M V V Q	38 186
	1.2×10^1 2.5×10^1 7.8×10^1 1.7×10^1 7.9		Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	Q Q Q Q Q	242, 243 244 245 67
3-oxobutanoic acid, ethyl ester $C_6H_{10}O_3$ (ethylacetoacetate) [141-97-9] XYIBRDXRQCHLP-UHFFFAOYSA-N	9.0 5.8 8.2 1.7×10^1 1.7×10^1 2.4×10^1 4.5 7.8 2.0×10^1 6.2×10^1 1.7×10^1 1.1×10^1 5.6 9.1	7200	Brockbank (2013) Hovorka et al. (2002) Duchowicz et al. (2020) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999)	L M V X X Q Q Q Q Q Q Q Q Q ?	1 38 186 258 237, 154 259 271, 243 244 245 246 67 21, 154
methyl pentanoate $C_4H_9COOCH_3$ (methyl valerate) [624-24-8] HNBDRPTVWVGKBR-UHFFFAOYSA-N	3.0×10^{-2} 3.1×10^{-2} 9.7×10^{-1} 3.9×10^{-2} 2.4×10^{-1} 2.9×10^{-2} 3.1×10^{-2} 2.0×10^{-2} 2.5×10^{-2} 2.2×10^{-2} 3.6×10^{-2} 3.1×10^{-2} 3.8×10^{-2} 2.6×10^{-2} 2.5×10^{-2} 3.1×10^{-2} 3.1×10^{-2}	6100 5000 6200	Plyasunov et al. (2004) Buttery et al. (1969) Djerki and Laub (1988) Della Gatta et al. (1981) Keshavarz et al. (2022) Duchowicz et al. (2020) Li et al. (2014) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Katritzky et al. (1998) Suzuki et al. (1992) Nirmalakhandan and Speece (1988) Duchowicz et al. (2020) Abraham et al. (1990)	L M V T Q Q Q Q Q Q Q Q Q Q Q Q Q ?	299 241 271, 243 244 245 67 230, 231 232 185, 21



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl pentanoate $C_4H_9COOC_2H_5$ (ethyl valerate) [539-82-2] ICMAFTSLXCXHRK-UHFFFAOYSA-N	2.3×10^{-2} 1.4×10^{-1} 2.7×10^{-2} 2.8×10^{-2} 2.8×10^{-2} 2.9×10^{-2} 2.7×10^{-2} 8.6×10^{-2} 2.5×10^{-2} 1.6×10^{-2} 2.0×10^{-2} 1.5×10^{-2} 2.6×10^{-2} 2.3×10^{-2} 2.0×10^{-2} 1.8×10^{-2} 2.2×10^{-2} 2.7×10^{-2}	6800 4800	Plyasunov et al. (2004) Meynier et al. (2003) Duchowicz et al. (2020) Meylan and Howard (1991) Abraham (1984) Hine and Mookerjee (1975) Meynier et al. (2003) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Suzuki et al. (1992) Meylan and Howard (1991) Nirmalakhandan and Speece (1988) Abraham et al. (1990)	L M V V V V C Q Q Q Q Q Q Q Q Q Q Q Q ?	38 186 242, 243 244 245 67 230, 231 232
methyl 2,2-dimethylpropanoate $C_6H_{12}O_2$ (methyl pivalate) [598-98-1] CNMFHDIDIMZHKY-UHFFFAOYSA-N	9.5×10^{-3} 2.3×10^{-2} 3.9×10^{-2} 4.1×10^{-2} 3.1×10^{-2} 1.6×10^{-2} 2.5×10^{-2} 1.7×10^{-2} 3.7×10^{-2} 1.8×10^{-2} 2.3×10^{-2} 1.8×10^{-2} 2.3×10^{-2}	5600 6000 6000	Plyasunov et al. (2004) Bagno et al. (1991) Della Gatta et al. (1981) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	L T T Q Q Q Q Q Q Q Q Q Q Q ?	473 242, 243 244 245 67 248, 272 230, 231 185, 21
ethyl 2-methylbutanoate $C_7H_{14}O_2$ [7452-79-1] HCRBXQFHJMCTLF-UHFFFAOYSA-N	1.4×10^{-2} 8.9×10^{-3} 2.7×10^{-2}	6700	Plyasunov et al. (2004) Pollien et al. (2003) Roberts and Pollien (1997)	L M M	
ethyl 3-methylbutanoate $C_7H_{14}O_2$ (ethyl isovalerate) [108-64-5] PPXUHEORWJQRHJ-UHFFFAOYSA-N	1.4×10^{-2} 1.4×10^{-2} 1.1×10^{-2} 1.4×10^{-2} 2.2×10^{-2} 3.3×10^{-2} 2.5×10^{-2} 1.6×10^{-2} 2.0×10^{-2}	6500 6700 5900	Brockbank (2013) Plyasunov et al. (2004) Wieland et al. (2015) Duchowicz et al. (2020) Dupeux et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L L M V Q Q Q Q Q Q	1 513 186 259 271, 243 244 245



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-2}		Hilal et al. (2008)	Q	
	2.8×10^{-2}		Modarresi et al. (2007)	Q	67
	1.5×10^{-2}		Yao et al. (2002)	Q	229
	1.6×10^{-2}		Yaws (1999)	?	21
ethyl 2,2-dimethylpropanoate $C_7H_{14}O_2$ (ethyl pivalate) [3938-95-2] HHEIMYAXCOIQJ-UHFFFAOYSA-N	6.4×10^{-3}	6700	Brockbank (2013)	L	1
	5.7×10^{-3}	6100	Plyasunov et al. (2004)	L	
butyl pentanoate $C_9H_{18}O_2$ (butyl valerate) [591-68-4] OKJADYKTJJGKDX-UHFFFAOYSA-N	9.8×10^{-3}		Plyasunov et al. (2004)	L	
	2.3×10^{-2}		Dupeux et al. (2022)	Q	259
	2.0×10^{-2}		Yao et al. (2002)	Q	229
	1.5×10^{-2}		Yaws (1999)	?	21
3-methylbutyl 3-methylbutanoate $C_{10}H_{20}O_2$ (isoamyl isovalerate) [659-70-1] XINCEQTMHSORG-UHFFFAOYSA-N	4.0×10^{-3}		Yaws (1999)	?	21
methyl hexanoate $C_5H_{11}COOCH_3$ (methyl caproate) [106-70-7] NUKZAGXMTUAFE-UHFFFAOYSA-N	2.6×10^{-2}	6600	Plyasunov et al. (2004)	L	
	1.9×10^{-2}		Aprea et al. (2007)	M	
	2.7×10^{-2}		Buttery et al. (1969)	M	
	2.6	5600	Djerki and Laub (1988)	V	
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	2.5×10^{-1}		Duchowicz et al. (2020)	Q	299
	2.7×10^{-2}		Li et al. (2014)	Q	241
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.8×10^{-2}		Hilal et al. (2008)	Q	
	2.9×10^{-2}		Modarresi et al. (2007)	Q	67
	2.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.3×10^{-2}		English and Carroll (2001)	Q	230, 274
	3.6×10^{-2}		Katritzky et al. (1998)	Q	
	2.0×10^{-2}		Suzuki et al. (1992)	Q	232
	2.0×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	2.7×10^{-2}		Abraham et al. (1990)	?	
ethyl hexanoate $C_5H_{11}COOC_2H_5$ (ethyl caproate) [123-66-0] SHZIWNPUGLXDT-UHFFFAOYSA-N	1.9×10^{-2}	7200	Plyasunov et al. (2004)	L	
	1.4×10^{-2}		Aprea et al. (2007)	M	
	1.6×10^{-2}		Landy et al. (1996)	M	
	9.4×10^{-3}		Landy et al. (1995)	M	
	6.9×10^{-3}		Philippe et al. (2003)	V	14
	1.8×10^{-2}		Abraham (1984)	V	
	3.0		Abney (2021)	Q	399



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-2}		Savary et al. (2014)	Q	
	1.1×10^{-2}		Hilal et al. (2008)	Q	
	1.7×10^{-2}		English and Carroll (2001)	Q	230, 260
	1.7×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	1.8×10^{-2}		Abraham et al. (1990)	?	
2-ethylbutanoic acid, 1,2-ethanediylobis(oxy-2,1-ethanediy) ester $C_{18}H_{34}O_6$ [95-08-9] JEYLQCXBYFQJRO-UHFFFAOYSA-N	9.9×10^5		HSDB (2015)	Q	99
methyl heptanoate $C_8H_{16}O_2$ [106-73-0] XNCNNDVCAUWAIT-UHFFFAOYSA-N	1.8×10^{-2}		Plyasunov et al. (2004)	L	
ethyl heptanoate $C_6H_{13}COOC_2H_5$ [106-30-9] TVQGDYNRXLQAP-UHFFFAOYSA-N	2.0×10^{-2}		Meylan and Howard (1991)	V	
	2.0×10^{-2}		Abraham (1984)	V	
	2.0×10^{-2}		Hine and Mookerjee (1975)	V	
	9.6×10^{-2}		Keshavarz et al. (2022)	Q	
	9.1×10^{-2}		Duchowicz et al. (2020)	Q	299
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	9.2×10^{-3}		Hilal et al. (2008)	Q	
	1.9×10^{-2}		Modarresi et al. (2007)	Q	67
	1.2×10^{-2}		Suzuki et al. (1992)	Q	232
	1.0×10^{-2}		Meylan and Howard (1991)	Q	
	2.1×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	2.0×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	2.0×10^{-2}		Abraham et al. (1990)	?	
methyl octanoate $C_6H_{13}COOCH_3$ [111-11-5] JGHZJRVJDZXS NKQ-UHFFFAOYSA-N	1.2×10^{-2}		Plyasunov et al. (2004)	L	
	9.9×10^{-3}		Aprea et al. (2007)	M	
	1.3×10^{-2}		Buttery et al. (1969)	M	
	9.6×10^{-2}		Keshavarz et al. (2022)	Q	
	2.7×10^{-1}		Duchowicz et al. (2020)	Q	299
	1.3×10^{-2}		Li et al. (2014)	Q	241
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	67
	4.7×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	1.2×10^{-2}		Suzuki et al. (1992)	Q	232
	1.1×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	1.3×10^{-2}		Duchowicz et al. (2020)	?	185, 21



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl octanoate $C_7H_{15}COOC_2H_5$ [106-32-1] YYZUSRORWSJGET-UHFFFAOYSA-N	1.7×10^{-2} 1.1×10^{-2} 1.2×10^{-2} 7.8×10^{-3}		Plyasunov et al. (2004) Aprea et al. (2007) Abraham (1984) Savary et al. (2014)	L M V Q	
octadecanoic acid, 2-methylpropyl ester $C_{22}H_{44}O_2$ (isobutyl stearate) [646-13-9] ORFWYUFLWUWSFM-UHFFFAOYSA-N	2.6×10^{-4}		HSDB (2015)	Q	99
octadecanoic acid, butyl ester $C_{22}H_{44}O_2$ [123-95-5] ULBTUVJTXULMLP-UHFFFAOYSA-N	2.6×10^{-4}		HSDB (2015)	Q	99
methyl nonanoate $C_{10}H_{20}O_2$ [1731-84-6] IJXHLVMUNBOGRR-UHFFFAOYSA-N	8.2×10^{-3} 7.0×10^{-3}		Plyasunov et al. (2004) Abraham (1984)	L V	
ethyl nonanoate $C_8H_{17}COOC_2H_5$ [123-29-5] BYEVBITUADOIGY-UHFFFAOYSA-N	1.3×10^{-2}		Abraham (1984)	V	
nonanedioic acid, bis(2-ethylhexyl) ester $C_{25}H_{48}O_4$ (di-2-ethylhexyl azelate) [103-24-2] ZDWGXBPVPXVXMQ-UHFFFAOYSA-N	8.2×10^{-2}		HSDB (2015)	Q	99
methyl decanoate $C_{11}H_{22}O_2$ (methyl caprate) [110-42-9] YRHCMZPEVDGFQ-UHFFFAOYSA-N	1.1×10^{-2} 4.8×10^{-3} 1.4×10^{-2} 3.2×10^{-3} 2.8×10^{-1} 5.8×10^{-3} 7.7×10^{-3}		Aprea et al. (2007) Duchowicz et al. (2020) Krop et al. (1997) Abraham (1984) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008)	M V V V Q Q Q	186 99
ethyl decanoate $C_9H_{19}COOC_2H_5$ [110-38-3] RGXWDWUGBIJHDO-UHFFFAOYSA-N	1.2×10^{-2} 1.4×10^{-2} 1.7×10^{-2}		Plyasunov et al. (2004) Aprea et al. (2007) Abraham (1984)	L M V	



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
decanedioic acid, diethyl ester $C_{14}H_{26}O_4$ (diethyl sebacate) [110-40-7] ONKUXPIBXRRIDU-UHFFFAOYSA-N	2.7		Bartelt-Hunt et al. (2008)	?	21
methyl dodecanoate $C_{13}H_{26}O_2$ (methyl laurate) [111-82-0] UQDUPQYQJKYHQI-UHFFFAOYSA-N	8.3×10^{-3} 7.5×10^{-3} 3.3×10^{-3} 4.8×10^{-3}		Krop et al. (1997) Dupeux et al. (2022) HSDB (2015) Hilal et al. (2008)	V Q Q Q	259 99
ethyl dodecanoate $C_{14}H_{28}O_2$ (ethyl laurate) [106-33-2] MMXKVMNBHPAILY-UHFFFAOYSA-N	7.7×10^{-3} 3.1×10^{-3}		Krop et al. (1997) Hilal et al. (2008)	V Q	
propyl dodecanoate $C_{15}H_{30}O_2$ (propyl laurate) [3681-78-5] FTBUKOLPOATXGV-UHFFFAOYSA-N	7.7×10^{-3} 2.1×10^{-3}		Krop et al. (1997) Hilal et al. (2008)	V Q	
2-hydroxypropyl dodecanoate $C_{15}H_{30}O_3$ [142-55-2] BHIZVZJETFVJMJ-UHFFFAOYSA-N	9.5×10^{-2}		Ebert et al. (2023)	?	318
dodecanoic acid, 2-hydroxy-1-methylethyl ester $C_{15}H_{30}O_3$ [107328-11-0] SVWZGNLBKFWCMV-UHFFFAOYSA-N	2.6×10^1		Ebert et al. (2023)	?	318
butyl dodecanoate $C_{16}H_{32}O_2$ (butyl laurate) [106-18-3] NDKYEUMQPZIGFN-UHFFFAOYSA-N	7.1×10^{-3} 1.5×10^{-3}		Krop et al. (1997) Hilal et al. (2008)	V Q	
2-ethylhexyl dodecanoate $C_{20}H_{40}O_2$ (2-ethylhexyl laurate) [20292-08-4] LWLRMRFJCCMNML-UHFFFAOYSA-N	3.0×10^{-3} 8.6×10^{-4}		Krop et al. (1997) Hilal et al. (2008)	V Q	



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl tetradecanoate $C_{15}H_{30}O_2$ (methyl myristate) [124-10-7] ZAZKJZBWRNLLDS-UHFFFAOYSA-N	5.0×10^{-3} 1.9×10^{-3} 3.1×10^{-3}		Krop et al. (1997) HSDB (2015) Hilal et al. (2008)	V Q Q	99
methyl hexadecanoate $C_{17}H_{34}O_2$ (methyl palmitate) [112-39-0] FLIACVVOZYBSBS-UHFFFAOYSA-N	2.9×10^{-3} 1.1×10^{-3} 1.8×10^{-3}		Krop et al. (1997) HSDB (2015) Hilal et al. (2008)	V Q Q	99
isopropyl palmitate $C_{19}H_{38}O_2$ [142-91-6] XUGNVMKQXJXZCD-UHFFFAOYSA-N	2.1×10^{-4}		HSDB (2015)	Q	447
ascorbic palmitate $C_{22}H_{38}O_7$ [137-66-6] QAQJMLQRFWZOBN-LAUBAEHRSA-N	7.0×10^1		HSDB (2015)	Q	99
methyl octadecanoate $C_{19}H_{38}O_2$ (methyl stearate) [112-61-8] HPEUJJPJOZXNMSJ-UHFFFAOYSA-N	1.7×10^{-3} 6.2×10^{-4} 1.1×10^{-3}		Krop et al. (1997) HSDB (2015) Hilal et al. (2008)	V Q Q	99
methyl eicosanoate $C_{21}H_{42}O_2$ (methyl arachidate) [1120-28-1] QGBRLVONZXHAKJ-UHFFFAOYSA-N	1.0×10^{-3}		Krop et al. (1997)	V	
methyl docosanoate $C_{23}H_{46}O_2$ (methyl behenate) [929-77-1] QSQLTHHMFHEFIY-UHFFFAOYSA-N	5.9×10^{-4}		Krop et al. (1997)	V	
cyclopropanecarboxylic acid, methyl ester $C_5H_8O_2$ [2868-37-3] PKAHQJNJPDVTDU-UHFFFAOYSA-N	4.1×10^{-1} 1.1×10^{-1} 1.4×10^{-1}	6100	Bagno et al. (1991) Hilal et al. (2008) English and Carroll (2001)	T Q Q	473 230, 231
cyclohexanecarboxylic acid, methyl ester $C_6H_{11}COOCH_3$ [4630-82-4] ZQWPRMPSCMSAJU-UHFFFAOYSA-N	1.1×10^{-1} 1.1×10^{-1}	7200	Bagno et al. (1991) English and Carroll (2001)	T Q	473 230, 231



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>Z,Z,Z</i>)-9,12,15-octadecatrienoic acid, methyl ester $C_{19}H_{32}O_2$ (methyl linolenate) [301-00-8] DVWSXZIH SUZZKJ-YSTUJMKBSA-N	2.8×10^{-1} 7.2×10^{-3}		Krop et al. (1997) Hilal et al. (2008)	V Q	
(<i>Z,Z</i>)-9,12-octadecadienoic acid, methyl ester $C_{19}H_{34}O_2$ (methyl linolate) [112-63-0] WTTJVINHCBCLGX-NQLNTRDSA-N	6.2×10^{-2} 4.8×10^{-3}		Krop et al. (1997) Hilal et al. (2008)	V Q	
(<i>Z</i>)-9-octadecenoic acid, methyl ester $C_{19}H_{36}O_2$ (methyl oleate) [112-62-9] QYDYPVFESGNLHU-KHPPLWFESA-N	1.3×10^{-2} 7.0×10^{-4} 2.5×10^{-3}		Krop et al. (1997) HSDB (2015) Hilal et al. (2008)	V Q Q	99
(<i>Z</i>)-13-docosenoic acid, methyl ester $C_{23}H_{44}O_2$ (methyl erucate) [1120-34-9] ZYNDJIBBPLNPOW-KHPPLWFESA-N	5.3×10^{-3} 8.2×10^{-4}		Krop et al. (1997) Hilal et al. (2008)	V Q	
<i>trans</i> -quercus lactone $C_9H_{16}O_2$ (<i>trans</i> -whisky lactone) [105119-22-0] WNVCMFHPRIBNCW-SFYZADRCSA-N	3.5×10^1		Abney (2021)	Q	399
γ -decalactone $C_{10}H_{18}O_2$ [706-14-9] IFYYFLINQYPWGJ-UHFFFAOYSA-N	5.3×10^1		Abney (2021)	Q	399
γ -dodecalactone $C_{12}H_{22}O_2$ [2305-05-7] WGPCZPLRVAWXPW-UHFFFAOYSA-N	3.7×10^1		Abney (2021)	Q	399
oxacyclohexadecan-2-one $C_{15}H_{28}O_2$ (pentadecalactone) [106-02-5] FKUPPRZPSYCDRS-UHFFFAOYSA-N	4.0×10^{-3} 7.6×10^{-2}		Amoore and Buttery (1978) Amoore and Buttery (1978)	M V	



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2- <i>tert</i> -butylcyclohexyl acetate $C_{12}H_{22}O_2$ [88-41-5] FINOAUUDUYKVGDS-UHFFFAOYSA-N	9.9×10^{-3} 3.8×10^{-2} 5.3×10^{-1} 7.0×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
hedione $C_{13}H_{22}O_3$ [24851-98-7] KVWWIYGFBYDJQC-UHFFFAOYSA-N	7.0×10^1		Dupeux et al. (2022)	Q	259
ethylene brassylate $C_{15}H_{26}O_4$ [105-95-3] XRHCAGNSDHCHEJ-UHFFFAOYSA-N	5.3×10^1		Dupeux et al. (2022)	Q	259
propyl 3-oxo-2-pentylcyclopentaneacetate $C_{15}H_{26}O_3$ [158474-72-7] IPDFPNNPBMREIF-UHFFFAOYSA-N	1.4×10^1		Ebert et al. (2023)	?	318
2-ethyl-3-oxo-butanoic acid, ethyl ester $C_8H_{14}O_3$ [607-97-6] OKANYBNORCUPKZ-UHFFFAOYSA-N	3.4		Hilal et al. (2008)	Q	
2-hydroxypropanoic acid, butyl ester $C_7H_{14}O_3$ [138-22-7] MRABAEUHTLLEML-UHFFFAOYSA-N	4.9 2.7 2.9×10^1 2.6 1.6 1.2×10^1 1.2×10^{-1} 6.4×10^1 4.3×10^1		HSDB (2015) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q Q Q	 80, 238 80, 239 80, 240 271, 243 244 245 67
methyl propenoate $C_4H_6O_2$ (methyl acrylate) [96-33-3] BAPJBEWLBFYGME-UHFFFAOYSA-N	5.0×10^{-2} 4.9×10^{-2} 5.2×10^{-2} 5.2×10^{-2} 5.8×10^{-2} 6.3×10^{-1} 7.2×10^{-2} 6.2×10^{-2} 6.2×10^{-2} 9.9×10^{-2} 6.0×10^{-2} 5.4×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Mackay et al. (1995) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008)	V V V V X Q Q Q Q Q Q Q	186 237, 72 242, 243 244 245 246



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.4×10^{-2}		Modarresi et al. (2007)	Q	67
	5.2×10^{-2}		Yaws (1999)	?	21, 72
ethyl propenoate $C_5H_8O_2$ (ethyl acrylate) [140-88-5] JIGUQPWFLRLWPJ-UHFFFAOYSA-N	3.9×10^{-2}	4400	Brockbank (2013)	L	1
	2.9×10^{-2}		Duchowicz et al. (2020)	V	186
	2.9×10^{-2}		HSDB (2015)	V	
	2.9×10^{-2}		Mackay et al. (2006c)	V	
	2.9×10^{-2}		Mackay et al. (1995)	V	
	3.9×10^{-2}		Yaws (2003)	X	258
	4.7×10^{-2}		Dupeux et al. (2022)	Q	259
	2.5×10^{-1}		Duchowicz et al. (2020)	Q	
	8.8×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.5×10^{-2}		Hilal et al. (2008)	Q	
	5.3×10^{-2}		Modarresi et al. (2007)	Q	67
	8.8×10^{-2}		Yao et al. (2002)	Q	229
	4.0×10^{-2}		Yaws (1999)	?	21
2-propenoic acid, butyl ester $C_7H_{12}O_2$ (butyl acrylate) [141-32-2] CQEYYJKEWSMYFG-UHFFFAOYSA-N	1.5×10^{-2}		Duchowicz et al. (2020)	V	186
	2.1×10^{-2}		HSDB (2015)	V	
	2.9×10^{-1}		Duchowicz et al. (2020)	Q	
	2.6×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	4.4×10^{-2}		Modarresi et al. (2007)	Q	67
	5.2×10^{-2}		Yao et al. (2002)	Q	229, 267
	1.7×10^{-2}		Yaws (1999)	?	21, 12
2-propenoic acid, 2-methylpropyl ester $C_7H_{12}O_2$ (isobutyl acrylate) [106-63-8] CFVWNXQPGQOHRJ-UHFFFAOYSA-N	1.3×10^{-2}		Duchowicz et al. (2020)	V	186
	1.6×10^{-2}		HSDB (2015)	V	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	
	1.4×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.4×10^{-2}		Hilal et al. (2008)	Q	
	3.4×10^{-2}		Modarresi et al. (2007)	Q	67
	3.9×10^{-2}		Yao et al. (2002)	Q	229
	1.5×10^{-2}		Yaws (1999)	?	21, 72



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-propenoic acid, 2-ethylhexyl ester $C_{11}H_{20}O_2$ (2-ethylhexyl acrylate) [103-11-7] GOXQRTZXKQZDDN-UHFFFAOYSA-N	2.3×10^{-2}		Duchowicz et al. (2020)	V	186
	2.3×10^{-2}		HSDB (2015)	V	
	2.7×10^{-2}		Yaws (2003)	X	237, 72
	1.3×10^{-1}		Duchowicz et al. (2020)	Q	
	6.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.8×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	67
	2.0×10^{-2}		Yao et al. (2002)	Q	229
	2.3×10^{-2}		Yaws (1999)	?	21, 72
2-propenoic acid, 2-hydroxyethyl ester $C_5H_8O_3$ (2-hydroxyethyl acrylate) [818-61-1] OMIGHNLMNHATMP-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	V	
2-methyl-2-propenoic acid, ethyl ester $C_6H_{10}O_2$ [97-63-2] SUPCQIBBMFXVTL-UHFFFAOYSA-N	1.7×10^{-2}		Duchowicz et al. (2020)	V	186
	1.7×10^{-2}		HSDB (2015)	V	
	1.6×10^{-2}		Hilal et al. (2008)	C	
	8.9×10^{-2}		Duchowicz et al. (2020)	Q	
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.9×10^{-2}		Hilal et al. (2008)	Q	
	3.5×10^{-2}		Modarresi et al. (2007)	Q	67
2-methyl-2-propenoic acid, 2-propenyl ester $C_7H_{10}O_2$ (allyl methacrylate) [96-05-9] FBCQUCJYYPMKRO-UHFFFAOYSA-N	2.4×10^{-2}		HSDB (2015)	Q	99
2-methyl-2-propenoic acid, oxiranylmethyl ester $C_7H_{10}O_3$ (glycidyl methacrylate) [106-91-2] VOZRNXNHFFUQHIL-UHFFFAOYSA-N	3.2×10^1		HSDB (2015)	Q	99



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
allyl acetoacetate $C_7H_{10}O_3$ [1118-84-9] AXLMPTNTPOWPLT-UHFFFAOYSA-N	1.2×10^1		Ebert et al. (2023)	?	318
2-methyl-2-propenoic acid, propyl ester $C_7H_{12}O_2$ (propyl methacrylate) [2210-28-8] NHARPD SAXCBDDR-UHFFFAOYSA-N	1.8×10^{-2}		HSDB (2015)	Q	99
2-methyl-2-propenoic acid, butyl ester $C_8H_{14}O_2$ (butyl methacrylate) [97-88-1] SOGAXMICEFXMKE-UHFFFAOYSA-N	2.0×10^{-2}		Duchowicz et al. (2020)	V	186
	2.0×10^{-2}		HSDB (2015)	V	
	9.9×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.8×10^{-2}		Hilal et al. (2008)	Q	
	4.0×10^{-2}		Modarresi et al. (2007)	Q	67
2-methyl-2-propenoic acid, 2-methylpropyl ester $C_8H_{14}O_2$ [97-86-9] RUMACXVDNRZJZ-UHFFFAOYSA-N	1.9×10^{-2}		Duchowicz et al. (2020)	V	186
	1.9×10^{-2}		HSDB (2015)	V	
	3.9×10^{-2}		Duchowicz et al. (2020)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.1×10^{-2}		Hilal et al. (2008)	Q	
	2.7×10^{-2}		Modarresi et al. (2007)	Q	67
2-methyl-2-propenoic acid, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester $C_{14}H_{22}O_6$ [109-16-0] HWSSEYVMGDIFMH-UHFFFAOYSA-N	5.8×10^6		HSDB (2015)	Q	99
methyl methacrylate $C_5H_8O_2$ [80-62-6] VVQNEPGJFQJSBK-UHFFFAOYSA-N	2.9×10^{-2}	5300	Brockbank (2013)	L	1
	4.3×10^{-2}	7700	Hiatt (2013)	M	
	3.1×10^{-2}		Duchowicz et al. (2020)	V	186
	3.1×10^{-2}		HSDB (2015)	V	
	3.1×10^{-2}	5300	Dohnal et al. (2010)	V	1
	3.1×10^{-2}		Mackay et al. (2006c)	V	
	3.0×10^{-2}		Lide and Frederikse (1995)	V	
	3.1×10^{-2}		Mackay et al. (1995)	V	
	2.4×10^{-1}		Duchowicz et al. (2020)	Q	
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	4.4×10^{-2}		Hilal et al. (2008)	Q	
	3.5×10^{-2}		Modarresi et al. (2007)	Q	67
			Burkholder et al. (2019)	W	514
			Burkholder et al. (2015)	W	515
<i>(E)</i> -3-hexenyl ethanoate $C_8H_{14}O_2$ [3681-82-1] NPFVVOAXDOBMCE-SNAWJCMRSA-N	3.3×10^{-2}		Karl et al. (2003)	M	
<i>(Z)</i> -3-hexenyl ethanoate $C_8H_{14}O_2$ [3681-71-8] NPFVVOAXDOBMCE-PLNGDYQASA-N	3.1×10^{-2}		Karl et al. (2003)	M	
ethenyl ethanoate $CH_3COOCHCH_2$ (vinyl acetate) [108-05-4] XTXRWKRVRITETP-UHFFFAOYSA-N	2.0×10^{-2}	4500	Burkholder et al. (2019)	L	
	2.0×10^{-2}	4500	Burkholder et al. (2015)	L	
	2.0×10^{-2}	4600	Brockbank (2013)	L	1
	2.0×10^{-2}	4400	Böhme et al. (2008)	M	
	1.9×10^{-2}		HSDB (2015)	V	
	2.0×10^{-2}	4600	Dohnal et al. (2010)	V	1
	1.6×10^{-2}		Mackay et al. (2006c)	V	
	2.0×10^{-2}		Lide and Frederikse (1995)	V	
	1.6×10^{-2}		Mackay et al. (1995)	V	
	2.0×10^{-2}		Yaws (2003)	X	258
	2.0×10^{-2}		Yaws (2003)	X	237
	1.7×10^{-2}		Goldstein (1982)	X	446
	1.7×10^{-2}	2600	Goldstein (1982)	X	298
	1.2×10^{-2}		Dupeux et al. (2022)	Q	259
	5.8×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.2×10^{-2}		Gharagheizi et al. (2010)	Q	246
	6.9×10^{-2}		Hilal et al. (2008)	Q	
	6.6×10^{-2}		Modarresi et al. (2007)	Q	67
	2.0×10^{-2}		Yaws (1999)	?	21
<i>(7E,9Z)</i> -dodecadienyl acetate $C_{14}H_{24}O_2$ [54364-62-4] LLRZUAWETKPZJO-SCFJQAPRSA-N	1.2×10^{-2}		Ebert et al. (2023)	?	318
<i>(9Z,12E)</i> -9,12-tetradecadienyl acetate $C_{16}H_{28}O_2$ [30507-70-1] ZZGJZGSGVLSNDPG-FDTUMDBZSA-N	1.7×10^{-1}		Ebert et al. (2023)	?	318



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
isoambrettolide $C_{16}H_{28}O_2$ [28645-51-4] QILMAYXCYBTEDM-IWQZZHSRSA-N	2.5		Dupeux et al. (2022)	Q	259
vetyveryl acetate $C_{17}H_{26}O_2$ [117-98-6] UAVFEMBKDRODDE-UHFFFAOYSA-N	2.2		Dupeux et al. (2022)	Q	259
hydroprene $C_{17}H_{30}O_2$ [41096-46-2] FYQGBXGJFWXIPP-UEVLXMDPSA-N	5.1×10^{-2}		Ebert et al. (2023)	?	316
empenthrin $C_{18}H_{26}O_2$ [54406-48-3] YUGWDVYLFSETPE-UHFFFAOYSA-N	2.9×10^{-2}		Ebert et al. (2023)	?	316
3-(4-methoxyphenyl)-2-propenoic acid, 2-ethylhexyl ester $C_{18}H_{26}O_3$ (octinoxate) [5466-77-3] YBGZDTIWKFICR-JLHYAGUSA-N	1.2		HSDB (2015)	Q	447
kinoprene $C_{18}H_{28}O_2$ [42588-37-4] FZRBKIRIBLNOAM-WHVZTFIZSA-N	1.8×10^{-1}		Ebert et al. (2023)	?	316
allethrin $C_{19}H_{26}O_3$ [584-79-2] ZCVAOQKBXKSDMS-UHFFFAOYSA-N	6.0×10^1		Ebert et al. (2023)	?	318
S-methoprene $C_{19}H_{34}O_3$ [65733-16-6] NFGXHKASABOEWE-GYMWBFJFSA-N	1.5		Ebert et al. (2023)	?	318
methyl benzoate $C_6H_5COOCH_3$ [93-58-3] QPJVMBTYPHYUOC-UHFFFAOYSA-N	2.9×10^{-1}	6400	Brockbank (2013)	L	1
	3.0×10^{-1}		Duchowicz et al. (2020)	V	186
	3.0×10^{-1}		HSDB (2015)	V	
	3.0×10^{-1}		Mackay et al. (2006c)	V	
	3.0×10^{-1}		Mackay et al. (1995)	V	
	2.8×10^{-1}		Meylan and Howard (1991)	V	
	5.6×10^{-1}		Hine and Mookerjee (1975)	V	
3.1×10^{-1}	Abraham et al. (1994a)	R			
	5.8×10^{-1}	6300	Bagno et al. (1991)	T	473



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.8×10^{-1}		Yaws (2003)	X	258
	2.6×10^{-1}		Dupeux et al. (2022)	Q	259
	1.4		Duchowicz et al. (2020)	Q	
	2.9×10^{-1}		Zhang et al. (2010)	Q	287, 288
	3.6×10^{-1}		Zhang et al. (2010)	Q	287, 289
	9.5×10^{-1}		Zhang et al. (2010)	Q	287, 290
	6.1×10^{-1}		Zhang et al. (2010)	Q	287, 291
	2.9×10^{-1}		Hilal et al. (2008)	Q	
	1.6×10^{-1}		Modarresi et al. (2007)	Q	67
		5100	Kühne et al. (2005)	Q	
	3.2×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	6.8×10^{-1}		Yao et al. (2002)	Q	229
	1.1		English and Carroll (2001)	Q	230, 274
	3.0×10^{-1}		Katritzky et al. (1998)	Q	
	5.6×10^{-1}		Suzuki et al. (1992)	Q	232
	2.8×10^{-1}		Meylan and Howard (1991)	Q	
	2.7×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
		3500	Kühne et al. (2005)	?	
	2.8×10^{-1}		Yaws (1999)	?	21
	5.6×10^{-1}		Abraham et al. (1990)	?	
ethyl benzoate $\text{C}_6\text{H}_5\text{COOC}_2\text{H}_5$ [93-89-0] MTZQAGJQAFMTAQ-UHFFFAOYSA-N	1.7×10^{-1}	6300	Brockbank (2013)	L	1
	1.3×10^{-1}		Duchowicz et al. (2020)	V	186
	9.7×10^{-2}		Mackay et al. (2006c)	V	
	9.7×10^{-2}		Mackay et al. (1995)	V	
	1.9×10^{-1}		Abraham et al. (1994a)	R	
	1.4×10^{-1}		Yaws (2003)	X	258
	1.5×10^{-1}		Dupeux et al. (2022)	Q	259
	5.2×10^{-1}		Duchowicz et al. (2020)	Q	
	3.1×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.1×10^{-1}		Zhang et al. (2010)	Q	287, 288
	2.1×10^{-1}		Zhang et al. (2010)	Q	287, 289
	5.1×10^{-1}		Zhang et al. (2010)	Q	287, 290
	4.8×10^{-1}		Zhang et al. (2010)	Q	287, 291
	1.9×10^{-1}		Hilal et al. (2008)	Q	
	1.6×10^{-1}		Modarresi et al. (2007)	Q	67
	1.9×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	6.7×10^{-1}		English and Carroll (2001)	Q	230, 231
	5.1×10^{-1}		Katritzky et al. (1998)	Q	
	2.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.4×10^{-1}		Yaws (1999)	?	21
	1.9×10^{-1}		Abraham et al. (1990)	?	



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-hydroxybenzoic acid methyl ester $C_8H_8O_3$ (methyl salicylate) [119-36-8] OSWPMRLSEHDHFF-UHFFFAOYSA-N	1.6 3.3×10^{-1} 1.0×10^{-1} 1.1×10^1 7.8 1.8×10^1 9.3 1.0×10^{-1} 1.0	9500	Brockbank (2013) Karl et al. (2008) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Bartelt-Hunt et al. (2008) Yaws (1999)	L M V V Q Q Q ? ?	1 67 21 21, 38
benzoic acid, 4-methyl-, methyl ester $C_9H_{10}O_2$ [99-75-2] OSSJZLPUHJDKF-UHFFFAOYSA-N	2.6×10^{-1} 3.9×10^{-1} 1.7 3.5×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
acetylsalicylic acid $C_9H_8O_4$ (aspirin) [50-78-2] BSYNRYMUTXBXSQ-UHFFFAOYSA-N	7.6×10^3 1.5×10^4 1.5×10^5 6.2×10^2 4.9×10^4 7.8×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) Abraham et al. (2019) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q Q	186 271, 243 244 245
1,4-benzenedicarboxylic acid, dimethyl ester $C_{10}H_{10}O_4$ [120-61-6] WOZVHXUHUFLZGK-UHFFFAOYSA-N	7.4×10^{-2} 7.6×10^{-2} 2.2×10^2 4.4×10^1 1.3×10^2 5.3×10^1 9.2×10^1 2.4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Modarresi et al. (2007)	V V Q Q Q Q Q Q	186 287, 288 287, 289 287, 290 287, 291 67
butyl benzoate $C_{11}H_{14}O_2$ [136-60-7] XSIFPSYPOVKYCO-UHFFFAOYSA-N	2.5×10^{-1} 1.0×10^{-1} 5.7×10^{-1} 2.0×10^{-1} 9.9×10^{-2} 1.2×10^{-1} 1.2×10^{-1} 1.0×10^{-1} 5.2×10^{-1} 3.2×10^{-1} 8.3×10^{-2}		Duchowicz et al. (2020) Dupeux et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Modarresi et al. (2007)	V Q Q Q Q Q Q Q Q Q Q Q	186 259 242, 243 244 245 287, 288 287, 289 287, 290 287, 291 67



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-benzenedicarboxylic acid, butyl cyclohexyl ester $C_{18}H_{24}O_4$ (butyl cyclohexyl phthalate) [84-64-0] BHKLONWXRPNAE-UHFFFAOYSA-N	1.0×10^1		HSDB (2015)	Q	99
butyl glycolyl butyl phthalate $C_{18}H_{24}O_6$ [85-70-1] GOJCVVPJCKEBQV-UHFFFAOYSA-N	4.7×10^2		HSDB (2015)	Q	99
diamyl phthalate $C_{18}H_{26}O_4$ [131-18-0] IPKKHRVROFYTEK-UHFFFAOYSA-N	1.1×10^1		HSDB (2015)	Q	99
butyl benzyl phthalate $C_{19}H_{20}O_4$ [85-68-7] IRIAEXORFWYRCZ-UHFFFAOYSA-N	1.0×10^2 7.8 7.6 7.5 1.9×10^1 4.9 1.3×10^1 7.8 9.6 2.9×10^2 3.2×10^1 >9.9		Lee et al. (2012) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Saçan et al. (2005) Cousins and Mackay (2000) Staples et al. (1997) Mackay et al. (1995) Ryan et al. (1988) Duchowicz et al. (2020) Saçan et al. (2005) Petrasek et al. (1983)	M V V V V V V V C Q Q E	186
dihexyl phthalate $C_{20}H_{30}O_4$ [84-75-3] KCXZNSGUUQJTR-UHFFFAOYSA-N	8.3 3.8×10^{-1} 3.8×10^{-1} 1.4 2.2×10^{-1} 5.5×10^1 1.6×10^1		Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Cousins and Mackay (2000) Staples et al. (1997) Duchowicz et al. (2020) Saçan et al. (2005)	L V V V V Q Q	186
butyl 2-ethylhexyl phthalate $C_{20}H_{30}O_4$ [85-69-8] AVOLBYOSCILFLL-UHFFFAOYSA-N	2.1 2.5×10^1 4.7 6.9×10^1		Cousins and Mackay (2000) Staples et al. (1997) HSDB (2015) Saçan et al. (2005)	V V Q Q	99
diphenyl terephthalate $C_{20}H_{14}O_4$ [1539-04-4] HPGJOUYGWKFYQW-UHFFFAOYSA-N	3.2×10^2 4.3×10^4 2.7×10^4 7.7×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A3.8: Esters (RCOOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^1		Wolfe et al. (1980)	V	
	3.4×10^1		Ryan et al. (1988)	C	
	8.2×10^1		Petrasek et al. (1983)	C	
	9.5		Duchowicz et al. (2020)	Q	
	2.5×10^1		Saçan et al. (2005)	Q	
	8.4×10^{-1}		Meylan and Howard (1991)	Q	
	3.7×10^1		Bartelt-Hunt et al. (2008)	?	21
bis(2-ethylhexyl) terephthalate $C_{24}H_{38}O_4$ [6422-86-2] RWPICVVBGZBXNA-UHFFFAOYSA-N	9.9×10^{-1}		HSDB (2015)	Q	99
dinonyl phthalate $C_{26}H_{42}O_4$ [84-76-4] DROMNWUQASBTFM-UHFFFAOYSA-N	1.1×10^{-1} 7.0×10^{-1} 3.0×10^1		Cousins and Mackay (2000) HSDB (2015) Saçan et al. (2005)	V Q Q	 99
diisononyl phthalate $C_{26}H_{42}O_4$ [28553-12-0] HBGGXQJOCNVPFY-UHFFFAOYSA-N	6.6 6.6 1.1×10^{-1} 9.9 3.3×10^1		Duchowicz et al. (2020) HSDB (2015) Cousins and Mackay (2000) Duchowicz et al. (2020) Saçan et al. (2005)	V V V Q Q	186
didecyl phthalate $C_{28}H_{46}O_4$ [84-77-5] PGIBJVOP LXHHGS-UHFFFAOYSA-N	4.6×10^{-2} 3.5×10^{-1}		Cousins and Mackay (2000) HSDB (2015)	V Q	 99
diisodecyl phthalate $C_{28}H_{46}O_4$ [26761-40-0] ZVFDTKUVRCTHQE-UHFFFAOYSA-N	8.9 9.0 3.8×10^1 4.6×10^{-2} 1.1×10^1 1.0×10^1 1.3×10^1 2.4×10^1 8.9		Duchowicz et al. (2020) HSDB (2015) Saçan et al. (2005) Cousins and Mackay (2000) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010) Saçan et al. (2005) Yaws (1999)	V V V V X Q Q Q ?	186 237, 79 246 21, 79
diundecyl phthalate $C_{30}H_{50}O_4$ [3648-20-2] QQVHEQUEHCEAKS-UHFFFAOYSA-N	3.3×10^1 2.0×10^{-2} 1.8×10^{-1} 1.4×10^1		Saçan et al. (2005) Cousins and Mackay (2000) HSDB (2015) Saçan et al. (2005)	V V Q Q	 99
ditridecyl phthalate $C_{34}H_{58}O_4$ [119-06-2] YCZJVRCZIPDYHH-UHFFFAOYSA-N	3.6×10^{-3} 4.5×10^{-2} 7.9×10^1		Cousins and Mackay (2000) HSDB (2015) Saçan et al. (2005)	V Q Q	 99



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethanedioic acid, dimethyl ester $C_4H_6O_4$ (dimethyl oxalate) [553-90-2] LOMVENUNSWAXEN-UHFFFAOYSA-N	3.4		Duchowicz et al. (2020)	V	186
	2.6×10^1		Duchowicz et al. (2020)	Q	
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^1		Raventos-Duran et al. (2010)	Q	244
	3.9		Raventos-Duran et al. (2010)	Q	245
	6.9		Hilal et al. (2008)	Q	
	4.6×10^{-1}		Modarresi et al. (2007)	Q	67
ethanedioic acid, diethyl ester $C_6H_{10}O_4$ [95-92-1] WYACBZDAHNBPPB-UHFFFAOYSA-N	4.5		Duchowicz et al. (2020)	V	186
	6.4		Duchowicz et al. (2020)	Q	
propanedioic acid, dimethyl ester $C_5H_8O_4$ (dimethyl malonate) [108-59-8] BEPAFCGSDWSTEL-UHFFFAOYSA-N	3.8×10^1	11000	Katrib et al. (2003)	M	
propanedioic acid, diethyl ester $C_7H_{12}O_4$ (diethyl malonate) [105-53-3] IYXGSMUGOJNHAZ-UHFFFAOYSA-N	3.9	7500	Brockbank (2013)	L	1
	4.7		Duchowicz et al. (2020)	V	186
	7.9		Duchowicz et al. (2020)	Q	
	2.0		Raventos-Duran et al. (2010)	Q	242, 243
	4.9		Raventos-Duran et al. (2010)	Q	244
	1.2×10^1		Raventos-Duran et al. (2010)	Q	245
	3.9		Hilal et al. (2008)	Q	
	5.0×10^{-1}		Modarresi et al. (2007)	Q	67
		5900	Kühne et al. (2005)	Q	
	4.2		Bartelt-Hunt et al. (2008)	?	21
		6400	Kühne et al. (2005)	?	
	4.1		Yaws (1999)	?	21, 14
butanedioic acid, dimethyl ester $C_6H_{10}O_4$ (dimethyl succinate) [106-65-0] MUXOBHXGJLMRAB-UHFFFAOYSA-N	3.0×10^1	8500	Katrib et al. (2003)	M	
	1.5×10^2		HSDB (2015)	Q	99
		7100	Kühne et al. (2005)	Q	
		7000	Kühne et al. (2005)	?	
diethyl succinate $C_8H_{14}O_4$ [123-25-1] DKMROQRQHGEIOW-UHFFFAOYSA-N	1.9×10^1		Duchowicz et al. (2020)	V	186
	9.3		Duchowicz et al. (2020)	Q	
	3.9×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	4.9		Raventos-Duran et al. (2010)	Q	244
	9.9		Raventos-Duran et al. (2010)	Q	245
	4.0		Hilal et al. (2008)	Q	
	1.3		Modarresi et al. (2007)	Q	67



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Table A3.8: Esters (RCOOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>Z</i>)-2-butenedioic acid dimethyl ester $C_6H_8O_4$ (dimethyl maleate) [624-48-6] LDCRRTXIJACKKU-ARJAWSKDSA-N	1.4×10^1 5.2×10^1 1.2×10^1 3.9×10^1 7.8×10^1 2.3×10^1 1.6		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q	186 271, 243 244 245 67
(<i>E</i>)-2-butenedioic acid dimethyl ester $C_6H_8O_4$ (dimethyl fumarate) [624-49-7] LDCRRTXIJACKKU-ONEGZZNKS-A-N	1.4×10^1		HSDB (2015)	Q	99
pentanedioic acid, dimethyl ester $C_7H_{12}O_4$ [1119-40-0] XTDYIOOONNVFMA-UHFFFAOYSA-N	1.5×10^1 6.9×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
diethyl glutarate $C_9H_{16}O_4$ [818-38-2] OUWSNHWQZPEFEX-UHFFFAOYSA-N	1.7×10^1		Ebert et al. (2023)	?	316
diethyl pimelate $C_{11}H_{20}O_4$ [2050-20-6] LKKOGZVQQQUVHF-UHFFFAOYSA-N	2.2×10^1 1.3×10^1 1.5 8.6×10^{-1} 2.2×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Bartelt-Hunt et al. (2008)	V Q Q Q ?	186 67 21
1,3-benzenedicarboxylic acid, diethyl ester $C_{12}H_{14}O_4$ [636-53-3] JLVWYVWLMFVCDI-UHFFFAOYSA-N	2.5×10^1 1.9×10^1 2.9×10^7 5.6×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
dibutyl maleate $C_{12}H_{20}O_4$ [105-76-0] JBSLOWBPDRZSMB-FPLPWBNLSA-N	2.6×10^1 1.5×10^1 2.5 4.9 1.2×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q	186 271, 243 244 245
dimethyl sebacate $C_{12}H_{22}O_4$ (decanedioic acid, dimethyl ester) [106-79-6] ALOUNLDAKADEEB-UHFFFAOYSA-N	1.8×10^1		Ebert et al. (2023)	?	316



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,6-naphthalenedicarboxylic acid, dimethyl ester $C_{14}H_{12}O_4$ [840-65-3] GYUVM LBYMPKZAZ-UHFFFAOYSA-N	4.5×10^2		Zhang et al. (2010)	Q	287, 288
	2.5×10^3		Zhang et al. (2010)	Q	287, 289
	2.6×10^7		Zhang et al. (2010)	Q	287, 290
	1.3×10^3		Zhang et al. (2010)	Q	287, 291
diisooctyl adipate $C_{22}H_{42}O_4$ [1330-86-5] CJFLBOQMPJCVLRL-UHFFFAOYSA-N	1.9×10^{-1}		HSDB (2015)	Q	99
di-(2-ethylhexyl)-adipate $C_{22}H_{42}O_4$ [103-23-1] SAOKZLXYCUGLFA-UHFFFAOYSA-N	2.3×10^1		Felder et al. (1986)	M	87
	4.3×10^{-1}		Hilal et al. (2008)	Q	
	4.0×10^{-1}		Modarresi et al. (2007)	Q	67
peroxybenzoic acid, <i>tert</i> -butyl ester $C_{11}H_{14}O_3$ [614-45-9] GJBRNHKUVLOCEB-UHFFFAOYSA-N	4.7×10^{-2}		HSDB (2015)	Q	99
	4.7×10^{-2}		Zhang et al. (2010)	Q	287, 288
	1.8×10^{-1}		Zhang et al. (2010)	Q	287, 289
	8.2		Zhang et al. (2010)	Q	287, 290
	5.4		Zhang et al. (2010)	Q	287, 291
neodecaneperoxoic acid, 1,1-dimethylethyl ester $C_{14}H_{28}O_3$ [26748-41-4] NMOALOSNPWTWRH-UHFFFAOYSA-N	9.9×10^{-4}		Zhang et al. (2010)	Q	287, 288
	4.7×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.2×10^{-1}		Zhang et al. (2010)	Q	287, 290
	2.3×10^{-2}		Zhang et al. (2010)	Q	287, 291
neoheptaneperoxoic acid, 1-methyl-1-phenylethyl ester $C_{16}H_{24}O_3$ [130097-36-8] WFAUFYAGXAXBEG-UHFFFAOYSA-N	3.8×10^{-2}		Zhang et al. (2010)	Q	287, 288
	9.0×10^{-2}		Zhang et al. (2010)	Q	287, 289
	2.5		Zhang et al. (2010)	Q	287, 290
	1.3		Zhang et al. (2010)	Q	287, 291
hydroxypropyl acrylate $C_6H_{10}O_3$ [25584-83-2] AYEFIAVHMUFQPZ-UHFFFAOYSA-N	5.8×10^3		HSDB (2015)	Q	99
2-hydroxyethyl methacrylate $C_6H_{10}O_3$ [868-77-9] WOBHKFSMXKNTIM-UHFFFAOYSA-N	4.6×10^1		Duchowicz et al. (2020)	V	186
	6.6×10^1		Duchowicz et al. (2020)	Q	
	2.1×10^3		HSDB (2015)	Q	99
2-hydroxypropyl acrylate $C_6H_{10}O_3$ [999-61-1] GWZMWHWAWHPNHN-UHFFFAOYSA-N	1.6×10^3		HSDB (2015)	Q	99



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexanedioic acid, dimethyl ester $C_8H_{14}O_4$ (dimethyl adipate) [627-93-0] UDSFAEKRVUSQDD-UHFFFAOYSA-N	4.3 8.1×10^1 1.0×10^1 6.0		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) Bartelt-Hunt et al. (2008)	V Q Q ?	186 99 21
methyl 4-hydroxybenzoate $C_8H_8O_3$ (methylparaben) [99-76-3] LXCFILQKQLGQFO-UHFFFAOYSA-N	4.5×10^3		HSDB (2015)	Q	99
diethyl fumarate $C_8H_{12}O_4$ [623-91-6] IEPRKVQEAMIZSS-AATRIKPKSA-N	4.1×10^2		HSDB (2015)	Q	99
diethyl adipate $C_{10}H_{18}O_4$ [141-28-6] VIZORQUEIQEFRT-UHFFFAOYSA-N	2.7 2.7 1.2×10^1 3.7		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Bartelt-Hunt et al. (2008)	V V Q ?	186 99 21
propyl 4-hydroxybenzoate $C_{10}H_{12}O_3$ (propylparaben) [94-13-3] QELSKZZBTMNZEB-UHFFFAOYSA-N	1.5×10^3		HSDB (2015)	Q	99
diethylene glycol diacrylate $C_{10}H_{14}O_5$ [4074-88-8] LEJBBGNFFAFPKQ-UHFFFAOYSA-N	1.0×10^4		HSDB (2015)	Q	99
(2,2-dimethyl-3-prop-2-enoyloxypropyl) prop-2-enoate $C_{11}H_{16}O_4$ (2,2-dimethyltrimethylene acrylate) [2223-82-7] MXFQRSUWYYSPOC-UHFFFAOYSA-N	2.7×10^1		HSDB (2015)	Q	447
methyl jasmonate $C_{13}H_{20}O_3$ [1211-29-6] GEWDNTWNSAZUDX-NNOMMRTBSA-N	5.0×10^1 7.0×10^2		Karl et al. (2008) HSDB (2015)	M Q	99
cinoxate $C_{14}H_{18}O_4$ [104-28-9] CMDKPGRTAQVGFQ-RMKNXTFCSA-N	1.9×10^3		HSDB (2015)	Q	447



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
trimethylolpropane triacrylate $C_{15}H_{20}O_6$ [15625-89-5] DAKWPKUUDNSNPN-UHFFFAOYSA-N	1.6×10^4		HSDB (2015)	Q	447
benzyl cinnamate $C_{16}H_{14}O_2$ [103-41-3] NGHOLYJTSCBCGC-VAWYXSNFSA-N	3.0×10^1		HSDB (2015)	Q	99
2,2,4-trimethyl-1,3-pentanediol diisobutyrate $C_{16}H_{30}O_4$ [6846-50-0] OMVSWZDEEGIJI-UHFFFAOYSA-N	9.0×10^{-1}		HSDB (2015)	Q	99
nonanedioic acid, dibutyl ester $C_{17}H_{32}O_4$ (dibutyl azelate) [2917-73-9] RISLXYINQFKFRL-UHFFFAOYSA-N	8.2×10^{-1}		HSDB (2015)	Q	99
isopropyl myristate $C_{17}H_{34}O_2$ [110-27-0] AXISYYRBXTVTFY-UHFFFAOYSA-N	4.2×10^{-4}		HSDB (2015)	Q	99
decanedioic acid, dibutyl ester $C_{18}H_{34}O_4$ [109-43-3] PYGXAGIECVIOZ-UHFFFAOYSA-N	2.0×10^2 2.1×10^2 1.8×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
diethylene glycol dibenzoate $C_{18}H_{18}O_5$ [120-55-8] NXQMCAOPTPLPRL-UHFFFAOYSA-N	3.3×10^6		HSDB (2015)	Q	99
12-hydroxy-9-octadecenoic acid, methyl ester $C_{19}H_{36}O_3$ (ricinoleic acid, methyl ester) [141-24-2] XKGDWZQXVZSXAQ-RAXLEYEMSA-N	6.7×10^1		HSDB (2015)	Q	99
chrysanthemic acid 2,4-dimethylbenzyl ester $C_{19}H_{26}O_2$ (dimethrin) [70-38-2] FHNBSDJERHDHZ-UHFFFAOYSA-N	1.3×10^{-1}		HSDB (2015)	Q	99



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tributyl acetyl citrate $C_{20}H_{34}O_8$ (acetyl tributyl citrate) [77-90-7] OZCLKYGREBVARF-UHFFFAOYSA-N	2.6×10^4		HSDB (2015)	Q	99
hexanedioic acid, bis[2-(2-butoxyethoxy)ethyl] ester $C_{22}H_{42}O_8$ (bis(2-(2-butoxyethoxy)ethyl) adipate) [141-17-3] SCABKEBYDRTODC-UHFFFAOYSA-N	3.2×10^7		HSDB (2015)	Q	99
1,2-benzenedicarboxylic acid, decyl octyl ester $C_{26}H_{42}O_4$ [119-07-3] LVAGMBHLXLZJKZ-UHFFFAOYSA-N	4.7×10^{-1}		HSDB (2015)	Q	99
phthalic acid, isodecyl octyl ester $C_{26}H_{42}O_4$ [1330-96-7] UXLBXTIBYMXRXN-UHFFFAOYSA-N	4.7×10^{-1}		HSDB (2015)	Q	99
diisononyl hexahydrophthalate $C_{26}H_{48}O_4$ [166412-78-8] HORIEOQXBKUKGQ-UHFFFAOYSA-N	1.4×10^{-1}		HSDB (2015)	Q	99
decanedioic acid, bis(2-ethylhexyl) ester $C_{26}H_{50}O_4$ (bis(2-ethylhexyl) sebacate) [122-62-3] VJHINFRDQUWOJ-UHFFFAOYSA-N	1.2×10^{-1}		HSDB (2015)	Q	99
glycerol tricaprylate $C_{27}H_{50}O_6$ (tricaprylin) [538-23-8] VLPFTAMPNXLGLX-UHFFFAOYSA-N	3.9×10^2		HSDB (2015)	Q	99
tris(2-ethylhexyl) trimellitate $C_{33}H_{54}O_6$ [3319-31-1] KRADHMIOFJQKEZ-UHFFFAOYSA-N	2.2×10^1		HSDB (2015)	Q	99
MCM:CHOOCH2OOH $C_2H_4O_4$	3.8×10^3		Wang et al. (2017)	Q	80, 238
	7.4×10^2		Wang et al. (2017)	Q	80, 239
RHCLSHTZJFAXOU-UHFFFAOYSA-N	6.3×10^1		Wang et al. (2017)	Q	80, 240



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CHOOCHO $\text{C}_2\text{H}_2\text{O}_3$ VGGRCVDNFAQIKO-UHFFFAOYSA-N	3.3 2.5×10^1 1.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOOMCO3H $\text{C}_3\text{H}_4\text{O}_5$ NYMJKVCDMUPZFI-UHFFFAOYSA-N	4.6×10^4 2.0×10^3 3.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETHFORMOOH $\text{C}_3\text{H}_6\text{O}_4$ DJECRZORXDSOEF-UHFFFAOYSA-N	3.6×10^3 2.9×10^2 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MECOFOROOH $\text{C}_3\text{H}_4\text{O}_5$ TUWVUCWHUYJQAO-UHFFFAOYSA-N	1.6×10^5 3.6×10^4 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METACETHO $\text{C}_3\text{H}_4\text{O}_3$ ORWKVZNEPHTCOE-UHFFFAOYSA-N	2.2 4.4×10^1 1.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METACETO2H $\text{C}_3\text{H}_6\text{O}_4$ AIBRVUZTVKELQP-UHFFFAOYSA-N	2.6×10^3 1.4×10^3 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMCF $\text{C}_3\text{H}_4\text{O}_4$ IIHOUWJOSQHIII-UHFFFAOYSA-N	1.7×10^1 7.8×10^1 3.0×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMCFOOH $\text{C}_3\text{H}_4\text{O}_6$ LQGPNTLGGGGYKM-UHFFFAOYSA-N	1.2×10^6 5.9×10^5 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MOCOCH2OOH $\text{C}_3\text{H}_6\text{O}_4$ OQIIXPHPHGKJRP-UHFFFAOYSA-N	2.6×10^3 2.5×10^2 5.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACEC2H4OOH $\text{C}_4\text{H}_8\text{O}_4$ JNHNRXKAKFYQGM-UHFFFAOYSA-N	2.1×10^3 2.0×10^3 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACETMECO3H $\text{C}_4\text{H}_6\text{O}_5$ UCKKJLQTXHILBL-UHFFFAOYSA-N	3.2×10^4 3.5×10^3 7.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:COO2C3CO3H $\text{C}_4\text{H}_6\text{O}_5$ CKNWOSHVDVKEZAO-UHFFFAOYSA-N	3.2×10^4 2.9×10^3 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:COO2C4OOH $\text{C}_4\text{H}_8\text{O}_4$ KATJWBCCJXQUDM-UHFFFAOYSA-N	2.1×10^3 1.6×10^3 4.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:EOCOCH2OOH $C_4H_8O_4$ ZDXGLRBKCRGTGQP-UHFFFAOYSA-N	2.1×10^3 1.1×10^2 3.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETHACETOOH $C_4H_8O_4$ FITNUWWXWGTMFO-UHFFFAOYSA-N	2.4×10^3 2.7×10^2 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRFORMOOH $C_4H_8O_4$ DHNDYBGDIQCRQB-UHFFFAOYSA-N	2.0×10^3 5.1×10^1 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
maleic anhydride $C_4H_2O_3$ (MCM:MALANHY) [108-31-6] FPYJFEHAWHCUMM-UHFFFAOYSA-N	1.9×10^1 1.2×10^5 9.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MECOACEOOH $C_4H_6O_5$ ZCPJTWSQAQFRVMG-UHFFFAOYSA-N	1.1×10^5 6.6×10^4 5.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACCOETOOH $C_5H_8O_5$ MRPVYADEHOUTJI-UHFFFAOYSA-N	8.7×10^4 5.8×10^5 8.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACCOMECO3H $C_5H_6O_6$ OSZJUWKUAMKWAM-UHFFFAOYSA-N	1.3×10^6 8.5×10^5 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACETC2CO3H $C_5H_8O_5$ LEMDJBHCHPODAJ-UHFFFAOYSA-N	2.5×10^4 3.2×10^3 5.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACETCOC2H5 $C_5H_8O_3$ KLUDQUOLAFVLLOL-UHFFFAOYSA-N	1.2 2.5×10^1 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUFORMOOH $C_5H_{10}O_4$ HTFWPRQCJNWCFU-UHFFFAOYSA-N	2.6×10^3 9.8×10^1 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:COO2C4CO3H $C_5H_8O_5$ XFYUESMQFXHHIL-UHFFFAOYSA-N	2.5×10^4 2.5×10^3 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRACBCO3H $C_5H_8O_5$ IEXBKLGSAHQBW-UHFFFAOYSA-N	2.8×10^4 6.9×10^2 6.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRACBOOH $C_5H_{10}O_4$ HJBGHGSQOFAQDB-UHFFFAOYSA-N	1.9×10^3 7.3×10^2 5.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IPRACOOH $C_5H_{10}O_4$ UMMAXRSQAGVERV-UHFFFAOYSA-N	1.3×10^3 5.9×10^1 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMALANHY $C_5H_4O_3$ AYKYXWQEBUNJCN-UHFFFAOYSA-N	1.3×10^1 2.1×10^5 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEAALOOH $C_5H_{10}O_4$ OJPAWJIXAIXDOD-UHFFFAOYSA-N	1.6×10^3 2.3×10^2 5.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEALCO3H $C_5H_8O_5$ GVHAIIVWJUJAR-UHFFFAOYSA-N	2.3×10^4 1.1×10^2 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPRACAOOH $C_5H_{10}O_4$ BAISPOQWBPLMQI-UHFFFAOYSA-N	1.9×10^3 7.4×10^2 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPRACBOOH $C_5H_{10}O_4$ KUTULJFZWKOEBJ-UHFFFAOYSA-N	1.9×10^3 1.5×10^2 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPRACCOOH $C_5H_{10}O_4$ GYDFEBDSBUDYEN-UHFFFAOYSA-N	1.7×10^3 1.0×10^3 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRCOFORM $C_5H_8O_3$ JKMPLJUAEDQBOK-UHFFFAOYSA-N	1.6 1.4×10^1 1.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRCOFOROOH $C_5H_8O_5$ VVRRHCGIFBEYON-UHFFFAOYSA-N	1.2×10^5 2.4×10^5 9.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRCOOMOHH $C_5H_{10}O_4$ JALZRJAYIBRIKJ-UHFFFAOYSA-N	1.7×10^3 4.9×10^2 2.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLFUONE $C_5H_6O_2$ BGLUXFNVVSVEET-UHFFFAOYSA-N	3.2×10^{-1} 1.4×10^2 8.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACCOPROOH $C_6H_{10}O_5$ HNMHVARGKGINS-UHFFFAOYSA-N	8.1×10^4 2.1×10^5 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACETCOC3H7 $C_6H_{10}O_3$ BVQHUUQLZPXAYQ-UHFFFAOYSA-N	1.0 1.3×10^1 2.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BOCOCH2OOH $C_6H_{12}O_4$ DQCMTBDKSIDVDF-UHFFFAOYSA-N	1.1×10^3 3.5×10^1 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMMALANHY $C_6H_6O_3$ MFGALGYVFGDXIX-UHFFFAOYSA-N	8.1 1.7×10^5 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBFUONE $C_6H_8O_2$ GOUILHYTHSOMQJ-UHFFFAOYSA-N	3.0×10^{-1} 7.8×10^1 4.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EMALANHY $C_6H_6O_3$ AXGOOClyBPQWNG-UHFFFAOYSA-N	1.0×10^1 1.1×10^5 5.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MCOOTBOOH $C_6H_{12}O_4$ GZZAVFPVGHZEL-UHFFFAOYSA-N	1.1×10^3 2.8×10^2 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXFYUONE $C_6H_8O_2$ SAXRUMLUKZBSTO-UHFFFAOYSA-N	2.2×10^{-1} 9.1×10^1 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUACAOOH $C_6H_{12}O_4$ VUJYCVMLKZJB-UHFFFAOYSA-N	1.7×10^3 5.9×10^2 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUACBOOH $C_6H_{12}O_4$ ZDNJENJHBNLWSZ-UHFFFAOYSA-N	1.7×10^3 4.4×10^2 6.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUACCOOH $C_6H_{12}O_4$ CCXFYGGILMLVCI-UHFFFAOYSA-N	1.7×10^3 1.1×10^2 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRCOOMCO3H $C_6H_{10}O_5$ NIESGQMUWIIUQP-UHFFFAOYSA-N	2.0×10^4 8.7×10^2 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:SBUACAOOH $C_6H_{12}O_4$ XEFYSNUZBIEBQZ-UHFFFAOYSA-N	1.1×10^3 3.6×10^1 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:SBUACBOOH $C_6H_{12}O_4$ SHPWQWOSZRPJCY-UHFFFAOYSA-N	1.8×10^3 3.6×10^2 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TBUACCO3H $C_6H_{10}O_5$ CTLNPRHGCLAPPZ-UHFFFAOYSA-N	1.6×10^4 1.2×10^2 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TMB1FUONE $C_6H_8O_2$ GLCOTRLUPUIAFI-UHFFFAOYSA-N	2.2×10^{-1} 1.3×10^2 3.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBFUONE $C_7H_{10}O_2$ LWFKYUIZWLJTCA-UHFFFAOYSA-N	2.8×10^{-1} 6.9×10^1 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPMALANHY $C_7H_8O_3$ QSWLSAYLEATCSH-UHFFFAOYSA-N	9.3 6.3×10^4 2.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MEBFUONE $C_7H_{10}O_2$ UVERQUDHQJYTIT-UHFFFAOYSA-N	2.0×10^{-1} 5.4×10^1 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBFUONE $C_7H_{10}O_2$ CLCLZCBNFGUOD-UHFFFAOYSA-N	2.3×10^{-1} 5.5×10^1 4.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PMALANHY $C_7H_8O_3$ LPFJFXRQANKTRA-UHFFFAOYSA-N	8.7 6.0×10^4 4.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TMB2FUONE $C_7H_{10}O_2$ OSFZDFIHIXIEL-UHFFFAOYSA-N	1.5×10^{-1} 9.1×10^1 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1013OOH $C_{10}H_{18}O_4$ BQYOGPDLQGPQM-UHFFFAOYSA-N	2.1×10^3 9.8×10^2 2.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1013CO3H $C_{11}H_{18}O_5$ ZWRGNVICSEPNH-UHFFFAOYSA-N	2.2×10^4 6.3×10^2 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYFUONE $C_5H_6O_2$ VGHBEPMIVGJJP-UHFFFAOYSA-N	2.3×10^{-1} 3.0×10^2 4.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYFUONE $C_6H_8O_2$ QHQDWCHELGHSTO-UHFFFAOYSA-N	1.6×10^{-1} 2.8×10^2 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOOCH2OH $C_2H_4O_3$ APUQIHKCZFWODD-UHFFFAOYSA-N	1.4×10^2 6.5×10^1 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETHFORMOH $C_3H_6O_3$ JRUKHAIAGVYRP-UHFFFAOYSA-N	1.4×10^2 6.2×10^1 7.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ETOHOCHO $\text{C}_3\text{H}_6\text{O}_3$ UKQJDWBNQNAJHB-UHFFFAOYSA-N	1.6×10^2 3.3×10^2 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METACETOH $\text{C}_3\text{H}_6\text{O}_3$ JYVNDCLJHKQUHE-UHFFFAOYSA-N	9.8×10^1 1.1×10^2 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMCFOH $\text{C}_3\text{H}_4\text{O}_5$ XDYLYGBFMHJJOW-UHFFFAOYSA-N	4.6×10^4 1.4×10^5 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MOXCOCH2OH $\text{C}_3\text{H}_6\text{O}_3$ GSJFXBNYJCXDGI-UHFFFAOYSA-N	5.0 1.5×10^2 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACEETOHOOH $\text{C}_4\text{H}_8\text{O}_5$ QQYYRFGUJQKRH-UHFFFAOYSA-N	8.3×10^6 2.9×10^4 2.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZFUOH $\text{C}_4\text{H}_6\text{O}_4$ SGMJBNSHAZVGM-UHFFFAOYSA-N	4.8×10^6 3.3×10^7 1.7×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZFUOOH $\text{C}_4\text{H}_6\text{O}_5$ LZJWYIKGTDPLAQ-UHFFFAOYSA-N	7.8×10^9 8.9×10^7 3.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EOX2COMEOH $\text{C}_4\text{H}_8\text{O}_3$ ZANNOFHADGWOLI-UHFFFAOYSA-N	4.0 7.1×10^1 1.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETACETOH $\text{C}_4\text{H}_8\text{O}_3$ HXDLWJWIAHWIKI-UHFFFAOYSA-N	9.6×10^1 3.6×10^2 3.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETHACETOH $\text{C}_4\text{H}_8\text{O}_3$ MLAFRLBDNVSLPE-UHFFFAOYSA-N	8.9×10^1 7.1×10^1 7.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOACETEOOH $\text{C}_4\text{H}_8\text{O}_5$ QWYGOSGRTPMPCI-UHFFFAOYSA-N	3.0×10^5 5.6×10^5 5.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRFORMOH $\text{C}_4\text{H}_8\text{O}_3$ SVJMGLNDGCVDIT-UHFFFAOYSA-N	7.4×10^1 3.2×10^1 2.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MALANHY2OH $\text{C}_4\text{H}_4\text{O}_5$ BOGVTNYNTGOONP-UHFFFAOYSA-N	7.1×10^8 4.8×10^8 3.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MALANHYOOH $\text{C}_4\text{H}_4\text{O}_6$ UPSCPEYLZZUIND-UHFFFAOYSA-N	1.2×10^{12} 1.0×10^9 1.3×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PROL2FORM $\text{C}_4\text{H}_8\text{O}_3$ CRMUFGZOBODVGS-UHFFFAOYSA-N	1.5×10^2 2.6×10^2 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUOHFORM $\text{C}_5\text{H}_{10}\text{O}_3$ KIZCCPGSHHAFRX-UHFFFAOYSA-N	8.7×10^1 3.0×10^1 4.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRACBOH $\text{C}_5\text{H}_{10}\text{O}_3$ YJNKLTJZSXVHQ-UHFFFAOYSA-N	1.0×10^2 2.0×10^2 2.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRACOH $\text{C}_5\text{H}_{10}\text{O}_3$ MYOAZFOMGTTYOD-UHFFFAOYSA-N	5.0×10^1 4.1×10^1 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMALNHY2OH $\text{C}_5\text{H}_6\text{O}_5$ DGWWWNMWYNUWPBC-UHFFFAOYSA-N	3.9×10^8 6.8×10^8 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMALNHYOOH $\text{C}_5\text{H}_6\text{O}_6$ JNCHKPBVXWMPAJ-UHFFFAOYSA-N	6.3×10^{11} 6.8×10^8 7.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEACHOHO $\text{C}_5\text{H}_{10}\text{O}_3$ GQMJADBSHHFADW-UHFFFAOYSA-N	8.1×10^1 7.6×10^1 8.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPRACAOH $\text{C}_5\text{H}_{10}\text{O}_3$ PPPFYBPQAPISCT-UHFFFAOYSA-N	1.0×10^2 3.2×10^2 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPRACBOH $\text{C}_5\text{H}_{10}\text{O}_3$ VEGXEWGKYMMJKP-UHFFFAOYSA-N	7.3×10^1 4.7×10^1 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPRACCOH $\text{C}_5\text{H}_{10}\text{O}_3$ DOUBAFNWVFAWEC-UHFFFAOYSA-N	6.0×10^1 6.3×10^2 9.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYFUOH $\text{C}_5\text{H}_8\text{O}_4$ OHTGZAWPVDWARE-UHFFFAOYSA-N	2.7×10^6 4.3×10^7 3.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYFUOOH $\text{C}_5\text{H}_8\text{O}_5$ IEFDVDGOIVKGRZ-UHFFFAOYSA-N	4.5×10^9 4.9×10^7 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TLFUOH $C_5H_8O_4$ JYHWQRJRDKSSIF-UHFFFAOYSA-N	4.5×10^6 3.7×10^7 7.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLFUOOH $C_5H_8O_5$ GNXADMJANDYCAE-UHFFFAOYSA-N	7.3×10^9 1.0×10^8 2.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOX2COMOH $C_6H_{12}O_3$ VFGRALUHHHDQI-UHFFFAOYSA-N	2.9 2.9×10^1 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMMALYOH $C_6H_8O_5$ KIOPGAGDHZEGB-UHFFFAOYSA-N	2.2×10^8 1.2×10^9 4.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMMALYOOH $C_6H_8O_6$ VRKLPKITGMCVQP-UHFFFAOYSA-N	3.5×10^{11} 8.9×10^8 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBFUOH $C_6H_{10}O_4$ AQSJHOPJZAKOAP-UHFFFAOYSA-N	4.1×10^6 3.5×10^7 3.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBFUOOH $C_6H_{10}O_5$ KIZOVCBYQCGADC-UHFFFAOYSA-N	6.0×10^9 8.5×10^7 7.6×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EMALNHY2OH $C_6H_8O_5$ GPJQUVLKFIAXFZ-UHFFFAOYSA-N	3.6×10^8 8.3×10^8 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EMALNHYOOH $C_6H_8O_6$ LSSHMOINJMVLHQ-UHFFFAOYSA-N	5.0×10^{11} 8.5×10^8 6.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYFUOH $C_6H_{10}O_4$ WCMYKJKBZGIGND-UHFFFAOYSA-N	2.5×10^6 3.7×10^7 3.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYFUOOH $C_6H_{10}O_5$ WGIMCWKICZLLM-UHFFFAOYSA-N	4.2×10^9 2.8×10^7 3.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUACAOH $C_6H_{12}O_3$ KLUHZXMBIDAHSJ-UHFFFAOYSA-N	5.6×10^1 6.5×10^2 6.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUACBOH $C_6H_{12}O_3$ BZLQSYFOTWOIDC-UHFFFAOYSA-N	8.0×10^1 2.1×10^2 5.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NBUACCOH $\text{C}_6\text{H}_{12}\text{O}_3$ BMNRJWUOBYCRX-UHFFFAOYSA-N	5.6×10^1 3.6×10^1 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYFUOH $\text{C}_6\text{H}_{10}\text{O}_4$ GZXKXVWYDQOSDI-UHFFFAOYSA-N	1.5×10^6 3.2×10^7 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYFUOOH $\text{C}_6\text{H}_{10}\text{O}_5$ DHHFHIZBMAEZJT-UHFFFAOYSA-N	2.4×10^9 2.3×10^7 3.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRCOOETOH $\text{C}_6\text{H}_{12}\text{O}_3$ GIOCILWWMFZESP-UHFFFAOYSA-N	6.9×10^1 1.3×10^2 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:SBUACAOH $\text{C}_6\text{H}_{12}\text{O}_3$ WAXXMBOGFVJIHX-UHFFFAOYSA-N	4.0×10^1 3.2×10^1 7.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:SBUACBOH $\text{C}_6\text{H}_{12}\text{O}_3$ BCWWODMTUXMSAB-UHFFFAOYSA-N	9.6×10^1 1.7×10^2 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TBOCOCH2OH $\text{C}_6\text{H}_{12}\text{O}_3$ WINGEFIITRDOLJ-UHFFFAOYSA-N	2.0 1.7×10^1 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TBUACOH $\text{C}_6\text{H}_{12}\text{O}_3$ GWOKHTMCBUZSOP-UHFFFAOYSA-N	4.9×10^1 9.1×10^1 1.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TMB1FUOH $\text{C}_6\text{H}_{10}\text{O}_4$ AUTABLFJFWRKZ-UHFFFAOYSA-N	2.5×10^6 2.2×10^7 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TMB1FUOOH $\text{C}_6\text{H}_{10}\text{O}_5$ NFODFJMABSYJFC-UHFFFAOYSA-N	1.8×10^8 7.4×10^7 4.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXCOOLOOH $\text{C}_7\text{H}_{14}\text{O}_5$ PDOIGHDIMJPNL-UHFFFAOYSA-N	2.1×10^5 2.4×10^5 1.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBFUOH $\text{C}_7\text{H}_{12}\text{O}_4$ ZIPHTXAVHSYMQR-UHFFFAOYSA-N	3.9×10^6 3.0×10^7 5.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBFUOOH $\text{C}_7\text{H}_{12}\text{O}_5$ HVQWCSPFZPPNOE-UHFFFAOYSA-N	5.4×10^9 7.8×10^7 2.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IPMLNHY2OH $C_7H_{10}O_5$ RBIJYTIBBLMIRU-UHFFFAOYSA-N	3.2×10^8 1.2×10^9 4.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPMLNHYOOH $C_7H_{10}O_6$ LGGLTRMSNOIPLU-UHFFFAOYSA-N	4.7×10^{11} 1.1×10^9 9.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MEBFUOH $C_7H_{12}O_4$ SYHJYGJIPQZFIO-UHFFFAOYSA-N	2.2×10^6 2.2×10^7 1.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MEBFUOOH $C_7H_{12}O_5$ VRHMFTJWRSNJLN-UHFFFAOYSA-N	3.2×10^9 1.7×10^7 2.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBFUOH $C_7H_{12}O_4$ DMMDFVMQHRHVSU-UHFFFAOYSA-N	3.2×10^6 2.4×10^7 5.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBFUOOH $C_7H_{12}O_5$ KAMUACRVJWJEFX-UHFFFAOYSA-N	5.3×10^9 6.2×10^7 6.3×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PMALNHY2OH $C_7H_{10}O_5$ PVDNZCIFUUKBS-UHFFFAOYSA-N	2.8×10^8 8.9×10^8 1.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PMALNHYOOH $C_7H_{10}O_6$ VKSMRBCXNQEUFP-UHFFFAOYSA-N	4.1×10^{11} 8.0×10^8 4.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRCOOPROL $C_7H_{14}O_3$ QXXGFEMAULVMST-UHFFFAOYSA-N	6.5×10^1 1.3×10^2 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TMB2FUOH $C_7H_{12}O_4$ YEQCQVSGZKCWAA-UHFFFAOYSA-N	1.4×10^6 1.8×10^7 1.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TMB2FUOOH $C_7H_{12}O_5$ MINPHQZFUPUEBH-UHFFFAOYSA-N	2.2×10^9 1.2×10^7 3.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1013OH $C_{10}H_{18}O_3$ OYGVMQZTRRRABW-UHFFFAOYSA-N	7.1×10^1 5.4×10^2 3.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ALCOMOXOOH $C_3H_4O_5$ DRQRCDXSDDWNEU-UHFFFAOYSA-N	2.3×10^6 1.6×10^5 9.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DFC	1.0×10^3		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_2\text{O}_5$	6.9×10^3		Wang et al. (2017)	Q	80, 239
DOMHJQJKOPZSOM-UHFFFAOYSA-N	1.2×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:MOXY2CHO	3.7×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_4\text{O}_3$	1.1×10^2		Wang et al. (2017)	Q	80, 239
MFRMAQFRVTUENW-UHFFFAOYSA-N	1.1×10^1		Wang et al. (2017)	Q	80, 240
MCM:MOXYCOCHO	3.1×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_4\text{O}_3$	3.2×10^1		Wang et al. (2017)	Q	80, 239
KFKXSMSQHIOMSO-UHFFFAOYSA-N	6.5×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:ACETETCHO	2.5×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_4\text{H}_6\text{O}_3$	1.8×10^2		Wang et al. (2017)	Q	80, 239
GUPGZURVZDIQPM-UHFFFAOYSA-N	1.7×10^1		Wang et al. (2017)	Q	80, 240
MCM:CO14O3CHO	2.3×10^4		Wang et al. (2017)	Q	80, 238
$\text{C}_4\text{H}_4\text{O}_4$	1.2×10^4		Wang et al. (2017)	Q	80, 239
ZFWWLKQBCHQUFEJ-UHFFFAOYSA-N	8.0×10^1		Wang et al. (2017)	Q	80, 240
MCM:COO2C3CHO	2.5×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_4\text{H}_6\text{O}_3$	5.4×10^1		Wang et al. (2017)	Q	80, 239
AGADEVQOWQDDFX-UHFFFAOYSA-N	1.1×10^1		Wang et al. (2017)	Q	80, 240
MCM:EOCOCHO	2.5×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_4\text{H}_6\text{O}_3$	1.7×10^1		Wang et al. (2017)	Q	80, 239
DBPFRFRGLYGEJI-UHFFFAOYSA-N	8.7×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:ACCOMECCHO	1.1×10^3		Wang et al. (2017)	Q	80, 238
$\text{C}_5\text{H}_6\text{O}_4$	1.6×10^4		Wang et al. (2017)	Q	80, 239
GRUDDVNYUQQBCU-UHFFFAOYSA-N	9.8×10^1		Wang et al. (2017)	Q	80, 240
MCM:ACEC2CHO	2.0×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_5\text{H}_8\text{O}_3$	1.7×10^2		Wang et al. (2017)	Q	80, 239
PRSPRAWXBFRHKV-UHFFFAOYSA-N	7.4×10^1		Wang et al. (2017)	Q	80, 240
MCM:COO2C4CHO	2.0×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_5\text{H}_8\text{O}_3$	1.3×10^2		Wang et al. (2017)	Q	80, 239
DLZVZNAPRCRKEG-UHFFFAOYSA-N	3.5×10^1		Wang et al. (2017)	Q	80, 240
MCM:IPRACBCHO	2.3×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_5\text{H}_8\text{O}_3$	3.9×10^1		Wang et al. (2017)	Q	80, 239
FXPPNKAYSGWCQG-UHFFFAOYSA-N	5.0		Wang et al. (2017)	Q	80, 240
MCM:MTBEACHO13	1.9×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_5\text{H}_8\text{O}_3$	5.8		Wang et al. (2017)	Q	80, 239
MDWWHODIKOPHH-UHFFFAOYSA-N	1.7		Wang et al. (2017)	Q	80, 240
MCM:BOXCOALOOH	1.4×10^6		Wang et al. (2017)	Q	80, 238
$\text{C}_6\text{H}_{10}\text{O}_5$	2.0×10^4		Wang et al. (2017)	Q	80, 239
MZUJTBWESAMQA-UHFFFAOYSA-N	4.4×10^1		Wang et al. (2017)	Q	80, 240



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BOXCOCHO $C_6H_{10}O_3$ NRYDRJHYTRBEEA-UHFFFAOYSA-N	1.8×10^1 6.0 1.5×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C14O3ECHO $C_6H_8O_4$ FVLOJCOPOCRBFF-UHFFFAOYSA-N	1.7×10^4 3.3×10^3 5.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRCOOMCHO $C_6H_{10}O_3$ YEBNSRBQIHWQC-UHFFFAOYSA-N	1.8×10^1 4.7×10^1 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TBOCOCHO $C_6H_{10}O_3$ WDPZTIFGRQKSEN-UHFFFAOYSA-N	1.3×10^1 3.6 1.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TBUACCO $C_6H_{10}O_3$ BYYPVMBDPUHHR-UHFFFAOYSA-N	1.3×10^1 6.6 5.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C14O3IPCHO $C_7H_{10}O_4$ NPPWDFRKAMDHMM-UHFFFAOYSA-N	1.6×10^4 2.3×10^3 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C14O3PCHO $C_7H_{10}O_4$ GNODSIBUYMXKGR-UHFFFAOYSA-N	1.5×10^4 2.1×10^3 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1014OOH $C_{10}H_{18}O_5$ REYZAYCUYYNPLJ-UHFFFAOYSA-N	5.3×10^5 8.3×10^4 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCALBOC $C_{15}H_{24}O_3$ FEPYZLRQFOQWRK-UHFFFAOYSA-N	2.1×10^1 3.0×10^1 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOOMCO2H $C_3H_6O_4$ CBNAABWGSNQFTA-UHFFFAOYSA-N	4.7×10^5 1.9×10^5 8.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1014OH $C_{10}H_{18}O_4$ IJPJFXOOJHUBTK-UHFFFAOYSA-N	1.9×10^4 2.1×10^5 9.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C152OH $C_{15}H_{26}O_5$ XZXFZFFZSKVDT-UHFFFAOYSA-N	2.3×10^7 1.0×10^8 1.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C152OOH $C_{15}H_{26}O_6$ PKQOWOPWICZSPN-UHFFFAOYSA-N	2.0×10^9 2.2×10^8 5.1×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C23O3CHO	1.3×10^3		Wang et al. (2017)	Q	80, 238
C ₄ H ₆ O ₄	7.3×10^3		Wang et al. (2017)	Q	80, 239
RULCSXTUAHNYHU-UHFFFAOYSA-N	6.2×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:MCOCOMOOH	1.6×10^6		Wang et al. (2017)	Q	80, 238
C ₄ H ₆ O ₅	2.5×10^5		Wang et al. (2017)	Q	80, 239
BJTKGFWDIAZUGI-UHFFFAOYSA-N	1.2×10^3		Wang et al. (2017)	Q	80, 240
MCM:MCOCOMOX	2.1×10^1		Wang et al. (2017)	Q	80, 238
C ₄ H ₆ O ₃	3.0×10^1		Wang et al. (2017)	Q	80, 239
CWKZLZLBVOJRSOM-UHFFFAOYSA-N	4.3		Wang et al. (2017)	Q	80, 240
MCM:PRNFORMOOH	2.2×10^6		Wang et al. (2017)	Q	80, 238
C ₄ H ₆ O ₅	5.4×10^3		Wang et al. (2017)	Q	80, 239
LIFMXPSJWIBAGH-UHFFFAOYSA-N	2.0×10^2		Wang et al. (2017)	Q	80, 240
MCM:PRNFORM	2.5×10^1		Wang et al. (2017)	Q	80, 238
C ₄ H ₆ O ₃	1.5×10^2		Wang et al. (2017)	Q	80, 239
WNVAJGCMEDTIE-UHFFFAOYSA-N	3.9×10^1		Wang et al. (2017)	Q	80, 240
MCM:ACCOCOMOOH	6.8×10^7		Wang et al. (2017)	Q	80, 238
C ₅ H ₆ O ₆	3.2×10^6		Wang et al. (2017)	Q	80, 239
WKJHUBLAYZIBAJ-UHFFFAOYSA-N	1.3×10^3		Wang et al. (2017)	Q	80, 240
MCM:ACECOCOCH3	8.9×10^2		Wang et al. (2017)	Q	80, 238
C ₅ H ₆ O ₄	9.1×10^3		Wang et al. (2017)	Q	80, 239
OBTVATRSWTWNGS-UHFFFAOYSA-N	8.7×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:ACEPROPONE	1.7×10^1		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ O ₃	1.8×10^2		Wang et al. (2017)	Q	80, 239
DBERHVIZRVGDFO-UHFFFAOYSA-N	8.0×10^1		Wang et al. (2017)	Q	80, 240
MCM:ACPRNEOOH	1.5×10^6		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ O ₅	5.5×10^3		Wang et al. (2017)	Q	80, 239
FOWIMBLOPIOWII-UHFFFAOYSA-N	2.3×10^2		Wang et al. (2017)	Q	80, 240
MCM:C23O3CCO3H	1.6×10^7		Wang et al. (2017)	Q	80, 238
C ₅ H ₆ O ₆	5.5×10^5		Wang et al. (2017)	Q	80, 239
SPYAIQASSDQEIX-UHFFFAOYSA-N	1.1×10^3		Wang et al. (2017)	Q	80, 240
MCM:C23O3MCOOH	1.5×10^6		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ O ₅	6.6×10^4		Wang et al. (2017)	Q	80, 239
RVGUYZMHBBERKH-UHFFFAOYSA-N	6.5×10^2		Wang et al. (2017)	Q	80, 240
MCM:PRNOCOMOOH	1.3×10^6		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ O ₅	2.2×10^5		Wang et al. (2017)	Q	80, 239
GJTAOZDAMDVHTP-UHFFFAOYSA-N	8.3×10^3		Wang et al. (2017)	Q	80, 240
MCM:ACBUOAOOH	1.2×10^6		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₀ O ₅	1.1×10^5		Wang et al. (2017)	Q	80, 239
BDHJVYCNZHBETI-UHFFFAOYSA-N	3.8×10^3		Wang et al. (2017)	Q	80, 240



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ACBUONBOOH $C_6H_{10}O_5$ RISONYRIGLPILV-UHFFFAOYSA-N	1.2×10^6 2.5×10^3 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACCOCOC2H5 $C_6H_8O_4$ WZGYRWNUCYXCFD-UHFFFAOYSA-N	6.9×10^2 4.7×10^3 3.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACCOCOEOOH $C_6H_8O_6$ RKPSGJVLERUIIG-UHFFFAOYSA-N	6.0×10^7 1.5×10^6 2.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACCOPRONE $C_6H_8O_4$ RYLHMXPGMTYTTF-UHFFFAOYSA-N	6.9×10^2 1.6×10^4 2.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACEBUTBONE $C_6H_{10}O_3$ LHGWIJBYBIICPP-UHFFFAOYSA-N	1.4×10^1 8.1×10^1 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACEBUTONE $C_6H_{10}O_3$ NWCYECXHIYEBJE-UHFFFAOYSA-N	1.4×10^1 1.8×10^2 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACOMCOMOOH $C_6H_8O_6$ NKXSSYAJYGYQPN-UHFFFAOYSA-N	5.3×10^7 5.4×10^6 4.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23O3ECOHO $C_6H_{10}O_5$ NLYPTRYHUBHKKI-UHFFFAOYSA-N	1.2×10^6 3.0×10^4 4.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23O3EHO $C_6H_8O_4$ AIDIMUPPUNPUTI-UHFFFAOYSA-N	6.9×10^2 4.6×10^3 3.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23O3MCO3H $C_6H_8O_6$ FIPIRZHVPPVNA-UHFFFAOYSA-N	1.5×10^7 1.1×10^5 9.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6O4KETOHO $C_6H_6O_7$ LLKUMVBDSCXDR-UHFFFAOYSA-N	3.6×10^{10} 3.8×10^8 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6OTKETCO $C_6H_6O_5$ GAPVBMQBWAUBHC-UHFFFAOYSA-N	5.5×10^5 1.0×10^6 3.2×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6OTKETOHO $C_6H_8O_6$ USMDUVUWRKQXQG-UHFFFAOYSA-N	7.8×10^8 8.3×10^5 6.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6OTRIKET $C_6H_8O_4$ XAHWCAXZWOTSBC-UHFFFAOYSA-N	1.0×10^4 2.4×10^4 5.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO356OCOOH $C_6H_8O_6$ MVKXXKVCXUKLOS-UHFFFAOYSA-N	6.0×10^7 4.5×10^6 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:SBUACCOOH $C_6H_{10}O_5$ DTGNYNGASXJUMP-UHFFFAOYSA-N	8.1×10^5 5.3×10^2 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:SBUACEONE $C_6H_{10}O_3$ ZKPTYCJWRHHBOW-UHFFFAOYSA-N	1.6×10^1 3.3×10^1 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOX2COMOOH $C_7H_{12}O_5$ YCDXONIQHOVSF-UHFFFAOYSA-N	9.1×10^5 2.1×10^4 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXCOCOME $C_7H_{12}O_3$ ZAZUOXBHFAXWMD-UHFFFAOYSA-N	1.2×10^1 6.3 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23O3ECO3H $C_7H_{10}O_6$ FWVKIPPVGIEQRB-UHFFFAOYSA-N	1.4×10^7 5.1×10^4 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC6OTKTOOH $C_7H_{10}O_6$ DJTBKMNUYULRIV-UHFFFAOYSA-N	4.5×10^8 9.3×10^4 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC6OTRIKET $C_7H_{10}O_4$ FJYCWCZCSXDGURV-UHFFFAOYSA-N	9.6×10^3 5.9×10^3 2.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRCOOPRONE $C_7H_{12}O_3$ AIJLJYUDTAJRDN-UHFFFAOYSA-N	1.2×10^1 5.0×10^1 3.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRNOCOPOOH $C_7H_{12}O_5$ RGEURRORAZXRIV-UHFFFAOYSA-N	9.1×10^5 6.8×10^5 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1013CO $C_{10}H_{16}O_3$ DPRGOCIPALHGLN-UHFFFAOYSA-N	1.6×10^1 8.3×10^1 6.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZFUCO $C_4H_4O_4$ MFFNSLKCUEAFI-UHFFFAOYSA-N	1.2×10^4 4.2×10^6 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.8: Esters (RCOOR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MALNHYOHCO $C_4H_2O_5$ DBWAPECJPVLXJZ-UHFFFAOYSA-N	2.6×10^7 1.0×10^9 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACPRONEOH $C_5H_8O_4$ LBOLMEABDOYQGX-UHFFFAOYSA-N	2.5×10^3 1.3×10^4 7.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23O3MOH $C_5H_8O_4$ WHFDSTOTVFOUIH-UHFFFAOYSA-N	4.8×10^4 2.0×10^4 3.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACBUONAOH $C_6H_{10}O_4$ UGJVDYQVVBKWGL-UHFFFAOYSA-N	4.5×10^4 5.1×10^4 2.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACBUONBOH $C_6H_{10}O_4$ GYQPXJWBTJDNQC-UHFFFAOYSA-N	2.3×10^3 6.8×10^3 7.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23O3EOH $C_6H_{10}O_4$ BVDDSYZMRAYIJ-UHFFFAOYSA-N	4.5×10^4 1.1×10^4 2.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6OTKETOH $C_6H_8O_5$ NOUUUBJIFPBZMZ-UHFFFAOYSA-N	4.4×10^4 1.5×10^6 2.0×10^6 6.9×10^2	16000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:EBFUOCO $C_6H_8O_4$ QFGGPABGKQEYQI-UHFFFAOYSA-N	1.0×10^4 5.0×10^6 7.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:SBUACCOH $C_6H_{10}O_4$ SUDJMSTXSVMFNQ-UHFFFAOYSA-N	1.4×10^3 4.5×10^3 5.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBFUOCO $C_7H_{10}O_4$ NHSFIZKDULUUEP-UHFFFAOYSA-N	9.6×10^3 4.6×10^6 6.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC6OTKETOH $C_7H_{10}O_5$ GQVIXHCRVNFYGI-UHFFFAOYSA-N	8.3×10^5 7.1×10^5 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBFUOCO $C_7H_{10}O_4$ PKKIVTPUHJVJRM-UHFFFAOYSA-N	8.0×10^3 3.6×10^6 7.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23O3CCHO $C_5H_6O_4$ JQZIMULKJBYVEJ-UHFFFAOYSA-N	1.5×10^4 2.1×10^4 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C23O3MCHO $C_6H_8O_4$ KNKMVXKCHLTCEX-UHFFFAOYSA-N	1.4×10^4 6.0×10^3 8.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5OCO3M $C_6H_8O_4$ MFFVRQLCUBYBQSQ-UHFFFAOYSA-N	1.4×10^4 5.6×10^3 4.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23O3ECHO $C_7H_{10}O_4$ RCPFVGJRWKBYKE-UHFFFAOYSA-N	1.1×10^4 3.2×10^3 4.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1014CO $C_{10}H_{16}O_4$ MPJVRMHYAPYGFU-UHFFFAOYSA-N	4.6×10^3 2.0×10^4 4.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCLKBOC $C_{14}H_{22}O_4$ YETGIZICMMLUOK-UHFFFAOYSA-N	7.8×10^3 3.6×10^4 5.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C148CO $C_{14}H_{20}O_5$ WKRRISEJACIFSSJ-UHFFFAOYSA-N	5.8×10^6 3.5×10^5 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C148OOH $C_{14}H_{22}O_6$ QNGFZXSUHFZFIE-UHFFFAOYSA-N	6.8×10^8 3.0×10^6 4.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C148OH $C_{14}H_{22}O_5$ LXDPLKVHKWYPKP-UHFFFAOYSA-N	1.3×10^6 7.6×10^6 9.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACETC2CO2H $C_5H_8O_4$ RFEXARYJXBYPLD-UHFFFAOYSA-N	2.9×10^3 4.8×10^4 6.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C24O3CCO2H $C_5H_6O_5$ HSSKPURIBYAXCO-UHFFFAOYSA-N	1.6×10^5 3.5×10^6 7.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRACBCO2H $C_5H_8O_4$ WTLNOANVTIKPEE-UHFFFAOYSA-N	3.5×10^3 6.9×10^3 5.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEALCO2H $C_5H_8O_4$ BXXOFUQIACXFIW-UHFFFAOYSA-N	2.8×10^3 2.1×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1013CO2H $C_{11}H_{18}O_4$ QWGCLZMSSSTRXLX-UHFFFAOYSA-N	3.0×10^3 3.1×10^4 5.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.8: Esters (RCOOR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO14O3CO2H	3.3×10^6		Wang et al. (2017)	Q	80, 238
C ₄ H ₄ O ₅	5.4×10^4		Wang et al. (2017)	Q	80, 239
OPFWUCMKDVVTF-UHFFFAOYSA-N	1.7×10^5		Wang et al. (2017)	Q	80, 240
MCM:C23O3CCO2H	2.3×10^6		Wang et al. (2017)	Q	80, 238
C ₅ H ₆ O ₅	9.1×10^6		Wang et al. (2017)	Q	80, 239
WRKCXTWVOWDGBE-UHFFFAOYSA-N	1.7×10^5		Wang et al. (2017)	Q	80, 240
MCM:C23O3MCO2H	2.0×10^6		Wang et al. (2017)	Q	80, 238
C ₆ H ₈ O ₅	1.6×10^6		Wang et al. (2017)	Q	80, 239
OGSBZWITKXVLIV-UHFFFAOYSA-N	9.3×10^4		Wang et al. (2017)	Q	80, 240
MCM:C23O3ECO2H	1.7×10^6		Wang et al. (2017)	Q	80, 238
C ₇ H ₁₀ O ₅	6.0×10^5		Wang et al. (2017)	Q	80, 239
OEONINCNUUTEPU-UHFFFAOYSA-N	2.5×10^4		Wang et al. (2017)	Q	80, 240



A3.9 Ethers (ROR)

Table A3.9: Ethers (ROR)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethyl ether <chem>CH3OCH3</chem> [115-10-6] LCGLNKUTAGEVQW-UHFFFAOYSA-N	9.9×10^{-3}	4900	Duchowicz et al. (2020)	V	186
	1.7×10^{-3}		HSDB (2015)	V	
	7.6×10^{-2}		Mackay et al. (2006c)	V	
	1.3×10^{-1}		Mackay et al. (1993)	V	
	9.9×10^{-3}		Hine and Mookerjee (1975)	V	
	9.8×10^{-3}		Hine and Weimar (1965)	R	
	1.0×10^{-2}		Bagno et al. (1991)	T	473
	1.5×10^{-2}		Yaws (2003)	X	237, 28
	6.5×10^{-3}		Hayer et al. (2022)	Q	20
	5.1×10^{-2}		Duchowicz et al. (2020)	Q	
	3.0×10^{-3}		Wang et al. (2017)	Q	80, 238
	3.0×10^{-2}		Wang et al. (2017)	Q	80, 239
	1.1×10^{-2}		Wang et al. (2017)	Q	80, 240
	7.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.8×10^{-2}		Hilal et al. (2008)	Q	
	1.4×10^{-2}		Modarresi et al. (2007)	Q	67
7.5×10^{-3}	Yaffe et al. (2003)	Q	248, 249		
8.4×10^{-3}	Katritzky et al. (1998)	Q			
2.2×10^{-3}	Nirmalakhandan et al. (1997)	Q			
5.3×10^{-2}	Russell et al. (1992)	Q	358		
1.2×10^{-2}	Suzuki et al. (1992)	Q	232		
1.5×10^{-2}	Yaws (1999)	?	21, 28		
6.2×10^{-3}	Abraham and Weathersby (1994)	?	21		
9.9×10^{-3}	Abraham et al. (1990)	?			
ethyl methyl ether <chem>C2H5OCH3</chem> [540-67-0] XOBKSJJDNFUZF-UHFFFAOYSA-N	8.2×10^{-3}		Duchowicz et al. (2020)	V	186
	1.4×10^{-2}		Bagno et al. (1991)	T	473
	1.9×10^{-2}		Duchowicz et al. (2020)	Q	
	1.5×10^{-2}		HSDB (2015)	Q	99
	1.5×10^{-2}		Hilal et al. (2008)	Q	
	3.0×10^{-2}		English and Carroll (2001)	Q	230, 231
	9.7×10^{-3}		Katritzky et al. (1998)	Q	
	1.9×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	8.9×10^{-3}		Saxena and Hildemann (1996)	E	401
1.8×10^{-2}		Yaws (1999)	?	21	
diethyl ether <chem>C2H5OC2H5</chem> [60-29-7] RTZKZFJDLAIYFH-UHFFFAOYSA-N	9.9×10^{-3}	5800	Burkholder et al. (2019)	L	1
	2.0×10^{-2}	5800	Burkholder et al. (2015)	L	
	9.9×10^{-3}	5800	Brockbank (2013)	L	1
	5.0×10^{-3}		Steward et al. (1973)	L	14
	9.6×10^{-3}	5000	Allott et al. (1973)	L	
	1.1×10^{-2}	6600	Hiatt (2013)	M	
	9.5×10^{-2}		Helburn et al. (2008)	M	
	1.0×10^{-2}	5700	Ondo and Dohnal (2007)	M	1
	1.1×10^{-2}		Nielsen et al. (1994)	M	



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.3×10^{-3}		Yu (1992)	M	12
	7.0×10^{-3}	3900	Lamarche and Droste (1989)	M	345
	6.3×10^{-3}		Guitart et al. (1989)	M	14
	1.3×10^{-2}	7400	Bachofen and Farhi (1971)	M	
	6.3×10^{-3}		Brody et al. (1971)	M	14
	7.8×10^{-3}		Signer et al. (1969)	M	
	5.1×10^{-3}		Eger et al. (1963)	M	14
	1.1×10^{-2}		Mackay et al. (2006c)	V	
	1.0×10^{-2}	5800	Fukuchi et al. (2002)	V	
	1.1×10^{-2}		Mackay et al. (1993)	V	
	8.7×10^{-3}		Hwang et al. (1992)	V	
	1.1×10^{-2}		Hine and Weimar (1965)	V	
	1.1×10^{-2}		Butler and Ramchandani (1935)	V	
	6.0×10^{-3}	5700	Bagno et al. (1991)	T	473
	1.2×10^{-2}		Yaws (2003)	X	237
	4.3×10^{-3}		Keshavarz et al. (2022)	Q	
	6.8×10^{-3}		Duchowicz et al. (2020)	Q	184
	2.1×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.6×10^{-2}		Wang et al. (2017)	Q	80, 239
	2.2×10^{-3}		Wang et al. (2017)	Q	80, 240
	7.7×10^{-3}		Li et al. (2014)	Q	241
	1.3×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
	7.0×10^{-3}		Hilal et al. (2008)	Q	
	1.3×10^{-2}		Modarresi et al. (2007)	Q	67
		5300	Kühne et al. (2005)	Q	
	8.6×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	2.4×10^{-2}		English and Carroll (2001)	Q	230, 231
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	1.7×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	4.6×10^{-2}		Russell et al. (1992)	Q	279
	7.3×10^{-3}		Suzuki et al. (1992)	Q	232
	8.0×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		5700	Kühne et al. (2005)	?	
	1.2×10^{-2}		Yaws (1999)	?	21
	5.8×10^{-3}		Abraham and Weathersby (1994)	?	21
	7.7×10^{-3}		Hoff et al. (1993)	?	21
	6.0×10^{-3}		Abraham et al. (1990)	?	
diethyl ether-d10 $\text{C}_2\text{D}_5\text{OC}_2\text{D}_5$ [2679-89-2] RTZKZFJDLAIYFH-MWUKXHIBSA-N	1.3×10^{-2}	6500	Hiatt (2013)	M	



Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl propyl ether $\text{CH}_3\text{OC}_3\text{H}_7$ [557-17-5] VNKYTQGIUYNRMU-UHFFFAOYSA-N	6.6×10^{-3}		Duchowicz et al. (2020)	V	186
	6.7×10^{-3}		Meylan and Howard (1991)	V	
	6.7×10^{-3}		Hine and Mookerjee (1975)	V	
	6.9×10^{-3}		Yaws (2003)	X	237
	2.0×10^{-2}		Duchowicz et al. (2020)	Q	
	5.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	8.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-2}		Hilal et al. (2008)	Q	
	6.9×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.1×10^{-2}		Katritzky et al. (1998)	Q	
1.5×10^{-3}		Nirmalakhandan et al. (1997)	Q		
7.3×10^{-3}		Suzuki et al. (1992)	Q	232	
6.5×10^{-3}		Meylan and Howard (1991)	Q		
6.9×10^{-3}		Yaws (1999)	?	21	
methyl 2-propyl ether $\text{CH}_3\text{OC}_3\text{H}_7$ (methyl isopropyl ether) [598-53-8] RMGHERXMTMUMMV-UHFFFAOYSA-N	1.1×10^{-2}		Duchowicz et al. (2020)	V	186
	1.2×10^{-2}		Hine and Mookerjee (1975)	V	
	1.2×10^{-2}		Yaws (2003)	X	258
	1.1×10^{-2}		Yaws (2003)	X	237
	7.1×10^{-3}		Dupeux et al. (2022)	Q	259
	7.8×10^{-3}		Duchowicz et al. (2020)	Q	
	1.4×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-2}		Gharagheizi et al. (2010)	Q	246
	8.2×10^{-3}		Hilal et al. (2008)	Q	
	1.2×10^{-2}		Yaffe et al. (2003)	Q	248, 249
1.1×10^{-2}		Katritzky et al. (1998)	Q		
6.5×10^{-3}		Suzuki et al. (1992)	Q	232	
1.1×10^{-2}		Yaws (1999)	?	21	
divinyl ether $\text{C}_4\text{H}_6\text{O}$ [109-93-3] QYKIQEUNHZKYBP-UHFFFAOYSA-N	5.4×10^{-4}		Steward et al. (1973)	L	14
	5.4×10^{-4}		Allott et al. (1973)	L	14
	1.2×10^{-3}		Duchowicz et al. (2020)	V	186
	5.6×10^{-4}		Yaws (2003)	X	237, 14
	7.3×10^{-2}		Duchowicz et al. (2020)	Q	
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	6.0×10^{-4}		Gharagheizi et al. (2010)	Q	246
	3.8×10^{-4}		Hilal et al. (2008)	Q	
2.0×10^{-3}		Nirmalakhandan et al. (1997)	Q		
5.8×10^{-4}		Abraham and Weathersby (1994)	?	21	



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl butyl ether $C_5H_{12}O$ [628-28-4] CXBDYQVECUFKRK-UHFFFAOYSA-N	6.6×10^{-3}	6100	Brockbank (2013)	L	1, 518
	5.5×10^{-3}		Duchowicz et al. (2020)	V	186
	4.4×10^{-3}		Amoore and Buttery (1978)	V	
	7.1×10^{-3}		Yaws (2003)	X	237
	2.1×10^{-2}		Duchowicz et al. (2020)	Q	
	4.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	5.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
9.6×10^{-3}		Modarresi et al. (2007)	Q	67	
5.6×10^{-3}		Yaffe et al. (2003)	Q	248, 249	
1.1×10^{-2}		Katritzky et al. (1998)	Q		
2-methoxybutane $C_5H_{12}O$ (methyl <i>sec</i> -butyl ether) [6795-87-5] FVNIMHIOXIQT-UHFFFAOYSA-N	6.7×10^{-3}		Duchowicz et al. (2020)	V	186
	7.1×10^{-3}		Yaws (2003)	X	237
	8.1×10^{-3}		Duchowicz et al. (2020)	Q	
	7.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	7.2×10^{-3}		Gharagheizi et al. (2010)	Q	246
	6.2×10^{-3}		Hilal et al. (2008)	Q	
	1.6×10^{-2}		Modarresi et al. (2007)	Q	67
8.6×10^{-3}		Yaws (1999)	?	21	
methyl isobutyl ether $C_5H_{12}O$ [625-44-5] ZYVYEJXMYBUCMN-UHFFFAOYSA-N	4.3×10^{-3}	6700	Brockbank (2013)	L	1
	4.5×10^{-3}		Duchowicz et al. (2020)	V	186
	7.2×10^{-3}		Yaws (2003)	X	237
	8.1×10^{-3}		Duchowicz et al. (2020)	Q	
	2.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	7.1×10^{-3}		Modarresi et al. (2007)	Q	67
	5.6×10^{-3}		Yaffe et al. (2003)	Q	248, 272
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	8.6×10^{-3}		Yaws (1999)	?	21
methyl <i>tert</i> -butyl ether $CH_3OC(CH_3)_3$ (MTBE) [1634-04-4] BZLVMXJERCGZMT-UHFFFAOYSA-N	1.2×10^{-2}	5100	Schwardt et al. (2021)	L	1
	1.3×10^{-2}	5900	Brockbank (2013)	L	1
	1.7×10^{-2}	9100	Hiatt (2013)	M	
	2.4×10^{-2}	18000	Zhang et al. (2013)	M	324
	3.2×10^{-2}		Zhang et al. (2013)	M	325
	1.9×10^{-2}	5300	Hwang et al. (2010)	M	33, 519, 11
	1.1×10^{-2}	4800	Sieg et al. (2009)	M	326
	1.1×10^{-2}	4400	Falabella and Teja (2008)	M	11, 338
	1.5×10^{-2}	5900	Böhme et al. (2008)	M	
	1.2×10^{-2}	5100	Haimi et al. (2006)	M	520
1.2×10^{-2}	5000	Arp and Schmidt (2004)	M	521	



Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-2}	4500	Fischer et al. (2004)	M	
	7.2×10^{-3}	3200	Bierwagen and Keller (2001)	M	
	1.7×10^{-2}		Miller and Stuart (2000)	M	72
	2.3×10^{-2}		Park et al. (1997)	M	
	1.9×10^{-2}	15000	Robbins et al. (1993)	M	522
	1.4×10^{-2}		Mackay et al. (2006c)	V	
	1.0×10^{-1}	3700	Fukuchi et al. (2002)	V	
	1.6×10^{-2}		Park et al. (1997)	V	
	1.4×10^{-2}		Mackay et al. (1993)	V	
	2.0×10^{-2}		Hwang et al. (1992)	V	
	1.7×10^{-2}		Guthrie (1973)	V	
	1.7×10^{-2}		Bagno et al. (1991)	T	473
	1.8×10^{-2}		Yaws (2003)	X	258
	1.0×10^{-2}		Dupeux et al. (2022)	Q	259
	5.7×10^{-3}		Keshavarz et al. (2022)	Q	
	3.5×10^{-3}		Duchowicz et al. (2020)	Q	184
	1.3×10^{-3}		Wang et al. (2017)	Q	80, 238
	6.0×10^{-3}		Wang et al. (2017)	Q	80, 239
	1.5×10^{-2}		Wang et al. (2017)	Q	80, 240
	2.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-3}		Hilal et al. (2008)	Q	
	1.3×10^{-2}		Modarresi et al. (2007)	Q	67
		6300	Kühne et al. (2005)	Q	
	1.8×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.4×10^{-2}		English and Carroll (2001)	Q	230, 231
	1.1×10^{-2}		Katritzky et al. (1998)	Q	
	8.6×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	4.3×10^{-3}		Suzuki et al. (1992)	Q	232
	1.7×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		6000	Kühne et al. (2005)	?	
	1.8×10^{-2}		Yaws (1999)	?	21
ethyl propyl ether $\text{C}_2\text{H}_5\text{OC}_3\text{H}_7$ [628-32-0] NVJUHMYKUMQA-UHFFFAOYSA-N	8.7×10^{-3}		Duchowicz et al. (2020)	V	186
	8.6×10^{-3}		Hine and Mookerjee (1975)	V	
	8.6×10^{-3}		Butler and Ramchandani (1935)	V	
	6.4×10^{-3}		Yaws (2003)	X	237
	7.7×10^{-3}		Howard and Meylan (1997)	X	446
	7.0×10^{-3}		Duchowicz et al. (2020)	Q	
	8.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	7.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
	7.9×10^{-3}		Hilal et al. (2008)	Q	
	1.4×10^{-2}		Modarresi et al. (2007)	Q	67



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.6×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	5.7×10^{-3}		Suzuki et al. (1992)	Q	232
	7.9×10^{-3}		Yaws (1999)	?	21
ethyl isopropyl ether $C_5H_{12}O$ [625-54-7] XSJVWZAETSBXKU-UHFFFAOYSA-N	8.1×10^{-3}		Yaws (2003)	X	237
	2.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	9.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
2,2-dimethoxypropane $C_5H_{12}O_2$ [77-76-9] HEWZVZIVELJPQZ-UHFFFAOYSA-N	1.4×10^{-1}		Ebert et al. (2023)	?	316
methyl 1,2-dimethylpropyl ether $C_6H_{14}O$ [62016-49-3] JPUDLQKLSRSGN-UHFFFAOYSA-N	4.6×10^{-3}		Yaws (2003)	X	237
	3.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	5.7×10^{-3}		Gharagheizi et al. (2010)	Q	246
methyl 1-ethylpropyl ether $C_6H_{14}O$ [36839-67-5] CQRFEDVNTJTKFU-UHFFFAOYSA-N	4.4×10^{-3}		Yaws (2003)	X	237
	4.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.2×10^{-3}		Gharagheizi et al. (2010)	Q	246
methyl 1-methylbutyl ether $C_6H_{14}O$ [6795-88-6] XSAJCGUYMQTAHL-UHFFFAOYSA-N	4.2×10^{-3}		Yaws (2003)	X	237
	6.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
methyl 2,2-dimethylpropyl ether $C_6H_{14}O$ [1118-00-9] JILHZKWLEAKYRC-UHFFFAOYSA-N	4.5×10^{-3}		Yaws (2003)	X	237
	1.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
methyl 2-methylbutyl ether $C_6H_{14}O$ [62016-48-2] XGLHRCWEOMNVKS-UHFFFAOYSA-N	4.3×10^{-3}		Yaws (2003)	X	237
	2.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
methyl 3-methylbutyl ether $C_6H_{14}O$ [626-91-5] ZQAYBCWERYRAMF-UHFFFAOYSA-N	4.3×10^{-3}		Yaws (2003)	X	237
	3.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
methyl pentyl ether $C_6H_{14}O$ [628-80-8] DBUJFULDVAZULB-UHFFFAOYSA-N	3.8×10^{-3}		Yaws (2003)	X	237
	3.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	246



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methoxy-2-methylbutane $C_6H_{14}O$ (<i>tert</i> -amyl methyl ether) [994-05-8] HVZJRWJGKQPSFL-UHFFFAOYSA-N	9.7×10^{-3}	6600	Brockbank (2013)	L	1
	5.3×10^{-2}	9400	Hwang et al. (2010)	M	519, 11
	1.0×10^{-2}	7000	Haimi et al. (2006)	M	523
	8.6×10^{-3}	6500	Arp and Schmidt (2004)	M	
	5.2×10^{-3}		Miller and Stuart (2000)	M	72
	1.0×10^{-2}		Dohnal and Hovorka (1999)	M	
	7.0×10^{-3}		Park et al. (1997)	M	
	8.1×10^{-3}		Park et al. (1997)	V	
	4.2×10^{-3}		Yaws (2003)	X	237
	3.9×10^{-3}		Yaws (2003)	X	237
	4.7×10^{-2}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	299
	1.3×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.8×10^{-3}		Gharagheizi et al. (2010)	Q	246
3.8×10^{-3}		Gharagheizi et al. (2010)	Q	246	
	7.5×10^{-3}	6600	Kühne et al. (2005)	Q	
			Duchowicz et al. (2020)	?	185, 21
		6900	Kühne et al. (2005)	?	
	5.4×10^{-3}		Yaws (1999)	?	21
	5.0×10^{-3}	7600	Pankow et al. (1996)	?	
1-ethoxy-butane $C_6H_{14}O$ (ethyl butyl ether) [628-81-9] PZHIWRCQKBTTOW-UHFFFAOYSA-N	7.6×10^{-3}	5700	Brockbank (2013)	L	1
	6.4×10^{-3}		Miller and Stuart (2000)	M	72
	7.8×10^{-3}		Mackay et al. (2006c)	V	
	7.8×10^{-3}		Mackay et al. (1993)	V	
	4.0×10^{-3}		Yaws (2003)	X	237
	6.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
		5900	Kühne et al. (2005)	Q	
		5000	Kühne et al. (2005)	?	
ethyl isobutyl ether $C_6H_{14}O$ [627-02-1] RQUBQBFVDOLUKC-UHFFFAOYSA-N	4.9×10^{-3}		Yaws (2003)	X	237
	3.5×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
ethyl <i>sec</i> -butyl ether $C_6H_{14}O$ [2679-87-0] VSCUCHUDCLERMY-UHFFFAOYSA-N	4.9×10^{-3}		Yaws (2003)	X	237
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
ethyl <i>tert</i> -butyl ether $C_2H_5OC(CH_3)_3$ (ETBE) [637-92-3] NUMQCACRALPSHD-UHFFFAOYSA-N	7.2×10^{-3}	6900	Brockbank (2013)	L	1
	1.2×10^{-1}	13000	Hwang et al. (2010)	M	519, 11
	6.3×10^{-3}	6600	Sieg et al. (2009)	M	326
	4.4×10^{-3}	4300	Falabella and Teja (2008)	M	11, 338
	6.4×10^{-3}	7300	Haimi et al. (2006)	M	524
	6.1×10^{-3}	6500	Arp and Schmidt (2004)	M	
	4.2×10^{-3}		Miller and Stuart (2000)	M	72
5.2×10^{-3}		Yaws (2003)	X	237	



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.8×10^{-3}		Keshavarz et al. (2022)	Q	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	299
	1.1×10^{-3}		Wang et al. (2017)	Q	80, 238
	4.1×10^{-3}		Wang et al. (2017)	Q	80, 239
	1.5×10^{-2}		Wang et al. (2017)	Q	80, 240
	2.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.2×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	6.0×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	3.7×10^{-3}	7600	Pankow et al. (1996)	?	
dipropyl ether $C_3H_7OC_3H_7$ [111-43-3] POLCUAVZOMRGSN-UHFFFAOYSA-N	2.9×10^{-3}	6400	Brockbank (2013)	L	1
	3.0×10^{-3}		Li and Carr (1993)	M	
	2.9×10^{-3}		Li et al. (1993)	M	
	2.2×10^{-3}	9100	Hartkopf and Karger (1973)	M	
	3.9×10^{-3}		Mackay et al. (2006c)	V	
	3.9×10^{-3}		Mackay et al. (1993)	V	
	5.7×10^{-3}		Hwang et al. (1992)	V	
	2.9×10^{-3}		Hine and Mookerjee (1975)	V	
	2.8×10^{-3}		Butler and Ramchandani (1935)	V	
	4.5×10^{-3}		Yaws (2003)	X	258
	4.5×10^{-3}		Yaws (2003)	X	237
	1.2×10^{-3}		Dupeux et al. (2022)	Q	259
	7.8×10^{-3}		Keshavarz et al. (2022)	Q	
	7.2×10^{-3}		Duchowicz et al. (2020)	Q	184
	4.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	4.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
	6.0×10^{-3}		Hilal et al. (2008)	Q	
	7.5×10^{-3}		Modarresi et al. (2007)	Q	67
	4.5×10^{-3}	5900	Kühne et al. (2005)	Q	
	4.5×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.1×10^{-2}		Katritzky et al. (1998)	Q	
	1.0×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	4.3×10^{-3}		Suzuki et al. (1992)	Q	232
	4.5×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	4.5×10^{-3}	7300	Kühne et al. (2005)	?	
	4.5×10^{-3}		Yaws (1999)	?	21
	1.9×10^{-3}		Hoff et al. (1993)	?	21
	4.5×10^{-3}		Yaws and Yang (1992)	?	21
	2.9×10^{-3}		Abraham et al. (1990)	?	



Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diisopropyl ether	4.5×10^{-3}	6600	Brockbank (2013)	L	1
$\text{C}_3\text{H}_7\text{OC}_3\text{H}_7$	1.5×10^{-2}	8400	Hwang et al. (2010)	M	519, 11
[108-20-3]	3.9×10^{-3}	6400	Arp and Schmidt (2004)	M	
ZAFNJMIOTHYJRJ-UHFFFAOYSA-N	4.3×10^{-3}		Miller and Stuart (2000)	M	72
	4.7×10^{-3}		Dohnal and Hovorka (1999)	M	
	4.8×10^{-3}		Nielsen et al. (1994)	M	
	4.2×10^{-3}		Li and Carr (1993)	M	
	4.4×10^{-3}		Li et al. (1993)	M	
	2.8×10^{-3}		Guitart et al. (1989)	M	14
	4.3×10^{-3}		HSDB (2015)	V	
	3.9×10^{-3}		Mackay et al. (2006c)	V	
	4.8×10^{-3}	6200	Fukuchi et al. (2002)	V	
	3.1×10^{-3}	6400	Pankow et al. (1996)	V	
	3.9×10^{-3}		Mackay et al. (1993)	V	
	9.9×10^{-4}		Hine and Mookerjee (1975)	V	
	9.8×10^{-4}		Hine and Weimar (1965)	V	
	5.7×10^{-3}		Yaws (2003)	X	258
	5.6×10^{-3}		Yaws (2003)	X	237
	5.7×10^{-3}		Dupeux et al. (2022)	Q	259
	7.8×10^{-3}		Keshavarz et al. (2022)	Q	
	1.1×10^{-3}		Duchowicz et al. (2020)	Q	
	1.8×10^{-3}		Wang et al. (2017)	Q	80, 238
	6.2×10^{-3}		Wang et al. (2017)	Q	80, 239
	1.2×10^{-2}		Wang et al. (2017)	Q	80, 240
	2.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	5.5×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.7×10^{-3}		Hilal et al. (2008)	Q	
	9.6×10^{-3}		Modarresi et al. (2007)	Q	67
		6600	Kühne et al. (2005)	Q	
	4.5×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	8.0×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	3.5×10^{-3}		Suzuki et al. (1992)	Q	232
	3.9×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		7200	Kühne et al. (2005)	?	
	5.6×10^{-3}		Yaws (1999)	?	21
	5.7×10^{-3}		Yaws and Yang (1992)	?	21
	9.9×10^{-4}		Abraham et al. (1990)	?	



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propyl isopropyl ether $C_6H_{14}O$ [627-08-7] JIEJJGMNDWIGBJ-UHFFFAOYSA-N	5.0×10^{-3}		Yaws (2003)	X	237
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	5.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	6.3×10^{-3}		Modarresi et al. (2007)	Q	67
2-ethoxy-2-methylbutane $C_7H_{16}O$ (<i>tert</i> -amyl ethyl ether) [919-94-8] KFRVYYGHSPXSZ-UHFFFAOYSA-N	5.0×10^{-3}	7400	Brockbank (2013)	L	1
	4.8×10^{-3}	7600	Haimi et al. (2006)	M	525
	5.2×10^{-4}		Duchowicz et al. (2020)	V	186
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	245
<i>tert</i> -butyl isopropyl ether $C_7H_{16}O$ [17348-59-3] HNFSPWQNZVCTB-UHFFFAOYSA-N	2.4×10^{-3}		Hilal et al. (2008)	Q	
	1.1×10^{-2}		Modarresi et al. (2007)	Q	67
	6.6×10^{-4}		Yaws (1999)	?	21
dipropylene glycol monomethyl ether $C_7H_{16}O_3$ [34590-94-8] WGYZMNBZFHRYX-UHFFFAOYSA-N	8.6×10^3		Bartelt-Hunt et al. (2008)	?	21
dibutyl ether $C_4H_9OC_4H_9$ [142-96-1] DURPTKYDGMDSBL-UHFFFAOYSA-N	2.1×10^{-3}	6700	Brockbank (2013)	L	1
	7.2×10^{-3}	10000	Hwang et al. (2010)	M	519, 11
	2.2×10^{-3}		Li and Carr (1993)	M	
	1.3×10^{-3}		Li et al. (1993)	M	
	2.1×10^{-3}		Ioffe et al. (1984)	M	
	2.1×10^{-3}		Mackay et al. (2006c)	V	
	2.1×10^{-3}		Mackay et al. (1993)	V	
	1.6×10^{-3}		Pierotti et al. (1959)	X	414
	1.4×10^{-2}		Keshavarz et al. (2022)	Q	
	7.4×10^{-3}		Duchowicz et al. (2020)	Q	
	1.6×10^{-3}		Li et al. (2014)	Q	241
	2.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.1×10^{-3}		Hilal et al. (2008)	Q	
6.1×10^{-3}		Modarresi et al. (2007)	Q	67	
1.8×10^{-3}	6600	Kühne et al. (2005)	Q		
		Yaffe et al. (2003)	Q	248, 249	



Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.9×10^{-3}		Katritzky et al. (1998)	Q	
	6.4×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	2.2×10^{-3}		Russell et al. (1992)	Q	279
	2.5×10^{-3}		Suzuki et al. (1992)	Q	232
	1.6×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		7000	Kühne et al. (2005)	?	
	1.8×10^{-2}		Yaws (1999)	?	21
	1.6×10^{-3}		Abraham et al. (1990)	?	
diisobutyl ether $C_8H_{18}O$ [628-55-7] SZNYWUQFZLLT-UHFFFAOYSA-N	3.7×10^{-3}		Hilal et al. (2008)	Q	
di- <i>sec</i> -butyl ether $C_8H_{18}O$ [6863-58-7] HHBZZTKMMLDNDN-UHFFFAOYSA-N	1.8×10^{-3}		Yaws (2003)	X	258
	1.8×10^{-3}		Yaws (2003)	X	237
	1.0×10^{-3}		Dupeux et al. (2022)	Q	259
	8.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.7×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.8×10^{-3}		Yaws (1999)	?	21
di- <i>tert</i> -butyl ether $C_8H_{18}O$ [6163-66-2] AQEFLFZSWDEAIP-UHFFFAOYSA-N	2.1×10^{-3}		Yaws (2003)	X	237
	1.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.0×10^{-3}		Yaws (1999)	?	21
2-methoxy-2,4,4-trimethylpentane $C_9H_{20}O$ (methyl <i>tert</i> -octyl ether) [62108-41-2] IKZVAPMTXDXWMX-UHFFFAOYSA-N	1.9×10^{-3}		Ebert et al. (2023)	?	526
2-methoxy-2-methylheptane $C_9H_{20}O$ [76589-16-7] KJRACWZCOVHBQU-UHFFFAOYSA-N	1.9×10^{-3}	8100	Haimi et al. (2006)	M	527
2-ethoxy-2,4,4-trimethylpentane $C_{10}H_{22}O$ (ethyl <i>tert</i> -octyl ether) [187103-12-4] JGPJRBWLBUGAQN-UHFFFAOYSA-N	7.7×10^{-4}	6900	Haimi et al. (2006)	M	528
1,1'-oxybis-pentane $C_{10}H_{22}O$ (dipentyl ether) [693-65-2] AOPDRZXCEAKHHW-UHFFFAOYSA-N	3.5×10^{-4}		Yaws (2003)	X	258
	3.5×10^{-4}		Yaws (2003)	X	237
	4.5×10^{-4}		Dupeux et al. (2022)	Q	259
	4.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.3×10^{-4}		Gharagheizi et al. (2010)	Q	246
	2.7×10^{-3}		Hilal et al. (2008)	Q	
	1.0×10^{-3}		Yaws (1999)	?	21
			Brockbank (2013)	W	529



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1'-oxybis(3-methylbutane) $C_{10}H_{22}O$ (diisopentyl ether) [544-01-4] AQZGSPSLYZOOQP-UHFFFAOYSA-N	6.8×10^{-3} 6.6×10^{-3} 1.1×10^{-3} 1.2×10^{-3} 4.9×10^{-3} 1.2×10^{-3} 3.3×10^{-3} 4.8×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q Q Q Q	186 242, 243 244 245 67
1,1'-oxybisohexane $C_{12}H_{26}O$ (dihexyl ether) [112-58-3] BPIUIOXAFBGMNB-UHFFFAOYSA-N	2.9×10^{-4} 5.6×10^{-3} 1.7×10^{-4} 1.8×10^{-3} 3.0×10^{-3}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999) Brockbank (2013)	X Q Q Q ? W	237 246 21 530
1-ethoxy-3,7-dimethyloctane $C_{12}H_{26}O$ [22810-10-2] HCHHIPCZJSRFRU-UHFFFAOYSA-N	6.7×10^{-4} 5.3×10^{-3} 1.3×10^{-3} 2.5×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
diheptyl ether $C_{14}H_{30}O$ [629-64-1] UJEGHEMJVNQWOJ-UHFFFAOYSA-N	2.8×10^{-5} 8.5×10^{-5}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
dioctyl ether $C_{16}H_{34}O$ [629-82-3] NKJJOXAZJBOMXID-UHFFFAOYSA-N	1.3×10^{-4} 6.7×10^{-5} 8.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2010) Yaws (1999)	X Q ?	237 246 21
methoxycyclohexane $C_7H_{14}O$ [931-56-6] GHDIHPNJQVDFBL-UHFFFAOYSA-N	3.1×10^{-2}		Hilal et al. (2008)	Q	
methyl cedryl ether $C_{16}H_{28}O$ [19870-74-7] HRGPYCVTDOECMG-WALBABNVSA-N	2.5×10^{-3} 2.4×10^{-3} 7.7×10^{-3} 1.2×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
dimethoxymethane $CH_3OCH_2OCH_3$ (methylal) [109-87-5] NKDDWNXOKDWJAK-UHFFFAOYSA-N	6.1×10^{-2} 6.3×10^{-2} 6.1×10^{-2} 5.7×10^{-2} 1.6×10^{-2} 4.6×10^{-1} 7.1×10^{-2} 3.6×10^{-1} 6.5×10^{-2}	4700 4800	Brockbank (2013) Ondo and Dohnal (2007) HSDB (2015) Pierotti et al. (1959) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	L M V X Q Q Q Q Q	1 1 414 184 80, 238 80, 239 80, 240



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	6.9×10^{-2}		Modarresi et al. (2007)	Q	67
	5.7×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	6.9×10^{-2}		Yaws (1999)	?	21, 12
trimethoxymethane HC(OCH ₃) ₃ [149-73-5] PYOKUURKVVELLB-UHFFFAOYSA-N	6.9×10^{-1}		Guthrie (1973)	V	
diethoxymethane C ₅ H ₁₂ O ₂ [462-95-3] KLKFAASOGCDTDT-UHFFFAOYSA-N	1.5×10^{-1}		Duchowicz et al. (2020)	V	186
	7.5×10^{-2}		Duchowicz et al. (2020)	Q	
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	7.2×10^{-2}		Modarresi et al. (2007)	Q	67
1,1-diethoxyethane (C ₂ H ₅ O) ₂ CHCH ₃ (acetal) [105-57-7] DHKHKXVYLBGOIT-UHFFFAOYSA-N	1.0×10^{-1}		Duchowicz et al. (2020)	V	186
	1.0×10^{-1}		HSDB (2015)	V	
	1.0×10^{-1}		Hine and Mookerjee (1975)	V	
	1.2×10^{-1}		Abney (2021)	Q	399
	3.2×10^{-2}		Duchowicz et al. (2020)	Q	
	5.7×10^{-2}		Hilal et al. (2008)	Q	
	6.9×10^{-2}		Modarresi et al. (2007)	Q	67
	1.1×10^{-1}		Yaws (1999)	?	21
1,2-diethoxyethane C ₂ H ₅ OC ₂ H ₄ OC ₂ H ₅ [629-14-1] LZDKZFUFMNSQJ-UHFFFAOYSA-N	1.6×10^{-1}		Duchowicz et al. (2020)	V	186
	1.6×10^{-1}		HSDB (2015)	V	
	1.6×10^{-1}		Hine and Mookerjee (1975)	V	
	1.2×10^{-1}		Howard and Meylan (1997)	X	446
	8.3×10^{-2}		Duchowicz et al. (2020)	Q	
	3.9×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	67
1,1,1-trimethoxyethane CH ₃ C(OCH ₃) ₃ [1445-45-0] HDPNBNXLDFELL-UHFFFAOYSA-N	6.4×10^{-1}		Guthrie (1973)	V	
1,2-dimethoxyethane C ₄ H ₁₀ O ₂ [110-71-4] XTHFKEDIFFGKHM-UHFFFAOYSA-N	1.3	7300	Brockbank (2013)	L	1, 531
	2.1		O'Farrell and Waghorne (2010)	M	
	1.4	7200	Ondo and Dohnal (2007)	M	1
	1.4	7100	Cabani et al. (1978)	T	
	9.0		HSDB (2015)	Q	99
	5.3×10^{-1}		Hilal et al. (2008)	Q	



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-3-oxa-1-pentanol $C_5H_{12}O_2$ (2-isopropoxyethanol) [109-59-1] HCGFUIQPSCUHI-UHFFFAOYSA-N	4.8 1.2×10^1 2.6 2.0×10^1 7.8 1.2×10^2 7.9 2.7×10^1 1.1×10^1		Johanson and Dynésius (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M Q Q Q Q Q Q Q ?	14 184 271, 243 244 245 67 185, 21
1,2-dibutoxyethane $C_{10}H_{22}O_2$ [112-48-1] GDXBHFHOEYVPED-UHFFFAOYSA-N	9.9×10^{-1} 1.4×10^{-1} 1.1×10^{-1}		HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q	67
3,6-dioxa-1-decanol $C_8H_{18}O_3$ (butyl carbitol) [112-34-5] OAYXUHPQHDHDDZ-UHFFFAOYSA-N	1.4×10^3		Kim et al. (2000)	M	
diethylene glycol dibutyl ether $C_{12}H_{26}O_3$ [112-73-2] KZVBVTZJMSWGK-UHFFFAOYSA-N	2.5 3.9 6.1 1.3 6.0 3.5 1.5 4.0	13000	Brockbank (2013) Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999)	L V X Q Q Q Q ?	1 186 237, 12 246 246 67 21, 12
methyl vinyl ether C_3H_6O [107-25-5] XJRBAMWJDBPFIM-UHFFFAOYSA-N	1.5×10^{-3} 9.9×10^{-3} 6.2×10^{-4} 1.6×10^{-3}		HSDB (2015) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q	242, 243 244 245
ethyl vinyl ether C_4H_8O [109-92-2] FJKIXWOMBXYWOQ-UHFFFAOYSA-N	1.8×10^{-3} 2.3×10^{-2} 6.2×10^{-3} 3.9×10^{-4} 1.2×10^{-3}		Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q	186 242, 243 244 245
propyl vinyl ether $C_5H_{10}O$ [764-47-6] OVGRCEFMXPHEBL-UHFFFAOYSA-N	3.1×10^{-3}	4800	Hwang et al. (2010)	M	519, 11
allyl glycidyl ether $C_6H_{10}O_2$ [106-92-3] LSWYGACWGAICNM-UHFFFAOYSA-N	2.1		Ebert et al. (2023)	?	316



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Table A3.9: Ethers (ROR) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butyl vinyl ether $C_6H_{12}O$ [111-34-2] UZKWTJUDCOPSNM-UHFFFAOYSA-N	4.6×10^{-3}		Duchowicz et al. (2020)	V	186
	4.5×10^{-3}		HSDB (2015)	V	
	7.3×10^{-4}		Dupeux et al. (2022)	Q	259
	2.5×10^{-2}		Duchowicz et al. (2020)	Q	
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	244
isobutyl vinyl ether $C_6H_{12}O$ [109-53-5] OZCMOJQLBXBKI-UHFFFAOYSA-N	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.9×10^{-4}		Hilal et al. (2008)	Q	
	2.5×10^{-3}		Modarresi et al. (2007)	Q	67
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	244
benzyl methyl ether $C_8H_{10}O$ [538-86-3] GQKZBCPTCWJTAS-UHFFFAOYSA-N	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.1×10^{-1}		Duchowicz et al. (2020)	V	186
	1.3×10^{-1}		Duchowicz et al. (2020)	Q	
benzyl ethyl ether $C_9H_{12}O$ [539-30-0] AXPZDYVDTMMLNB-UHFFFAOYSA-N	6.7×10^{-2}		Dupeux et al. (2022)	Q	259
methoxybenzene $C_6H_5OCH_3$ (anisole) [100-66-3] RDOXTESZEPMUJZ-UHFFFAOYSA-N	2.9×10^{-2}	4200	Brockbank (2013)	L	1
	2.9×10^{-2}	4200	Brockbank et al. (2013)	M	
	2.6×10^{-2}	4800	Dewulf et al. (1999)	M	
	3.2×10^{-2}		Li and Carr (1993)	M	
	2.0×10^{-2}		Duchowicz et al. (2020)	V	186
	3.1×10^{-2}		Mackay et al. (2006c)	V	
	4.0×10^{-2}		Mackay et al. (1993)	V	
	2.3×10^{-3}		Hine and Mookerjee (1975)	V	
	2.3×10^{-3}		Hine and Weimar (1965)	R	
	2.7×10^{-3}		Yaws (2003)	X	258
	2.7×10^{-3}		Yaws (2003)	X	237
	6.9×10^{-2}		Schüürmann (2000)	C	21
	1.9×10^{-2}		Dupeux et al. (2022)	Q	259
	1.2×10^{-1}		Duchowicz et al. (2020)	Q	
	2.3×10^{-3}		HSDB (2015)	Q	99
	1.9×10^{-2}		Li et al. (2014)	Q	241
	1.3×10^{-1}		Gharagheizi et al. (2010)	Q	246
9.0×10^{-3}		Hilal et al. (2008)	Q		
3.3×10^{-2}		Modarresi et al. (2007)	Q	67	
		4500	Kühne et al. (2005)	Q	
	8.6×10^{-3}		Yao et al. (2002)	Q	229
	1.2×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	2.3×10^{-3}		Suzuki et al. (1992)	Q	232
		4300	Kühne et al. (2005)	?	



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.7×10^{-3}		Yaws (1999)	?	21
	2.5×10^{-2}		Abraham et al. (1990)	?	
ethoxybenzene $C_8H_{10}O$ (phenetole) [103-73-1] DLRJIFUOBQJNS-UHFFFAOYSA-N	1.7×10^{-2}		Li and Carr (1993)	M	
	2.2×10^{-2}		Duchowicz et al. (2020)	V	186
	2.2×10^{-2}		HSDB (2015)	V	
	2.3×10^{-2}		Mackay et al. (2006c)	V	
	4.4×10^{-2}		Duchowicz et al. (2020)	Q	
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.5×10^{-3}		Hilal et al. (2008)	Q	
	2.9×10^{-2}		Modarresi et al. (2007)	Q	67
	2.6×10^{-1}		Katritzky et al. (1998)	Q	
	1.0×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	1.7×10^{-2}		Abraham et al. (1990)	?	
1,2-dimethoxybenzene $C_8H_{10}O_2$ [91-16-7] ABDKAPXRBAPSON-UHFFFAOYSA-N		5100	Kühne et al. (2005)	Q	
		2400	Kühne et al. (2005)	?	
2-phenoxyethanol $C_8H_{10}O_2$ [122-99-6] QCDWFXQBSFUVSP-UHFFFAOYSA-N	2.1×10^2		Duchowicz et al. (2020)	V	186
	2.0×10^2		HSDB (2015)	V	
	4.0×10^1		Duchowicz et al. (2020)	Q	
	3.4×10^1		Hilal et al. (2008)	Q	
	1.4×10^2		Modarresi et al. (2007)	Q	67
2-(phenylmethoxy)-ethanol $C_9H_{12}O_2$ [622-08-2] CUZKCNWZBXLJX-UHFFFAOYSA-N	8.2×10^1		Duchowicz et al. (2020)	V	186
	4.4×10^1		Duchowicz et al. (2020)	Q	
	1.6×10^3		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^2		Raventos-Duran et al. (2010)	Q	244
	3.1×10^3		Raventos-Duran et al. (2010)	Q	245
	1.5×10^2		Hilal et al. (2008)	Q	
	7.0×10^2		Modarresi et al. (2007)	Q	67
1,2,3-trimethoxybenzene $C_9H_{12}O_3$ [634-36-6] CRUILBNAQILVHZ-UHFFFAOYSA-N	3.6		Schüürmann (2000)	V	
1-methoxy-4-(1-propenyl)-benzene $C_{10}H_{12}O$ (anethole) [104-46-1] RUVINXPYWBROJD-UHFFFAOYSA-N	9.9×10^{-2}	6200	van Roon et al. (2005)	V	
	1.0×10^{-1}		Yaws (2003)	X	258
	3.7×10^{-2}		Dupeux et al. (2022)	Q	259
	1.4×10^{-1}		HSDB (2015)	Q	99
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	1.0×10^{-1}		Yaws (1999)	?	21



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methoxy-4-(2-propenyl)-phenol $C_{10}H_{12}O_2$ (eugenol) [97-53-0] RRAFCDWBNXTKKO-UHFFFAOYSA-N	9.2 5.0 6.9 5.1 7.2 3.9 3.5×10^{-1} 2.0×10^1 5.7	9700	McFall et al. (2020) Duchowicz et al. (2020) Martins et al. (2017) HSDB (2015) van Roon et al. (2005) Dupeux et al. (2022) Abney (2021) Duchowicz et al. (2020) McFall et al. (2020)	M V V V V Q Q Q Q	186 315 259 399 474
1,2-dimethoxy-4-(2-propenyl)-benzene $C_{11}H_{14}O_2$ [93-15-2] ZYEMGPIYFIJGTP-UHFFFAOYSA-N	1.8 1.8 1.0 3.6 1.9×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	186 67
diphenyl ether $C_{12}H_{10}O$ [101-84-8] USIUZYUHIKAEV-UHFFFAOYSA-N	1.9×10^{-2} 3.5×10^{-2} 3.5×10^{-2} 3.7×10^{-2} 1.1×10^{-1} 3.7×10^{-2} 1.8×10^{-2} 2.9×10^{-1} 1.9×10^{-2} 1.7×10^{-2} 1.7×10^{-1} 1.9×10^{-2}		Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Kurz and Ballschmiter (1999) Mackay et al. (1993) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999)	L V V V V V X Q Q Q Q Q ?	186 237 246 67 21
(phenoxymethyl)-oxirane $C_9H_{10}O_2$ [122-60-1] FQYUMYWMJTYZTK-UHFFFAOYSA-N	1.2×10^1 1.2×10^1 4.8 6.1×10^{-1} 1.9		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	186
1-dodecyl-4-phenoxybenzene $C_{24}H_{34}O$ [119345-02-7] XSAHYEQPUFJGKW-UHFFFAOYSA-N	3.4×10^{-3} 1.4×10^{-3} 1.7×10^{-2} 7.7×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2,2,4-trimethyl-4-(4-(4-(2,4,4-trimethylpentan-2-yl)phenoxy)phenyl)pentane $C_{28}H_{42}O$ [61702-88-3] AJDONJVWDSZZQF-UHFFFAOYSA-N	1.3×10^{-3} 1.2×10^{-3} 5.4×10^{-2} 6.9×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
etofenprox $C_{25}H_{28}O_3$ [80844-07-1] YREQHYQNNWYQCJ-UHFFFAOYSA-N	7.4×10^1		Maniere et al. (2011)	?	165
di- <i>tert</i> -butyl <i>sec</i> -butylidene diperoxide $C_{12}H_{26}O_4$ [2167-23-9] HQOVXPHOJANJBR-UHFFFAOYSA-N	1.2×10^{-2} 6.1×10^{-5} 1.6×10^{-2} 1.1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	287, 288 287, 289 287, 290 287, 291
peroxide, 1,1-dimethylethyl 1-methyl-1-phenylethyl $C_{13}H_{20}O_2$ [3457-61-2] BIISIZOQPWZPPS-UHFFFAOYSA-N	1.4×10^{-2} 4.8×10^{-3} 1.6×10^{-2} 1.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	287, 288 287, 289 287, 290 287, 291
di- <i>tert</i> -butyl 1,1,4,4-tetramethyltetramethylene diperoxide $C_{16}H_{34}O_4$ [78-63-7] DMWVYCCGQPJEA-UHFFFAOYSA-N	3.9×10^{-3} 7.9×10^{-4} 1.3×10^{-1} 3.4×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	287, 288 287, 289 287, 290 287, 291
1,4-bis(1- <i>tert</i> -butylperoxy-1- methyl-ethyl)benzene $C_{20}H_{34}O_4$ [2781-00-2] GWQOYRSARAWVTC-UHFFFAOYSA-N	1.0×10^{-1} 1.8×10^{-2} 2.9×10^{-1} 8.6		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	287, 288 287, 289 287, 290 287, 291
MCM:CH3OCH2OOH $C_2H_6O_3$ CDXAGPPPWKCPRI-UHFFFAOYSA-N	2.2×10^2 6.9×10^1 7.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETHOXOOH $C_2H_4O_3$ NOEKFNMWGHEGBN-UHFFFAOYSA-N	7.1×10^2 1.7×10^2 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMMAOOH $C_3H_8O_4$ SHLFZQKLTPTTSZ-UHFFFAOYSA-N	5.1×10^3 3.0×10^2 1.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMMBOOH $C_3H_8O_4$ HODDSHZVZWLHR-UHFFFAOYSA-N	5.5×10^3 5.6×10^1 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETOMEOOH $C_3H_8O_3$ NZBMKAZNWPZJND-UHFFFAOYSA-N	1.7×10^2 3.9×10^1 6.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MEMOXYCO3H $C_3H_6O_4$ PWWCDEMRYBWOJ-UHFFFAOYSA-N	2.6×10^3 7.1×10^1 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DIETETOOH $C_4H_{10}O_3$ CXWWPQGYBJCHJL-UHFFFAOYSA-N	1.7×10^2 1.3×10^1 4.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETOC2OOH $C_4H_{10}O_3$ NYVGIYPKZJSYSP-UHFFFAOYSA-N	1.6×10^2 8.1×10^1 6.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETOMECO3H $C_4H_8O_4$ ULYBJOMJQUHMOL-UHFFFAOYSA-N	2.1×10^3 3.4×10^1 4.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRMEOOH $C_4H_{10}O_3$ PSBSELFEZHDPTA-UHFFFAOYSA-N	1.1×10^2 4.5 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXMOOH $C_5H_{12}O_3$ DCHWALHTYQHXTG-UHFFFAOYSA-N	1.3×10^2 2.0×10^1 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EIPEOOH $C_5H_{12}O_3$ ZZXLAMSYBUBVJKS-UHFFFAOYSA-N	8.9×10^1 3.0 1.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPROC21OOH $C_5H_{12}O_3$ VGMUBGNCFVOQDX-UHFFFAOYSA-N	1.7×10^2 6.6 2.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEAOOH $C_5H_{12}O_3$ BGZKVDIFKPQYHL-UHFFFAOYSA-N	8.9×10^1 8.5 6.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEBCO3H $C_5H_{10}O_4$ NGYXBYFCPPVOQA-UHFFFAOYSA-N	1.3×10^3 4.7 3.4×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEBOOH $C_5H_{12}O_3$ FPTBRWWJTBOWHN-UHFFFAOYSA-N	8.9×10^1 2.5×10^1 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXMCO3H $C_6H_{12}O_4$ BMXLBBYCODRNJI-UHFFFAOYSA-N	1.5×10^3 1.7×10^1 8.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DIIPRETOOH $C_6H_{14}O_3$ PFVPTWUDXVSVAC-UHFFFAOYSA-N	8.3×10^1 1.6 2.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ETBEACO3H $C_6H_{12}O_4$ UAVAAIVEDVDYSQ-UHFFFAOYSA-N	1.1×10^3 3.4 3.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBEAOOH $C_6H_{14}O_3$ ITRUGVUCIYLYDK-UHFFFAOYSA-N	8.3×10^1 1.7×10^1 1.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBEBOOH $C_6H_{14}O_3$ VOZHKKMLSSYDIG-UHFFFAOYSA-N	8.3×10^1 2.5 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBECCO3H $C_6H_{12}O_4$ AELSWALKLVZVPO-UHFFFAOYSA-N	1.1×10^3 8.9 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBECOOH $C_6H_{14}O_3$ WJMPPRSRRBMJID-UHFFFAOYSA-N	8.3×10^1 2.0×10^1 5.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPROMC2OOH $C_6H_{14}O_3$ JCIUPJDJCBRYHD-UHFFFAOYSA-N	1.4×10^2 2.2×10^1 2.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPROMCCO3H $C_6H_{12}O_4$ SFJQIQZNOBLTBZ-UHFFFAOYSA-N	1.8×10^3 7.8 7.6×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCSOZ $C_{15}H_{24}O_3$ DXZCAIRIBLPJLG-UHFFFAOYSA-N	9.1 2.0×10^{-1} 7.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH3OCH2OH $C_2H_6O_2$ VHWYCFISQVCCP-UHFFFAOYSA-N	8.1 5.4×10^1 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMMAOH $C_3H_8O_3$ YANOHILBFNXRFM-UHFFFAOYSA-N	1.7×10^2 4.1×10^2 1.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMMBOH $C_3H_8O_3$ IIGJYLXJNYBXEO-UHFFFAOYSA-N	2.0×10^2 4.6×10^1 9.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETOMEOH $C_3H_8O_2$ RRLWYLINGKISHN-UHFFFAOYSA-N	6.8 3.0×10^1 3.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MO2EOLA2OH $C_3H_8O_3$ CSCSROFYRZJJH-UHFFFAOYSA-N	9.6×10^3 9.6×10^3 4.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MO2EOLAOOH $\text{C}_3\text{H}_8\text{O}_4$ PFSIOEPXGRVTPO-UHFFFAOYSA-N	8.1×10^5 2.8×10^4 6.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MO2EOLB2OH $\text{C}_3\text{H}_8\text{O}_3$ ONSWVOSXVUHESJ-UHFFFAOYSA-N	2.3×10^4 2.0×10^4 4.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MO2EOLBOOH $\text{C}_3\text{H}_8\text{O}_4$ VULCDXDIAONDTM-UHFFFAOYSA-N	6.0×10^5 1.4×10^5 2.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DIETETOH $\text{C}_4\text{H}_{10}\text{O}_2$ CAFAOQIVXSFSY-UHFFFAOYSA-N	6.0 1.7×10^1 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EOX2ETA2OH $\text{C}_4\text{H}_{10}\text{O}_3$ WWVBRUMYFUDEJQ-UHFFFAOYSA-N	8.0×10^3 6.6×10^3 4.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EOX2ETB2OH $\text{C}_4\text{H}_{10}\text{O}_3$ RZYMVMZJVMXDRP-UHFFFAOYSA-N	2.1×10^4 8.9×10^3 2.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EOX2OLA0OH $\text{C}_4\text{H}_{10}\text{O}_4$ OSAXOMWTXDBXFG-UHFFFAOYSA-N	6.3×10^5 1.7×10^4 4.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EOX2OLBOOH $\text{C}_4\text{H}_{10}\text{O}_4$ IWDPPKCRJRWMAAT-UHFFFAOYSA-N	6.3×10^5 6.2×10^4 1.5×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2C3OCOHO $\text{C}_4\text{H}_{10}\text{O}_3$ OAPWFUZOONIVKV-UHFFFAOYSA-N	2.1×10^4 1.0×10^4 2.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2C3OCOHOH $\text{C}_4\text{H}_{10}\text{O}_4$ ZZOFHQOVLUGOX-UHFFFAOYSA-N	6.3×10^5 1.3×10^5 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPRMEETOH $\text{C}_4\text{H}_{10}\text{O}_2$ BFSUQRCKXZXEX-UHFFFAOYSA-N	4.2 9.3 7.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PR2OHMOOOH $\text{C}_4\text{H}_{10}\text{O}_4$ BIISZUJLPYTCKS-UHFFFAOYSA-N	7.6×10^5 1.1×10^4 2.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PROH2MOX $\text{C}_4\text{H}_{10}\text{O}_3$ OEYNWAWWSZUGDU-UHFFFAOYSA-N	8.9×10^3 7.6×10^3 9.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BOXMOH $C_5H_{12}O_2$ CRHLZRRTZDFDAJ-UHFFFAOYSA-N	4.7 1.5×10^1 1.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EIPEOH $C_5H_{12}O_2$ MGMXTRZFWPWZFH-UHFFFAOYSA-N	3.4 6.3 7.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HIEPOXB $C_5H_{10}O_4$ YTIKZIBPNMOYQX-UHFFFAOYSA-N	1.5×10^8 1.8×10^8 5.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IEACO3H $C_5H_8O_5$ WBOLSVSGSKMCPN-UHFFFAOYSA-N	7.8×10^5 3.6×10^3 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IECCO3H $C_5H_8O_5$ CEWHGLGNUIHIJU-UHFFFAOYSA-N	7.8×10^5 2.7×10^3 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IEPOXA $C_5H_{10}O_3$ CIDUHKBATDRWPE-UHFFFAOYSA-N	1.6×10^4 9.3×10^4 4.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IEPOXC $C_5H_{10}O_3$ REKLCZSNEUFIBP-UHFFFAOYSA-N	1.6×10^4 4.7×10^4 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPROC21OH $C_5H_{12}O_2$ PWLPTLCMMFJZIU-UHFFFAOYSA-N	5.6 1.0×10^1 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEOH $C_5H_{12}O_2$ NHNIMVRQJIZFW-UHFFFAOYSA-N	3.4 7.4 2.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEOH $C_5H_{12}O_2$ VMPUAIZSESMILD-UHFFFAOYSA-N	4.8 1.5×10^1 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOX2E2OH $C_6H_{14}O_3$ WQHZNZXURJISVCT-UHFFFAOYSA-N	5.5×10^3 3.6×10^3 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOX2OHAOOH $C_6H_{14}O_4$ XRZMTAXNHOGTME-UHFFFAOYSA-N	4.1×10^5 3.6×10^4 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOX2OHBOOH $C_6H_{14}O_4$ LCMMTUJPIXBSDS-UHFFFAOYSA-N	4.6×10^5 8.1×10^3 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BOXOHETOH $C_6H_{14}O_3$ QLKNFVRAYYHHDF-UHFFFAOYSA-N	1.5×10^4 6.0×10^3 7.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DIIPRETOH $C_6H_{14}O_2$ FRKCFUUIQCQPC-UHFFFAOYSA-N	3.2 3.5 4.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBEOH $C_6H_{14}O_2$ WOSZILCYMCIWFB-UHFFFAOYSA-N	3.7 1.0×10^1 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBEOH $C_6H_{14}O_2$ DUNYNUFVLYAWTI-UHFFFAOYSA-N	3.2 4.1 1.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBECOH $C_6H_{14}O_2$ BDLXTDLGTWNUFM-UHFFFAOYSA-N	3.7 8.5 2.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPROMC2OH $C_6H_{14}O_2$ ZFEBANLLFQEKED-UHFFFAOYSA-N	6.5 1.3×10^1 4.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1-butoxy-2-propanol $C_7H_{16}O_2$ (MCM:BOX2PROL) [5131-66-8] RWNUSVWFHDHRCJ-UHFFFAOYSA-N	5.0 1.7×10^1 8.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXOHPROL $C_7H_{16}O_3$ ITIQJVOJGXCBQB-UHFFFAOYSA-N	1.4×10^4 7.8×10^3 6.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXPOLAOOH $C_7H_{16}O_4$ JGCUFCZSCOGTSN-UHFFFAOYSA-N	3.8×10^5 2.6×10^4 1.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXPOLBOOH $C_7H_{16}O_4$ AJCGQJRNRRPZGZ-UHFFFAOYSA-N	4.3×10^5 6.0×10^3 9.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXPR2OH $C_7H_{16}O_3$ XKPKIGSYCLTAJO-UHFFFAOYSA-N	5.1×10^3 2.9×10^3 4.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCSOZOH $C_{15}H_{26}O_5$ JQRHKAPCWHNLS-UHFFFAOYSA-N	1.1×10^7 1.1×10^5 3.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCSOZOOH $C_{15}H_{26}O_6$ VCKYKGHDZKOMMJ-UHFFFAOYSA-N	8.5×10^8 1.4×10^5 5.0×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MEMOXYCHO $\text{C}_3\text{H}_6\text{O}_2$ YSEFYOVWKJXNCH-UHFFFAOYSA-N	2.1 2.0×10^1 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EOX2ETCHO $\text{C}_4\text{H}_8\text{O}_2$ IAHZBRPNDIVNNR-UHFFFAOYSA-N	2.0 6.9 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXC4DIAL $\text{C}_4\text{H}_4\text{O}_3$ IRJHVNZVWOCVLV-UHFFFAOYSA-N	6.5×10^3 7.1×10^3 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXDLCO3H $\text{C}_4\text{H}_4\text{O}_5$ OKYIQGCZHSMTGV-UHFFFAOYSA-N	7.1×10^6 9.6×10^4 7.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMC4DIAL $\text{C}_5\text{H}_6\text{O}_3$ SYCYSIWUSJFZTN-UHFFFAOYSA-N	3.5×10^3 1.2×10^3 7.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMDLCO3H $\text{C}_5\text{H}_6\text{O}_5$ LLYFBEXLHOFXFI-UHFFFAOYSA-N	3.8×10^6 3.1×10^4 2.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEBCHO $\text{C}_5\text{H}_{10}\text{O}_2$ HSCUZOQCNPBPT-UHFFFAOYSA-N	1.1 1.5 5.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOX2ECHO $\text{C}_6\text{H}_{12}\text{O}_2$ RPLPGIHCAYYKX-UHFFFAOYSA-N	1.2 6.5 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZEMUCCO3H $\text{C}_6\text{H}_6\text{O}_5$ LTCNUSVDDXPSIF-UHFFFAOYSA-N	2.1×10^7 1.1×10^5 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZEPOXMUC $\text{C}_6\text{H}_6\text{O}_3$ NQHJMOLWTXQPLS-UHFFFAOYSA-N	1.9×10^4 5.4×10^3 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXM2C4DAL $\text{C}_6\text{H}_8\text{O}_3$ QTKFOEFUZGORG-UHFFFAOYSA-N	2.0×10^3 3.0×10^2 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXM2DCO3H $\text{C}_6\text{H}_8\text{O}_5$ CFBRPHMFNHCZEV-UHFFFAOYSA-N	2.2×10^6 6.8×10^3 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBEACHO $\text{C}_6\text{H}_{12}\text{O}_2$ HHIYJPQUMUPZIZ-UHFFFAOYSA-N	9.8×10^{-1} 1.2 4.5×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ETBECCHO $C_6H_{12}O_2$ SMUYZOMGNHBYHU-UHFFFAOYSA-N	9.8×10^{-1} 3.5 6.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPROMCCHO $C_6H_{12}O_2$ AAPDVSVFWBQNMLJ-UHFFFAOYSA-N	1.6 3.3 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMEC4DAL $C_7H_{10}O_3$ MOJUYSNCEBTQMW-UHFFFAOYSA-N	1.6×10^3 2.8×10^2 2.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMEDCO3H $C_7H_{10}O_5$ IBELTJZUJIPVRI-UHFFFAOYSA-N	1.7×10^6 3.7×10^3 5.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYEPOXMUC $C_8H_{10}O_3$ QLTFECLMPRWGQQ-UHFFFAOYSA-N	5.0×10^3 6.8×10^2 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYMUCCO3H $C_8H_{10}O_5$ PBSKNYKTPMDFL-UHFFFAOYSA-N	6.2×10^6 6.6×10^3 8.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLMUCO3H $C_9H_{12}O_5$ UVJSWMTUJCHEOZ-UHFFFAOYSA-N	5.0×10^6 4.0×10^3 5.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLPOXMUC $C_9H_{12}O_3$ NORSPZZKBNMHEY-UHFFFAOYSA-N	4.6×10^3 4.6×10^2 5.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IEACHO $C_5H_8O_3$ SXTKPSXTIDLQV-UHFFFAOYSA-N	7.1×10^2 4.2×10^3 3.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IECCHO $C_5H_8O_3$ FUNIHJAXNKVQS-UHFFFAOYSA-N	7.1×10^2 1.9×10^3 2.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZEMUCOH $C_6H_8O_5$ HYRDKGAOZPVDDL-UHFFFAOYSA-N	1.0×10^9 1.7×10^9 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZEMUCOOH $C_6H_8O_6$ YPGXWAYLBNMEJL-UHFFFAOYSA-N	7.6×10^{10} 1.2×10^9 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYMUCOH $C_8H_{12}O_5$ SKTSLFSGOHJFJLD-UHFFFAOYSA-N	3.1×10^8 1.3×10^8 9.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:OXYMUCCOOH $C_8H_{12}O_6$ ZBCSCLAPOVYAB-UHFFFAOYSA-N	4.6×10^{11} 2.9×10^8 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLMUCOH $C_9H_{14}O_5$ BKWOZADWPGCRT-UHFFFAOYSA-N	2.6×10^8 7.4×10^7 4.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLMUCOOH $C_9H_{14}O_6$ OMPONQJZISYFQ-UHFFFAOYSA-N	4.2×10^{11} 1.7×10^8 1.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRONEMOOOH $C_4H_8O_4$ WKDIYCKWLNCFHJ-UHFFFAOYSA-N	1.2×10^5 8.1×10^2 2.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRONEMOX $C_4H_8O_2$ CUZLJOLBIRPEFB-UHFFFAOYSA-N	1.4 1.4×10^1 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXKTMCO3H $C_6H_8O_5$ ABDSVLWFNPKKBV-UHFFFAOYSA-N	2.6×10^6 3.2×10^4 4.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMKTCO3H $C_6H_8O_5$ CAGQARJHZCESJI-UHFFFAOYSA-N	2.6×10^6 3.2×10^4 1.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXPROBOOH $C_7H_{14}O_4$ YHFJWWLEGMFFZ-UHFFFAOYSA-N	7.1×10^4 2.0×10^2 3.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXPRONE $C_7H_{14}O_2$ UYNCDYOFUJEUQN-UHFFFAOYSA-N	8.1×10^{-1} 8.0 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXPROOOH $C_7H_{14}O_4$ YUTHBWBUPOPMPG-UHFFFAOYSA-N	7.1×10^4 6.3×10^3 2.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXEKTCO3H $C_7H_{10}O_5$ PGCJNBAAIEYIA-UHFFFAOYSA-N	2.0×10^6 2.4×10^4 2.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLEMUCCO3H $C_7H_8O_5$ RISGILSSNRWCFR-UHFFFAOYSA-N	1.4×10^7 2.0×10^5 5.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZMUCCO3H $C_8H_{10}O_5$ GTEVSPXWKYUSQE-UHFFFAOYSA-N	1.1×10^7 9.6×10^4 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MXYMUCCO3H $C_8H_{10}O_5$ ROKAXOITEMHIEK-UHFFFAOYSA-N	7.6×10^6 3.6×10^4 3.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYMUCCO3H $C_8H_{10}O_5$ AYUPQGRQZSTAMO-UHFFFAOYSA-N	7.6×10^6 5.5×10^4 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBZMUCCO3H $C_9H_{12}O_5$ SKJBPGYNTSYQCQ-UHFFFAOYSA-N	1.0×10^7 5.6×10^4 9.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLMUCO3H $C_9H_{12}O_5$ CXRRYJPLLOUVIM-UHFFFAOYSA-N	6.0×10^6 1.7×10^4 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZMUCCO3H $C_9H_{12}O_5$ ZGGPGQBINYKVGU-UHFFFAOYSA-N	9.8×10^6 5.4×10^4 1.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLMUCO3H $C_9H_{12}O_5$ KWWJCAVGGMMRV-UHFFFAOYSA-N	6.0×10^6 2.6×10^4 7.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123OXMUC $C_9H_{12}O_3$ XYHNNFZVTWOCNN-UHFFFAOYSA-N	4.2×10^3 3.9×10^3 1.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124MUO3H $C_9H_{12}O_5$ FTWAFKXUKWKGAI-UHFFFAOYSA-N	4.2×10^6 1.2×10^4 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135MUO3H $C_9H_{12}O_5$ JNFPPQQOSCDIIIK-UHFFFAOYSA-N	5.3×10^6 3.4×10^4 6.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMEBMUO3H $C_{10}H_{14}O_5$ JWBQDZWURHDWCA-UHFFFAOYSA-N	4.1×10^6 1.7×10^4 1.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DETLMUO3H $C_{11}H_{16}O_5$ QEEAHFHJZRPBGU-UHFFFAOYSA-N	3.6×10^6 1.1×10^4 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCKSOZ $C_{14}H_{22}O_4$ JTKRSQXPBULRM-UHFFFAOYSA-N	3.7×10^3 1.4×10^2 1.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRONEMOXOH $C_4H_8O_3$ RETWRLMOZHRKHU-UHFFFAOYSA-N	2.4×10^2 1.4×10^3 6.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BOXPRONBOH $C_7H_{14}O_3$ ANPLAICHKIQBPV-UHFFFAOYSA-N	1.2×10^2 3.2×10^2 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXPRONOH $C_7H_{14}O_3$ NQJNHGUTJISDHM-UHFFFAOYSA-N	2.7×10^3 1.0×10^4 9.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123MUCCO $C_9H_{12}O_5$ ZVWGUKJQFRZUIG-UHFFFAOYSA-N	2.6×10^7 4.1×10^7 1.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123MUCOH $C_9H_{14}O_5$ JUUFKUYJQYFRGA-UHFFFAOYSA-N	2.6×10^8 3.7×10^8 1.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123MUOOH $C_9H_{14}O_6$ LLVDHGQYZCXGKH-UHFFFAOYSA-N	1.7×10^{10} 2.7×10^8 1.9×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXALMKT $C_6H_8O_3$ QJMAVIYYVSLPO-UHFFFAOYSA-N	2.1×10^3 9.8×10^2 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMALKT $C_6H_8O_3$ MWBGBWUOLRJCDU-UHFFFAOYSA-N	2.1×10^3 9.8×10^2 3.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXEALKT $C_7H_{10}O_3$ HQSBJPSKMKUTIT-UHFFFAOYSA-N	2.0×10^3 1.0×10^3 9.3×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZPOXMUC $C_8H_{10}O_3$ UTCVUMOGNJSPDS-UHFFFAOYSA-N	1.0×10^4 9.1×10^3 6.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYEPOXMUC $C_8H_{10}O_3$ VLMKIGFKBHEGBU-UHFFFAOYSA-N	6.2×10^3 3.5×10^3 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYEPOXMUC $C_8H_{10}O_3$ LGKLIBFTBUCZPW-UHFFFAOYSA-N	6.2×10^3 5.4×10^3 1.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBZPOXMUC $C_9H_{12}O_3$ NUCYHGVQTCVYLO-UHFFFAOYSA-N	9.6×10^3 6.6×10^3 4.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLPOXMUC $C_9H_{12}O_3$ SWHMTTAKVELRE-UHFFFAOYSA-N	5.5×10^3 1.9×10^3 4.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PBZPOXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ AHKQGNMGHQLOPP-UHFFFAOYSA-N	8.0×10^3 6.0×10^3 3.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLPOXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ UTBNMXYREJYVNO-UHFFFAOYSA-N	5.5×10^3 3.0×10^3 6.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124OXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ HFTMUUPKJAPHOHL-UHFFFAOYSA-N	3.4×10^3 1.3×10^3 2.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135OXMUC $\text{C}_9\text{H}_{12}\text{O}_3$ JFCWARPMSNNZLY-UHFFFAOYSA-N	4.2×10^3 3.7×10^3 3.0×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMEBPOXMUC $\text{C}_{10}\text{H}_{14}\text{O}_3$ VGOICOHBXPGRQT-UHFFFAOYSA-N	3.7×10^3 2.0×10^3 1.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DETLPOXMUC $\text{C}_{11}\text{H}_{16}\text{O}_3$ VPGNNECRJBEQEI-UHFFFAOYSA-N	3.0×10^3 1.4×10^3 6.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZEMUCCO $\text{C}_6\text{H}_6\text{O}_5$ KQXCODNTIAPVKL-UHFFFAOYSA-N	1.0×10^8 1.1×10^8 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLEMUCCO $\text{C}_7\text{H}_8\text{O}_5$ AJWOUZMMNQLKHW-UHFFFAOYSA-N	3.7×10^8 1.7×10^7 3.0×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLEMUCOH $\text{C}_7\text{H}_{10}\text{O}_5$ WPTVRQIFDQMAMS-UHFFFAOYSA-N	6.8×10^8 1.5×10^9 5.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLEMUCOOH $\text{C}_7\text{H}_{10}\text{O}_6$ DVPKQTIPTCHKXBD-UHFFFAOYSA-N	1.0×10^{12} 4.8×10^9 4.8×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZMUCCO $\text{C}_8\text{H}_{10}\text{O}_5$ MYHWFJZUBUHIGJ-UHFFFAOYSA-N	3.5×10^8 7.6×10^6 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZMUCOH $\text{C}_8\text{H}_{12}\text{O}_5$ VKTUBYIQTACODT-UHFFFAOYSA-N	5.6×10^8 1.0×10^9 3.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZMUCOOH $\text{C}_8\text{H}_{12}\text{O}_6$ KWCWGZCSJYJCAS-UHFFFAOYSA-N	9.1×10^{11} 3.3×10^9 8.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MXYMUCCO $C_8H_{10}O_5$ KJOIECUJZBFUMR-UHFFFAOYSA-N	2.1×10^8 3.3×10^6 9.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYMUCOH $C_8H_{12}O_5$ UZLLCOIUEBQPHF-UHFFFAOYSA-N	3.9×10^8 3.9×10^8 4.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYMUCOOH $C_8H_{12}O_6$ ZYWDOJNDZBPDDO-UHFFFAOYSA-N	5.6×10^{11} 1.2×10^9 8.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYMUCCO $C_8H_{10}O_5$ RJHLIQPRSGXWHC-UHFFFAOYSA-N	1.7×10^8 1.9×10^6 2.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYMUCCO $C_8H_{10}O_5$ UICQALDYFNTPHO-UHFFFAOYSA-N	2.1×10^8 4.9×10^6 1.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYMUCOH $C_8H_{12}O_5$ MIBKDAKBVPRIGB-UHFFFAOYSA-N	3.9×10^8 5.1×10^8 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYMUCOOH $C_8H_{12}O_6$ GSJPWDRXFYTPMH-UHFFFAOYSA-N	5.6×10^{11} 1.6×10^9 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBZMUCCO $C_9H_{12}O_5$ XOMPDNKHXXMMXOK-UHFFFAOYSA-N	3.2×10^8 1.3×10^7 5.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBZMUCOH $C_9H_{14}O_5$ AKVRVUIGBHJRNQ-UHFFFAOYSA-N	5.3×10^8 6.5×10^8 2.2×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBZMUCOOH $C_9H_{14}O_6$ LSOCHQKLDXSALN-UHFFFAOYSA-N	8.5×10^{11} 2.1×10^9 1.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLMUCCO $C_9H_{12}O_5$ ZRMCSOCJQIXUEX-UHFFFAOYSA-N	1.9×10^8 3.7×10^6 5.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLMUCOH $C_9H_{14}O_5$ ARJLZFCXPXPKBS-UHFFFAOYSA-N	3.0×10^8 1.8×10^8 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLMUCOOH $C_9H_{14}O_6$ UXABECSPQFCGIJ-UHFFFAOYSA-N	5.0×10^{11} 6.0×10^8 2.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:OETLMUCCO $\text{C}_9\text{H}_{12}\text{O}_5$ JSKKVRLLVSVGZ-UHFFFAOYSA-N	1.6×10^8 2.0×10^6 9.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZMUCCO $\text{C}_9\text{H}_{12}\text{O}_5$ FCRYPGHUONBQCX-UHFFFAOYSA-N	2.7×10^8 1.1×10^7 9.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZMUCOH $\text{C}_9\text{H}_{14}\text{O}_5$ VYXNVIKZUYSSA-UHFFFAOYSA-N	4.4×10^8 5.8×10^8 1.9×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZMUCOOH $\text{C}_9\text{H}_{14}\text{O}_6$ FCKGMMNUJIAHAV-UHFFFAOYSA-N	7.3×10^{11} 2.0×10^9 5.0×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLMUCCO $\text{C}_9\text{H}_{12}\text{O}_5$ RORTYMWKJCCJQU-UHFFFAOYSA-N	1.9×10^8 5.9×10^6 6.8×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLMUCOH $\text{C}_9\text{H}_{14}\text{O}_5$ ZLOWXLKYJYQIH-UHFFFAOYSA-N	3.0×10^8 2.5×10^8 8.7×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLMUCOOH $\text{C}_9\text{H}_{14}\text{O}_6$ RSNULGXAYPPGL-UHFFFAOYSA-N	5.0×10^{11} 8.1×10^8 3.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124MUCCO $\text{C}_9\text{H}_{12}\text{O}_5$ DQECTOJLTKBSTJ-UHFFFAOYSA-N	2.1×10^7 9.8×10^6 1.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124MUCOH $\text{C}_9\text{H}_{14}\text{O}_5$ KPYCPCVRGFCQPX-UHFFFAOYSA-N	2.1×10^8 1.0×10^8 7.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124MUOOH $\text{C}_9\text{H}_{14}\text{O}_6$ DQFPDDPNMNSRMG-UHFFFAOYSA-N	1.4×10^{10} 6.8×10^7 3.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135MUOH $\text{C}_9\text{H}_{14}\text{O}_5$ CZQCDAJVGDOGTR-UHFFFAOYSA-N	2.1×10^8 2.4×10^8 1.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135MUOOH $\text{C}_9\text{H}_{14}\text{O}_6$ FIFCCDBMOKNVLN-UHFFFAOYSA-N	1.4×10^{10} 1.2×10^8 2.6×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMEBMUOH $\text{C}_{10}\text{H}_{16}\text{O}_5$ MURMIEBRJYKLPQ-UHFFFAOYSA-N	1.7×10^8 1.3×10^8 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DMEBMUOOH $C_{10}H_{16}O_6$ QHUZCFCKANZAOE-UHFFFAOYSA-N	1.2×10^{10} 6.2×10^7 3.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DETLMUOH $C_{11}H_{18}O_5$ BLCXZNPISAMRZ-UHFFFAOYSA-N	1.4×10^8 8.5×10^7 5.4×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DETLMUOOH $C_{11}H_{18}O_6$ ZGRWZBBDFAIEE-UHFFFAOYSA-N	9.8×10^9 4.2×10^7 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETOMECO2H $C_4H_8O_3$ YZGQDNOIGFBYKF-UHFFFAOYSA-N	2.8×10^2 3.6×10^2 7.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEBECO2H $C_5H_{10}O_3$ BKBZFRJHYSCZA-UHFFFAOYSA-N	1.6×10^2 3.9×10^1 8.7×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXMCO2H $C_6H_{12}O_3$ AJQOASGWDCBKJ-UHFFFAOYSA-N	1.8×10^2 1.2×10^2 1.6×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXDLCO2H $C_4H_4O_4$ BIFCJMYQXQSHFE-UHFFFAOYSA-N	9.3×10^5 1.5×10^5 5.4×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMDLCO2H $C_5H_6O_4$ HNJRQDPCPFMZIJ-UHFFFAOYSA-N	5.4×10^5 5.9×10^4 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZEMUCCO2H $C_6H_6O_4$ YYDFWEKDUXDLMC-UHFFFAOYSA-N	2.5×10^6 4.8×10^5 3.7×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXM2DCO2H $C_6H_8O_4$ TVFMSHFDVSCCSQ-UHFFFAOYSA-N	2.9×10^5 2.6×10^4 6.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMEDCO2H $C_7H_{10}O_4$ CTYOPZSWGBYACX-UHFFFAOYSA-N	2.3×10^5 1.5×10^4 5.1×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYMUCCO2H $C_8H_{10}O_4$ CDVXJWVOWNWVPU-UHFFFAOYSA-N	7.6×10^5 8.1×10^4 7.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLMUCO2H $C_9H_{12}O_4$ UVQOKFRFLASUOJ-UHFFFAOYSA-N	6.8×10^5 5.1×10^4 3.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:EPXKTMCO2H $C_6H_8O_4$ BXVGKWFESHJVVPB-UHFFFAOYSA-N	3.1×10^5 5.3×10^4 6.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMKTCO2H $C_6H_8O_4$ FTLSPZDBESPPRR-UHFFFAOYSA-N	3.1×10^5 1.1×10^5 3.3×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXEKTCO2H $C_7H_{10}O_4$ XBMXXNQKRKRJR-UHFFFAOYSA-N	2.8×10^5 1.8×10^5 5.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLEMUCCO2H $C_7H_8O_4$ YZQFSRDEODCLRC-UHFFFAOYSA-N	1.7×10^6 8.3×10^5 1.3×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZMUCCO2H $C_8H_{10}O_4$ BSMJHSATRRVHTI-UHFFFAOYSA-N	1.5×10^6 5.0×10^5 6.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYMUCCO2H $C_8H_{10}O_4$ BMJHPUYAWBLOER-UHFFFAOYSA-N	9.1×10^5 4.2×10^5 3.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYMUCCO2H $C_8H_{10}O_4$ FMBYVAMRNZYNGO-UHFFFAOYSA-N	9.1×10^5 2.9×10^5 8.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBZMUCCO2H $C_9H_{12}O_4$ LXYULRJMRUJREP-UHFFFAOYSA-N	1.4×10^6 3.2×10^5 2.2×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLMUCO2H $C_9H_{12}O_4$ TZAADSLPRMCSBM-UHFFFAOYSA-N	8.0×10^5 2.1×10^5 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZMUCCO2H $C_9H_{12}O_4$ MSVJIRWCUUEXSU-UHFFFAOYSA-N	1.2×10^6 3.0×10^5 2.9×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLMUCO2H $C_9H_{12}O_4$ YZGPSCFZKHZHEQ-UHFFFAOYSA-N	8.0×10^5 1.4×10^5 2.6×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124MUO2H $C_9H_{12}O_4$ VDBMALGYQLXWML-UHFFFAOYSA-N	4.9×10^5 1.4×10^5 4.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135MUO2H $C_9H_{12}O_4$ RLMHTAETULORAU-UHFFFAOYSA-N	6.2×10^5 3.8×10^5 2.1×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A3.9: Ethers (ROR) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DMEBMUO2H $C_{10}H_{14}O_4$ GTDCCBIZJZUTJP-UHFFFAOYSA-N	5.4×10^5 2.0×10^5 1.0×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DETLMUO2H $C_{11}H_{16}O_4$ FTAMRHZAJZCWNK-UHFFFAOYSA-N	4.5×10^5 1.4×10^5 5.5×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMCOOH $C_3H_6O_5$ ISFGCMQHKVEPTP-UHFFFAOYSA-N	2.0×10^4 3.7×10^3 1.9×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMF $C_3H_6O_3$ VKWJMTLAAJULGF-UHFFFAOYSA-N	1.2 2.1 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMFOOH $C_3H_6O_5$ AAAZTRZXKHTMLL-UHFFFAOYSA-N	9.8×10^4 5.6×10^2 9.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMCOH $C_3H_6O_4$ YGODNDLTUXBUQH-UHFFFAOYSA-N	7.4×10^2 7.4×10^2 6.9×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMFOH $C_3H_6O_4$ GDDJZBRTXIGGHV-UHFFFAOYSA-N	3.6×10^3 1.5×10^2 4.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
GOLIG1 $C_4H_6O_5$ LEKXYOUPWKVTGM-UHFFFAOYSA-N	1.5×10^{12}	19000	Wieser et al. (2023)	Q	437
GOLIG2 $C_4H_8O_6$ GWSRJGBNXJVPO-UHFFFAOYSA-N	1.5×10^{15}	24000	Wieser et al. (2023)	Q	437
GOLIG3 $C_4H_{10}O_7$ ADECTKUVLJSMDK-UHFFFAOYSA-N	3.8×10^{18}	29000	Wieser et al. (2023)	Q	437
MGLYFB $C_6H_{10}O_6$ UCPBBDKPOGEXSQ-UHFFFAOYSA-N	7.1×10^8	23000	Wieser et al. (2023)	Q	437
MGLYOXDA $C_6H_{10}O_5$ QMSLRDMQAWWKIZ-UHFFFAOYSA-N	2.0×10^8	16000	Wieser et al. (2023)	Q	437
MGLYOXDB $C_6H_{12}O_6$ IUHMFBWAUOLAFM-UHFFFAOYSA-N	1.5×10^{13}	22000	Wieser et al. (2023)	Q	437



A3.10 Heterocycles with oxygen

Table A3.10: Heterocycles with oxygen

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
β -propiolactone $\text{C}_3\text{H}_4\text{O}_2$ [57-57-8] VEZXCJBBBCKRPI-UHFFFAOYSA-N	1.3×10^1		Ebert et al. (2023)	?	316
2-methyl-1,3-dioxolane $\text{C}_4\text{H}_8\text{O}_2$ [497-26-7] HTWIZMNMWYQRN-UHFFFAOYSA-N	7.9×10^{-1}		Ebert et al. (2023)	?	316
DIEPOXO3 $\text{C}_5\text{H}_8\text{O}_3$ QGQUFAZKBSHWQB-UHFFFAOYSA-N	1.3×10^3	14000	Wieser et al. (2023)	Q	437
IEPOXO4 $\text{C}_5\text{H}_8\text{O}_3$ DNQIATHBSKHPLN-UHFFFAOYSA-N	2.1×10^4	14000	Wieser et al. (2023)	Q	437
2,2-dimethyl-1,3-dioxolane $\text{C}_5\text{H}_{10}\text{O}_2$ [2916-31-6] SIJBDWPVNAYVGY-UHFFFAOYSA-N	4.8×10^{-1}		Ebert et al. (2023)	?	316
METHFDIOL $\text{C}_5\text{H}_{10}\text{O}_3$ UNAIQYXCADSMR-UHFFFAOYSA-N	9.0×10^5	11000	Wieser et al. (2023)	Q	437
3,4-dihydro-2-methoxy-2H-pyran $\text{C}_6\text{H}_{10}\text{O}_2$ [4454-05-1] XCYWUZHUTJDTGS-UHFFFAOYSA-N	9.7×10^{-2}		Ebert et al. (2023)	?	316
maltol $\text{C}_6\text{H}_6\text{O}_3$ [118-71-8] XPCTZQVDEJYUGT-UHFFFAOYSA-N	7.3×10^2		Abraham et al. (2019)	Q	
2-methylfuran $\text{C}_5\text{H}_6\text{O}$ [534-22-5] VQKFNUFAXTZWDK-UHFFFAOYSA-N	1.5×10^{-3}	4100	Wieland et al. (2015)	M	532
3-methylfuran $\text{C}_5\text{H}_6\text{O}$ [930-27-8] KJRRQXYWFQKJIP-UHFFFAOYSA-N	3.2×10^{-3}		Wu et al. (2022a)	Q	413



Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-furanmethanol $C_5H_6O_2$ (furfuryl alcohol) [98-00-0] XPFVYQJUAUNWIIW-UHFFFAOYSA-N	1.3×10^2		Duchowicz et al. (2020)	V	186
	1.2×10^2		HSDB (2015)	V	
	2.5×10^1		Yaws (2003)	X	258
	2.2×10^1		Duieux et al. (2022)	Q	259
	2.4×10^1		Duchowicz et al. (2020)	Q	
	5.3×10^1		Gharagheizi et al. (2012)	Q	
	6.2×10^1		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^1		Raventos-Duran et al. (2010)	Q	244
	4.9×10^1		Raventos-Duran et al. (2010)	Q	245
	3.4×10^1		Hilal et al. (2008)	Q	
tetrahydropyran-2-methanol $C_6H_{12}O_2$ [100-72-1] ROTONRWJLXYJBD-UHFFFAOYSA-N	4.8×10^1		Modarresi et al. (2007)	Q	67
	4.8×10^2		Katritzky et al. (1998)	Q	
	1.1×10^2		Yaws (1999)	?	21, 12
	6.5×10^2		Duchowicz et al. (2020)	V	186
	5.2×10^1		Duchowicz et al. (2020)	Q	
	6.2×10^1		Raventos-Duran et al. (2010)	Q	271, 243
	3.1×10^2		Raventos-Duran et al. (2010)	Q	244
	2.0×10^3		Raventos-Duran et al. (2010)	Q	245
	9.0×10^1		Hilal et al. (2008)	Q	
	8.5×10^1		Modarresi et al. (2007)	Q	67
oxirane C_2H_4O (ethylene oxide) [75-21-8] IAYPIBMASNF SPL-UHFFFAOYSA-N	5.8×10^{-2}	3200	Conway et al. (1983)	M	
	8.3×10^{-2}		Lide and Frederikse (1995)	V	
	8.6×10^{-2}		Mackay et al. (1993)	V	
	5.0×10^{-2}		Hwang et al. (1992)	V	
	6.0×10^{-2}		Keshavarz et al. (2022)	Q	
	1.4×10^{-1}		Duchowicz et al. (2020)	Q	
	9.3×10^{-3}		Wang et al. (2017)	Q	80, 238
	5.9×10^{-2}		Wang et al. (2017)	Q	80, 239
	6.0×10^{-2}		Wang et al. (2017)	Q	80, 240
	3.9×10^{-2}		Hilal et al. (2008)	Q	
	2.9×10^{-2}		Modarresi et al. (2007)	Q	67
	6.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.0×10^{-2}		Katritzky et al. (1998)	Q	
1,2-epoxypropane C_3H_6O (1,2-propylene oxide) [75-56-9] GOOHAUXETOMSMU-UHFFFAOYSA-N	6.7×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	4.1×10^{-2}		Yaws (1999)	?	21
	1.4×10^{-1}		Duchowicz et al. (2020)	V	186
	1.4×10^{-1}		HSDB (2015)	V	
	1.2×10^{-1}		Mackay et al. (2006c)	V	
	1.2×10^{-1}		Lide and Frederikse (1995)	V	
	1.2×10^{-1}		Mackay et al. (1993)	V	
	1.7×10^{-1}		Yaws (2003)	X	237, 12
	5.2×10^{-2}		Goldstein (1982)	X	446
	5.1×10^{-2}	3500	Goldstein (1982)	X	298
	6.3×10^{-2}		Duchowicz et al. (2020)	Q	
	1.2×10^{-1}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-2}		Hilal et al. (2008)	Q	



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Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	1.3×10^{-2}		Katritzky et al. (1998)	Q	
	1.4×10^{-1}		Yaws (1999)	?	21, 12
phenyloxirane C_8H_8O (styrene oxide) [96-09-3] AWMVMTVKBNGEAK-UHFFFAOYSA-N	6.2×10^{-1}		HSDB (2015)	V	
	5.8×10^{-1}		Mackay et al. (2006c)	V	
	5.8×10^{-1}		Mackay et al. (1993)	V	
	6.2×10^{-1}		Meylan and Howard (1991)	V	
	2.5×10^{-1}		Hilal et al. (2008)	Q	
	5.5×10^{-1}		Modarresi et al. (2007)	Q	67
	1.0		Meylan and Howard (1991)	Q	
oxacyclopentadiene C_4H_4O (furan; furfuran) [110-00-9] YLQBMQCUIZJEEH-UHFFFAOYSA-N	1.8×10^{-3}		HSDB (2015)	V	
	1.8×10^{-3}		Mackay et al. (2006c)	V	
	1.8×10^{-3}		Mackay et al. (1993)	V	
	1.8×10^{-3}		Yaws (2003)	X	258
	1.8×10^{-3}		Yaws (2003)	X	237
	2.2×10^{-3}		Dupeux et al. (2022)	Q	259
	4.6×10^{-3}		Hayer et al. (2022)	Q	20
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.3×10^{-3}		Hilal et al. (2008)	Q	
	1.9×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	4.3×10^{-3}		Yao et al. (2002)	Q	229
	1.2×10^{-2}		Katritzky et al. (1998)	Q	
	1.8×10^{-3}		Yaws (1999)	?	21
	1.8×10^{-3}		Yaws and Yang (1992)	?	21
dibenzofuran $C_{12}H_8O$ (2,2'-biphenylene oxide) [132-64-9] TXCDPCPKNAJMEE-UHFFFAOYSA-N	7.4×10^{-2}	5800	Brockbank (2013)	L	1
	4.6×10^{-2}		Duchowicz et al. (2020)	V	186
	4.7×10^{-2}		HSDB (2015)	V	
	7.1×10^{-2}		Mackay et al. (2006b)	V	
	7.2×10^{-2}		Govers and Krop (1998)	V	
	9.1×10^{-2}		Mackay et al. (1992b)	X	364
	8.9×10^{-3}		Yaws (2003)	X	237
	2.8×10^{-1}		Duchowicz et al. (2020)	Q	
	9.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
	8.2×10^{-2}		Saçan et al. (2005)	Q	
	4.7×10^{-2}		Govers and Krop (1998)	Q	
2-furancarboxaldehyde $C_5H_4O_2$ (furfural; 2-furaldehyde) [98-01-1] HYBBIBNJHNGZAN-UHFFFAOYSA-N	2.6		Duchowicz et al. (2020)	V	186
	2.6		HSDB (2015)	V	
	2.7		Mackay et al. (2006c)	V	
	2.7		Mackay et al. (1995)	V	
	3.0		Yaws (2003)	X	258
	3.0		Yaws (2003)	X	237
	9.6		Dupeux et al. (2022)	Q	259



Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.7		Gharagheizi et al. (2012)	Q	
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	6.2		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	3.0		Gharagheizi et al. (2010)	Q	246
	6.0		Hilal et al. (2008)	Q	
	8.1×10^{-1}		Modarresi et al. (2007)	Q	67
	7.2×10^{-2}		Emel'yanenko et al. (2007)	Q	415
	7.2×10^{-2}		Hertel and Sommer (2006)	Q	415
		6100	Kühne et al. (2005)	Q	
		5900	Kühne et al. (2005)	?	
	3.0		Yaws (1999)	?	21
5-methylfurfural $C_6H_6O_2$ [620-02-0] OUDFNZMQXZILJD-UHFFFAOYSA-N	4.7		Ebert et al. (2023)	?	316
2,2-dimethyloxirane C_4H_8O (isobutylene oxide) [558-30-5] GELKGVAFRCJNA-UHFFFAOYSA-N	2.9×10^{-2}		Ebert et al. (2023)	?	316
tetrahydrofuran C_4H_8O (THF) [109-99-9] WYURNTSHIVDZCO-UHFFFAOYSA-N	1.5×10^{-1}	5700	Brockbank (2013)	L	1
	1.5×10^{-1}	5700	Ondo and Dohnal (2007)	M	1
	6.4×10^{-1}		Welke et al. (1998)	M	
	6.0×10^{-1}	4200	Pividal et al. (1992)	M	
	2.2×10^{-1}		Signer et al. (1969)	M	
	1.4×10^{-1}	5700	Cabani et al. (1971b)	T	
	6.0×10^{-2}		Yaws (2003)	X	237, 12
	1.1×10^{-1}		Keshavarz et al. (2022)	Q	
	1.3×10^{-1}		Duchowicz et al. (2020)	Q	
	8.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	6.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-1}		Hilal et al. (2008)	Q	
	3.5×10^{-2}		Modarresi et al. (2007)	Q	67
		4000	Kühne et al. (2005)	Q	
	1.5×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	1.3×10^{-1}		English and Carroll (2001)	Q	230, 231
	2.4×10^{-2}		Katritzky et al. (1998)	Q	
	1.3×10^{-1}		Suzuki et al. (1992)	Q	232
	1.4×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		3200	Kühne et al. (2005)	?	
	1.9×10^{-1}		Yaws (1999)	?	21, 12



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Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-1}		Abraham et al. (1990)	?	
tetrahydrofuran-d8 C_4D_8O (THF-d8) [1693-74-9] WYURNTSHIVDZCO-SVYQBANQSA-N	2.3×10^{-1}	8000	Hiatt (2013)	M	
2-methyltetrahydrofuran $CH_3C_4H_7O$ [96-47-9] JWUJQDFVADABEY-UHFFFAOYSA-N	1.5×10^{-3} 1.1×10^{-1} 1.5×10^{-1} 5.3×10^{-2} 2.0×10^{-2} 1.2×10^{-1} 7.8×10^{-2} 6.1×10^{-2} 1.7×10^{-2} 1.0×10^{-1} 2.4×10^{-2} 9.0×10^{-2} 1.1×10^{-1}	6200	Mackay et al. (1993) Cabani et al. (1971b) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) English and Carroll (2001) Katritzky et al. (1998) Suzuki et al. (1992) Duchowicz et al. (2020) Kühne et al. (2005)	V T Q Q Q Q Q Q Q Q Q Q Q ?	242, 243 244 245 67 230, 260 232 185, 21 ?
2,5-dimethyltetrahydrofuran $(CH_3)_2C_4H_6O$ [1003-38-9] OXMIDRBAFOEQT-UHFFFAOYSA-N	5.5×10^{-2} 1.6×10^{-2} 7.8×10^{-2} 6.2×10^{-2} 3.1×10^{-2} 2.5×10^{-2} 7.9×10^{-2}	6800	Cabani et al. (1971b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001)	T Q Q Q Q Q Q	271, 243 244 245 67 230, 231
tetrahydropyran $C_5H_{10}O$ (THP) [142-68-7] DHXVGJBLRPWPCS-UHFFFAOYSA-N	8.1×10^{-2} 8.3×10^{-2} 1.0×10^{-1} 1.0×10^{-1} 7.8×10^{-2} 1.5×10^{-1} 1.4×10^{-1} 2.0×10^{-2} 2.0×10^{-1} 7.8×10^{-2} 1.1×10^{-1} 6.9×10^{-2} 7.9×10^{-2} 2.0×10^{-1} 2.6×10^{-2} 9.9×10^{-2} 7.9×10^{-2}	5800 5900	Brockbank (2013) Ondo and Dohnal (2007) Mackay et al. (2006c) Mackay et al. (1993) Cabani et al. (1971b) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Suzuki et al. (1992) Duchowicz et al. (2020)	L M V V T Q Q Q Q Q Q Q Q Q Q Q Q ?	1 1 242, 243 244 245 67 248, 249 230, 274 232 185, 21



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Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8		Yaws (1999)	?	21
	2.0		Betterton (1992)	?	533
	2.2		Betterton (1992)	?	534
	1.4		Yaws and Yang (1992)	?	21
1,4-dioxane-d8 $C_4D_8O_2$ (dioxane-d8) [17647-74-4] RYHBNJHYFVUHQT-SVYQBANQSA-N	2.8	6800	Hiatt (2013)	M	
trioxane $C_3H_6O_3$ [110-88-3] BGJSXRVTXTHVRSN-UHFFFAOYSA-N	9.6×10^{-1} 2.7		Yaws (2003) Dupeux et al. (2022)	X Q	258 259
4-methyl-1,3-dioxolan-2-one $C_4H_6O_3$ (propylene carbonate) [108-32-7] RUOJZAUFBMNUDX-UHFFFAOYSA-N	2.9×10^2 2.9×10^2 1.6×10^{-1} 1.4×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Abraham et al. (1990)	V V Q ?	186
1,3,3-trimethyl-2-oxabicyclo[2.2.2]octane $C_{10}H_{18}O$ (eucalyptol; 1,8-cineole) [470-82-6] WEEGYLXZBRQIMU-UHFFFAOYSA-N	5.9×10^{-2} 1.2×10^{-1} 9.0×10^{-2} 7.5×10^{-2} 7.4×10^{-2} 7.8×10^{-2} 5.3×10^{-3} 2.2×10^{-2} 1.3×10^{-1}		Kish et al. (2013) Amoore and Buttery (1978) Duchowicz et al. (2020) Copolovici and Niinemets (2005) Niinemets and Reichstein (2002) Amoore and Buttery (1978) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	M M V V V V Q Q Q	186 67
limonene oxide $C_{10}H_{16}O$ [1195-92-2] CCEFMBVVSUDRLG-UHFFFAOYSA-N	5.6×10^{-2} 5.5×10^{-2} 2.7×10^{-2} 4.8×10^{-2}	4600	Fichan et al. (1999) Duchowicz et al. (2020) van Roon et al. (2005) Duchowicz et al. (2020)	M V V Q	186
dibenzo[b, e][1,4]dioxin $C_{12}H_8O_2$ (dibenzo-p-dioxin) [262-12-4] NFBOHOGPQUYFRF-UHFFFAOYSA-N	8.9×10^{-2} 9.0×10^{-2} 8.5×10^{-2} 9.5×10^{-3} 8.5×10^{-2} 8.1×10^{-2} 2.0 2.7×10^{-2} 6.3×10^{-2} 9.1×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006b) Saçan et al. (2005) Govers and Krop (1998) Shiu et al. (1988) Duchowicz et al. (2020) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	V V V V V V Q Q Q Q	186 535



Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
piperonal $C_8H_6O_3$ [120-57-0] SATCULPHIDQDRE-UHFFFAOYSA-N	1.8×10^1 1.8×10^1 1.6×10^2 4.1×10^2 1.1×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	186 67
paraldehyde $C_6H_{12}O_3$ [123-63-7] SQYNKIJPMEDEEG-UHFFFAOYSA-N	5.8×10^{-1} 2.5×10^{-1} 4.7 3.6×10^{-1} 2.1 6.4×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999)	V V Q Q Q ?	186 67 21, 38
benzofuran C_8H_6O [271-89-6] IANQTJSKSUMEQM-UHFFFAOYSA-N	1.9×10^{-2} 1.9×10^{-2}		HSDB (2015) Hilal et al. (2008)	Q Q	99
γ -nonalactone $C_9H_{16}O_2$ [104-61-0] OALYTRUKMRCXNH-UHFFFAOYSA-N	1.8×10^{-1}		Hertel and Sommer (2006)	Q	415
xanthene $C_{13}H_{10}O$ [92-83-1] GJCOSYZMQJWQCA-UHFFFAOYSA-N	1.3×10^{-1}		Abraham et al. (2019)	Q	
1,5,5,9-tetramethyl-13-oxatricyclo(8.3.0.0(4,9))tridecane $C_{16}H_{28}O$ (ambroxan) [3738-00-9] YPZUZOLGGMJZJO-UHFFFAOYSA-N	2.0×10^{-2} 2.9×10^{-1} 6.5×10^{-2} 1.1×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylcyclopenta[g]-2-benzopyran $C_{18}H_{26}O$ [1222-05-5] ONKNPOPIGWHAQC-UHFFFAOYSA-N	7.6×10^{-2} 7.5×10^{-2} 8.2 8.4×10^{-2} 9.9×10^{-3}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	 287, 288 287, 289 287, 290 287, 291
cinmethylin $C_{18}H_{26}O_2$ [87818-31-3] QMTNOLKHSWIQBE-FGTMUONSA-N	1.3×10^1		Ebert et al. (2023)	?	318



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Table A3.10: Heterocycles with oxygen (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
milbemycin A4 $\text{C}_{32}\text{H}_{46}\text{O}_7$ (milbemectin A4) [51596-11-3] VOZIAWLULBIPN-LRBNKOISA-N	7.7×10^6		Ebert et al. (2023)	?	318



A3.11 Oxidized terpenoids

Table A3.11: Oxidized terpenoids

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(1S-endo)-1,7,7-trimethyl- bicyclo[2.2.1]heptan-2-ol $C_{10}H_{18}O$ (1S-endo-(-)-borneol) [464-45-9] DTGKSKDOIYIVQL-QXFUBDJGSA-N	4.5×10^{-1}		Fichan et al. (1999)	M	
	7.2×10^{-1}		Duchowicz et al. (2020)	V	186
	4.0×10^{-1}		Duchowicz et al. (2020)	Q	
(1R)-1,3,3- trimethylbicyclo[2.2.1]heptan-2-ol $C_{10}H_{18}O$ (endo-(+)-fenchyl alcohol) [2217-02-9] IAIHUHQCLTYTSF-OYNCUSHFSA-N	3.6×10^{-1}		Fichan et al. (1999)	M	
	3.6×10^{-1}		Duchowicz et al. (2020)	V	186
	4.0×10^{-1}		Duchowicz et al. (2020)	Q	
2-(4-methyl-3-cyclohexen-1-yl)-2- propanol $C_{10}H_{18}O$ (α -terpineol) [98-55-5] WUOACPNHFRMFPN-UHFFFAOYSA-N	4.4	2200	Copolovici and Niinemets (2005)	M	
	4.1		Copolovici and Niinemets (2005)	V	
	6.0×10^{-1}	4800	van Roon et al. (2005)	V	
	4.2		Niinemets and Reichstein (2002)	V	
	7.4×10^{-1}	5400	Li et al. (1998)	V	
	6.5		Dupeux et al. (2022)	Q	259
	3.6		Hilal et al. (2008)	Q	
	8.2×10^{-1}		Modarresi et al. (2007)	Q	67
1,2-dimethyl-3-(1-methylethenyl)- cyclopentanol $C_{10}H_{18}O$ (plinol) [72402-00-7] ZRVPDCMGGOSDKG-UHFFFAOYSA-N	5.3×10^{-1}		Duchowicz et al. (2020)	V	186
	4.0×10^{-1}	17000	Li et al. (1998)	V	
	3.4×10^{-1}		Duchowicz et al. (2020)	Q	
	1.2		Hilal et al. (2008)	Q	
	1.6		Modarresi et al. (2007)	Q	67
1-methyl-4-(1-methylethyl)-7- oxabicyclo[2.2.1]heptane $C_{10}H_{18}O$ (1,4-cineole) [470-67-7] RFFOTVCVTJUTAD-UHFFFAOYSA-N	3.9×10^{-2}		Helburn et al. (2008)	M	
	7.4×10^{-2}		Copolovici and Niinemets (2005)	V	
	1.4×10^{-1}	4000	van Roon et al. (2005)	V	
1,7,7-trimethyl- bicyclo[2.2.1]heptan-2-one $C_{10}H_{16}O$ (camphor) [76-22-2] DSSYKIVIOFKYAU-UHFFFAOYSA-N	1.2×10^{-1}		Duchowicz et al. (2020)	V	186
	1.2×10^{-1}		HSDB (2015)	V	
	1.1		Copolovici and Niinemets (2005)	V	
	5.4×10^{-1}	4800	van Roon et al. (2005)	V	
	8.2×10^{-1}		Niinemets and Reichstein (2002)	V	
	2.3×10^{-2}		Duchowicz et al. (2020)	Q	
	3.5×10^{-1}		Modarresi et al. (2007)	Q	67



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Table A3.11: Oxidized terpenoids (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,7,7-trimethyl-3-oxatricyclo[4.1.1.0(2,4)]octane $C_{10}H_{16}O$ (-)- α -pinene oxide [1686-14-2] NQFUSWIGRKFQAHK-UHFFFAOYSA-N	2.3×10^{-2}		Fichan et al. (1999)	M	
	2.3×10^{-2}		Duchowicz et al. (2020)	V	186
	2.4×10^{-2}		Copolovici and Niinemets (2005)	V	
	5.4×10^{-2}	4400	van Roon et al. (2005)	V	
	2.2×10^{-2}		Duchowicz et al. (2020)	Q	
5-methyl-2-(1-methylethylidene)-cyclohexanone $C_{10}H_{16}O$ (pulegone) [89-82-7] NZGWDASTMWDZIW-UHFFFAOYSA-N	2.8×10^{-1}	5300	van Roon et al. (2005)	V	
	1.7×10^{-1}		HSDB (2015)	Q	99
exo-2-[(1,7,7-trimethylbicyclo[2.2.1]hept-2-yl)-oxy]ethanol $C_{12}H_{22}O_2$ (arbanol) [7070-15-7] IWWCSDGEIDYEJV-JBLDHEPKSA-N	1.0	4100	Li et al. (1998)	V	
bornyl acetate $C_{12}H_{20}O_2$ [5655-61-8] KGEKLUUHTZCSIP-SCVCMEIPSA-N	3.8×10^{-4}	1700	Copolovici and Niinemets (2015)	M	
β -ionone $C_{13}H_{20}O$ [79-77-6] PSQYTAPXSHCGMF-BQYQJAHWSA-N	1.2		Fichan et al. (1999)	M	
	1.2×10^{-1}		Duchowicz et al. (2020)	V	186
	1.5×10^{-2}		Abney (2021)	Q	399
	6.6×10^{-3}		Duchowicz et al. (2020)	Q	
nerolidol $C_{15}H_{26}O$ [7212-44-4] FQTLCLSUCSAZDY-UHFFFAOYSA-N	3.2×10^{-4}	4300	Copolovici and Niinemets (2015)	M	



A3.12 Miscellaneous

Table A3.12: Miscellaneous

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
oxoethanoic acid OHCCOOH (glyoxylic acid) [298-12-4] HHLFWLYXYJOTON-UHFFFAOYSA-N	1.1×10^2 1.1×10^2 1.1×10^2 1.1×10^2 1.3×10^4 1.5×10^1 6.9×10^1 3.3×10^3 7.8×10^4 2.5×10^8 3.1×10^3 8.9×10^1	4800 4800 4800 4800	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Ip et al. (2009) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Saxena and Hildemann (1996) Warneck (2005)	L L L M Q Q Q Q Q Q Q E ?	460 460 80, 238 80, 239 80, 240 99 242, 243 244 245 401 536
hydroxyethanoic acid HOCH ₂ COOH (glycolic acid) [79-14-1] AEMRFAOFKBGASW-UHFFFAOYSA-N	2.8×10^2 2.8×10^2 2.8×10^2 2.8×10^2 1.9×10^3 1.4×10^5 5.3×10^4 1.2×10^3 3.1×10^4 1.2×10^2	4000 4000 4000 4000	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Ip et al. (2009) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L L L M Q Q Q Q Q Q	460, 537 460, 538 80, 238 80, 239 80, 240 242, 243 244 245
2-hydroxyethanal HOCH ₂ CHO (hydroxyacetaldehyde; glycolaldehyde) [141-46-8] WGCNASOHLSPBMP-UHFFFAOYSA-N	3.9×10^2 3.9×10^2 4.1×10^2 9.9×10^2 2.9×10^2 1.8×10^1 1.3×10^1 1.1×10^2 4.2 3.1×10^1 7.8×10^3 9.9×10^{-1} 6.5×10^2 2.4×10^2 4.1×10^2	4600 4600 4600 7600 4600	Burkholder et al. (2019) Burkholder et al. (2015) Betterton and Hoffmann (1988) Lee and Zhou (1993) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005)	L L M C Q Q Q Q Q Q Q Q Q Q Q Q Q ?	460 460 460 87 299 80, 238 80, 239 80, 240 271, 243 244 245 245 67 185, 21 ?



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-hydroxypropanoic acid $\text{CH}_3\text{CHOHCOOH}$ (lactic acid) [50-21-5] JVTAAEKZCFNVJCJ-UHFFFAOYSA-N	1.2×10^2 1.2×10^2 1.1×10^3 9.9×10^2 9.9×10^3 9.9×10^1 6.9×10^5		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Saxena and Hildemann (1996)	V V Q Q Q Q E	186 242, 243 244 245 401
glycidaldehyde $\text{C}_3\text{H}_4\text{O}_2$ [765-34-4] IWYRWIUNAVNFPE-UHFFFAOYSA-N	1.9×10^1		HSDB (2015)	Q	99
trimethylene oxide $\text{C}_3\text{H}_6\text{O}$ (1,3-epoxypropane; 1,3-propylene oxide; oxetane) [503-30-0] AHHWIHXENZJRFG-UHFFFAOYSA-N	4.0×10^{-1} 3.9×10^{-1} 1.2×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
2,3-dihydroxypropanal $\text{C}_3\text{H}_6\text{O}_3$ (glyceraldehyde) [367-47-5] MNQZXJOMYWMBOLU-UHFFFAOYSA-N	1.4×10^4 2.6×10^4 8.1×10^2 2.0×10^8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Saxena and Hildemann (1996)	Q Q Q E	80, 238 80, 239 80, 240 401
dihydroxyacetone $\text{C}_3\text{H}_6\text{O}_3$ [96-26-4] RXKJFZQQPGTFL-UHFFFAOYSA-N	1.8×10^6 5.5×10^3 3.8×10^3 5.0×10^3		HSDB (2015) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	V Q Q Q	 80, 238 80, 239 80, 240
2-methoxyethanol $\text{C}_3\text{H}_8\text{O}_2$ (methyl cellosolve) [109-86-4] XNWFRZJHXBZDAG-UHFFFAOYSA-N	4.4 2.2×10^{-4} 1.4×10^1 3.7×10^1 6.8 1.4×10^1 8.9 5.4×10^1 1.3×10^1 3.1×10^1 2.0×10^1 2.5×10^2 2.1×10^1 4.0×10^1 1.5×10^1 3.0×10^1	7500 -730 7300	Hiatt (2013) Ashworth et al. (1988) Johanson and Dynésius (1988) Cabani et al. (1978) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	M M M T Q Q Q Q Q Q Q Q Q Q Q Q ?	 14 539, 42, 278 14 184 80, 238 80, 239 80, 240 242, 243 244 245 67 185, 21



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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-oxobutanoic acid OHC(CH ₂) ₂ COOH [692-29-5] UIUJIQZEACWQSV-UHFFFAOYSA-N	8.3 × 10 ³ 3.2 × 10 ⁵ 2.1 × 10 ⁴ 4.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Saxena and Hildemann (1996)	Q Q Q E	80, 238 80, 239 80, 240 401
2,3-dihydroxybutanedioic acid HOOCCHOHCHOHCOOH (tartaric acid) [87-69-4] FEWJPZIEWOKRBE-JCYAYHJZSA-N	4.9 × 10 ¹⁵ 4.9 × 10 ¹⁵ 1.3 × 10 ¹³ 5.1 × 10 ¹⁰ 1.3 × 10 ¹³ 9.9 × 10 ¹⁵		Burkholder et al. (2019) Burkholder et al. (2015) Compernelle and Müller (2014a) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Saxena and Hildemann (1996)	L L V X Q Q E	540 237, 12 246 401
3-oxapentane-1,5-diol HO(CH ₂) ₂ O(CH ₂) ₂ OH (diethylene glycol) [111-46-6] MTHSVFCYNBDYFN-UHFFFAOYSA-N	3.3 × 10 ⁴ 3.3 × 10 ⁴ 9.0 × 10 ³ 2.5 × 10 ³ 1.6 × 10 ³ 1.7 × 10 ³ 4.9 × 10 ³ 7.7 × 10 ³ 3.8 × 10 ⁴ 2.4 × 10 ⁴ 2.2 × 10 ⁴ 2.0 × 10 ⁷ 3.3 × 10 ⁴		Yaws (2003) Yaws (2003) Dupeux et al. (2022) Olsen et al. (2016) Olsen et al. (2016) Olsen et al. (2016) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Saxena and Hildemann (1996) Yaws (1999)	X X Q Q Q Q Q Q Q Q Q E ?	258 237 259 425 426 427 99 246 229 401 21
hydroxybutanedioic acid HOOCCH ₂ CHOHCOOH (malic acid) [6915-15-7] BJEYPYKJPYRNKOW-UHFFFAOYSA-N	2.7 × 10 ⁸ 1.7 × 10 ⁹ 1.2 × 10 ⁷ 5.3 × 10 ⁸ 1.4 × 10 ⁹ 2.0 × 10 ¹¹		Compernelle and Müller (2014a) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Saxena and Hildemann (1996)	V X Q Q Q E	237, 372 99 246 401
2-ethoxyethanol C ₄ H ₁₀ O ₂ [110-80-5] ZNQVEEAIQZEUHB-UHFFFAOYSA-N	8.9 3.3 × 10 ¹ 2.8 × 10 ¹ 9.2 5.8 7.4 3.4 × 10 ¹ 9.8 2.5 × 10 ¹ 1.2 × 10 ¹ 1.6 × 10 ² 1.6 × 10 ¹ 3.2 × 10 ¹ 7.5 2.1 × 10 ¹	8000	Johanson and Dynésius (1988) Abraham et al. (1994a) Cabani et al. (1978) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	M R T Q Q Q Q Q Q Q Q Q Q Q ?	14 299 80, 238 80, 239 80, 240 242, 243 244 245 67 185, 21



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.9×10^1		Yaws (1999)	?	21, 12
2-methoxy-1-propanol $C_4H_{10}O_2$ [1589-47-5] YTTFFPATQICAQN-UHFFFAOYSA-N	5.5×10^2		HSDB (2015)	Q	99
1,1-dimethoxyethane $C_4H_{10}O_2$ [534-15-6] SPEUIVXLLWOEMJ-UHFFFAOYSA-N	1.5×10^{-1}		HSDB (2015)	Q	99
4-methylene-2-oxetanone $C_4H_4O_2$ (acetyl ketene) [674-82-8] WASQWSOJHCZDFK-UHFFFAOYSA-N	1.6×10^{-2}		HSDB (2015)	Q	99
2(5H)-furanone $C_4H_4O_2$ [497-23-4] VIHAEDVKXSOUAT-UHFFFAOYSA-N	3.5×10^{-1} 3.6×10^2 1.4×10^3 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	80, 238 80, 239 80, 240 99
2,2'-bioxirane $C_4H_6O_2$ [1464-53-5] ZFIVKAOQEXOYFY-UHFFFAOYSA-N	2.8×10^2		HSDB (2015)	Q	99
γ -butyrolactone $C_4H_6O_2$ [96-48-0] YEJRWHAVMIAJKC-UHFFFAOYSA-N	1.9×10^2 1.9×10^2 6.5×10^1 1.2		Duchowicz et al. (2020) HSDB (2015) Dupeux et al. (2022) Duchowicz et al. (2020)	V V Q Q	186 259
ethyloxirane C_4H_8O (1,2-epoxybutane) [106-88-7] RBACIKXCRWGCBB-UHFFFAOYSA-N	5.5×10^{-2} 5.5×10^{-2} 6.9×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
2,3-epoxy-2-methyl-1,4-butanediol $C_5H_{10}O_3$ (IEPOX) FLVAIUBQNOKHB-UHFFFAOYSA-N	5.0×10^4 1.3×10^5 3.2×10^4 2.7×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Pye et al. (2013) Chan et al. (2010)	Q Q Q Q Q	80, 238 80, 239 80, 240 492 541
	1.3×10^6 1.9×10^5 3.0×10^5		Eddingsaas et al. (2010) Vasilakos et al. (2021) Woo and McNeill (2015)	Q E ?	542 543 466
MEDICO1CO $C_5H_8O_4$ RRXXDUUNVWXRFN-UHFFFAOYSA-N	2.5×10^7	12000	Wieser et al. (2023)	Q	437



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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MEDICO4CO $C_5H_8O_4$ GXKSWJOBVXKANI-UHFFFAOYSA-N	3.1×10^6	12000	Wieser et al. (2023)	Q	437
METRICO $C_5H_{10}O_4$ LCGBCDAYKOJPSO-UHFFFAOYSA-N	7.3×10^6	12000	Wieser et al. (2023)	Q	437
2,3-epoxy-6-oxo-heptenal $C_7H_8O_3$ (MCM:TLEPOXMUC) YHZGHUOBDYTWMQ-UHFFFAOYSA-N	1.1×10^4 1.4×10^4 2.8×10^3 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) McNeill et al. (2012)	Q Q Q Q	80, 238 80, 239 80, 240
3-hydroxy-2-butanone $C_4H_8O_2$ (acetoin) [513-86-0] ROWKJAVDOGW PAT-UHFFFAOYSA-N	3.1 5.7×10^{-1} 7.8 1.1×10^2 1.2×10^1 9.9×10^{-1}		Wu et al. (2022b) Straver and de Loos (2005) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	M M Q Q Q Q	544 80, 238 80, 239 80, 240 99
2-(vinylloxy)ethanol $C_4H_8O_2$ (ethylene glycol monovinyl ether) [764-48-7] VUIWJRYTWUGOOF-UHFFFAOYSA-N	3.9×10^1		HSDB (2015)	Q	99
2-methyloxetane C_4H_8O [2167-39-7] FZIIIDOXPOQKBP-UHFFFAOYSA-N	1.2×10^{-1}		HSDB (2015)	Q	99
5-oxopentanoic acid $OHC(CH_2)_3COOH$ [5746-02-1] VBKPPDYGFUZOAJ-UHFFFAOYSA-N	3.9×10^1		Saxena and Hildemann (1996)	E	401
2-oxopentanedioic acid $HOOC(CH_2)_2COCOOH$ (α -keto glutaric acid) [328-50-7] KPGXRSRHYNQIFN-UHFFFAOYSA-N	9.9×10^6		Saxena and Hildemann (1996)	E	401
tetrahydro-2-furanmethanol $C_5H_{10}O_2$ (tetrahydrofurfuryl alcohol) [97-99-4] BSYVTEYKTMVBMK-UHFFFAOYSA-N	4.4×10^1 1.7×10^2 2.4×10^3		Yaws (2003) Dupeux et al. (2022) HSDB (2015)	X Q Q	258 259 99



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
xylose $C_5H_{10}O_5$ [58-86-6] PYMYPHUHKUWMLA-VPENINKCSA-N	8.2×10^3		HSDB (2015)	Q	99
2-(2-methoxyethoxy)ethanol $C_5H_{12}O_3$ (diethylene glycol monomethyl ether) [111-77-3] SBASXUCJHJRPEV-UHFFFAOYSA-N	6.2×10^5		HSDB (2015)	Q	99
3,6-dioxaoctane-1,8-diol $HO(CH_2CH_2O)_3H$ (triethylene glycol) [112-27-6] ZIBGPFATKBEMQZ-UHFFFAOYSA-N	1.1×10^4 5.9×10^3 6.7×10^3 3.1×10^5 8.9×10^9		Olsen et al. (2016) Olsen et al. (2016) Olsen et al. (2016) HSDB (2015) Saxena and Hildemann (1996)	Q Q Q Q E	425 426 427 99 401
2-oxepanone $C_6H_{10}O_2$ (caprolactone) [502-44-3] PAPBSGBWRJIAAV-UHFFFAOYSA-N	5.5×10^{-2}		HSDB (2015)	Q	99
glycidyl ether $C_6H_{10}O_3$ (diglycidyl ether) [2238-07-5] GYZLOYUZLXAJU-UHFFFAOYSA-N	7.6×10^2		HSDB (2015)	Q	99
4-hydroxy-4-methyl-2-pentanone $C_6H_{12}O_2$ (diacetone alcohol) [123-42-2] SWXVUIWOUIDPGS-UHFFFAOYSA-N	3.8×10^1 1.3×10^1 3.1×10^2 7.4×10^{-2} 7.6×10^1 8.0×10^2 6.8×10^1 2.3×10^3		Duchowicz et al. (2020) Yaws (2003) Dupeux et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	V X Q Q Q Q Q Q	186 258 259 80, 238 80, 239 80, 240 545
1-propoxy-2-propanol $C_6H_{14}O_2$ [1569-01-3] FENFUOGYJVOCRY-UHFFFAOYSA-N	2.9×10^2		HSDB (2015)	Q	545
2-(2-ethoxyethoxy)ethanol $C_6H_{14}O_3$ (diethylene glycol monoethyl ether) [111-90-0] XXJWXESWEXIICW-UHFFFAOYSA-N	4.4×10^2 4.5×10^2 9.0×10^2 6.4×10^1		Duchowicz et al. (2020) HSDB (2015) Dupeux et al. (2022) Duchowicz et al. (2020)	V V Q Q	186 259 99



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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5,8-trioxanonane $C_6H_{14}O_3$ (diglyme) [111-96-6] SBZXBUIDTXKZTM-UHFFFAOYSA-N	1.9×10^1 1.9×10^1 6.2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
oxydipropanol $C_6H_{14}O_3$ (dipropylene glycol) [25265-71-8] SZXQTJUDPRGNJN-UHFFFAOYSA-N	1.8×10^3		HSDB (2015)	V	
<i>p</i> -benzoquinone $C_6H_4O_2$ (1,4-benzoquinone) [106-51-4] AZQWKYJCGOJGHM-UHFFFAOYSA-N	2.1×10^{-2} 5.1 1.7×10^4 2.3×10^1 2.1×10^{-2} 7.7		HSDB (2015) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Yaffe et al. (2003) Katritzky et al. (1998)	V Q Q Q Q Q	80, 238 80, 239 80, 240 248, 249
5-hydroxymethylfurfural $C_6H_6O_3$ (5-hydroxymethyl-2-furfuraldehyde) [67-47-0] NOEGNKMFWQHSLSB-UHFFFAOYSA-N	1.8×10^4		HSDB (2015)	Q	99
5-hydroxy-2-(hydroxymethyl)-4H-pyran-4-one $C_6H_6O_4$ (kojic acid) [501-30-4] BEJNERDRQOWKJM-UHFFFAOYSA-N	4.1×10^1		HSDB (2015)	Q	99
2-hydroxy-1,2,3-propanetricarboxylic acid $C_6H_8O_7$ (citric acid) [77-92-9] KRKNYBCHXYNGOX-UHFFFAOYSA-N	3.1×10^{15} 3.1×10^{15} 7.6×10^{12} 4.8×10^{11} 7.9×10^{12} 3.0×10^{16}		Burkholder et al. (2019) Burkholder et al. (2015) Compernelle and Müller (2014a) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Saxena and Hildemann (1996)	L L V X Q Q E	546 237, 12 246 401
(butoxymethyl)oxirane $C_7H_{14}O_2$ (<i>n</i> -butyl glycidyl ether) [2426-08-6] YSUQLAYJZDEMOT-UHFFFAOYSA-N	4.0×10^{-1} 3.9×10^{-1} 8.9×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-(1,1-dimethylethoxy)-2-propanol $C_7H_{16}O_2$ (propylene glycol mono-t-butyl ether) [57018-52-7] GQCZPFJGIXHZMB-UHFFFAOYSA-N	2.1		HSDB (2015)	V	
2-[2-(2-methoxyethoxy)ethoxy]ethanol $C_7H_{16}O_4$ (triethylene glycol monomethyl ether) [112-35-6] JLGLQAWTXXGVEM-UHFFFAOYSA-N	2.8×10^8		HSDB (2015)	Q	99
2-methyl- <i>p</i> -benzoquinone $C_7H_6O_2$ [553-97-9] VTWDKFNVLAEHL-UHFFFAOYSA-N	3.1 6.9×10^3 2.1×10^1 5.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	80, 238 80, 239 80, 240 99
patulin $C_7H_6O_4$ [149-29-1] ZRWPUFFVAOMNM-UHFFFAOYSA-N	9.0×10^4		HSDB (2015)	Q	99
1-hydroxy-3-methoxybenzene $C_7H_8O_2$ (3-methoxyphenol) [150-19-6] ASHGTJPOSUFTGB-UHFFFAOYSA-N	1.7×10^2 1.7×10^2 4.7×10^2 2.0×10^2 2.5×10^2 3.1×10^2 1.3×10^2 6.4×10^1 5.0×10^2 1.7×10^2		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	R Q Q Q Q Q Q Q Q Q ?	 299 242, 243 244 245 67 185, 21
mequinol $C_7H_8O_2$ (4-methoxyphenol) [150-76-5] NWWWBRKAWDGAB-UHFFFAOYSA-N	6.9×10^{-1} 1.9×10^1 6.9×10^{-1} 2.0		Yaws (2003) HSDB (2015) Gharagheizi et al. (2010) Yaws (1999)	X Q Q ?	237, 14 99 246 21, 14
1-hydroxy-2-methoxybenzene $C_7H_8O_2$ (guaiacol; 2-methoxyphenol) [90-05-1] LHGVFZTZFXWLCP-UHFFFAOYSA-N	8.6 9.0 7.7 9.1 9.6 7.7 4.1×10^1 5.0	7900 7600	McFall et al. (2020) Wieland et al. (2015) Sagebiel et al. (1992) Sagebiel et al. (1992) Mackay et al. (2006c) Sagebiel et al. (1992) Leuenberger et al. (1985) Abraham et al. (1994a)	M M M M V V V R	547 416



Rolf Sander: Compilation of Henry's law constants

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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^1		Keshavarz et al. (2022)	Q	
	5.6×10^{-1}		Abney (2021)	Q	399
	8.7		Duchowicz et al. (2020)	Q	299
	8.2		McFall et al. (2020)	Q	474
	5.2		Hilal et al. (2008)	Q	
	7.7		Modarresi et al. (2007)	Q	67
		6700	Kühne et al. (2005)	Q	
	1.2×10^1		English and Carroll (2001)	Q	230, 274
	6.4×10^1		Katritzky et al. (1998)	Q	
	5.1×10^2		Nirmalakhandan et al. (1997)	Q	
	8.2		Duchowicz et al. (2020)	?	185, 21
		7800	Kühne et al. (2005)	?	
	3.3×10^{-1}		Yaws (1999)	?	21, 14
1,4-dimethoxybenzene $C_8H_{10}O_2$ (hydroquinone dimethyl ether) [150-78-7] OHBQPCCRFSCAX-UHFFFAOYSA-N	2.8×10^{-3}		HSDB (2015)	Q	99
4-methyl-2-methoxyphenol $C_8H_{10}O_2$ [93-51-6] PETRWTHZSKVLR-UHFFFAOYSA-N	7.7 7.1 1.0×10^1 1.6×10^1 5.2 3.1×10^1 3.1 2.5×10^2 5.2 2.5 7.3 6.2×10^1 7.4		Sagebiel et al. (1992) Sagebiel et al. (1992) Sagebiel et al. (1992) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) Katritzky et al. (1998) Duchowicz et al. (2020) Kühne et al. (2005)	M M V Q Q Q Q Q Q Q Q Q Q ?	
		7100			271, 243 244 245 67
		7900			248, 249 185, 21
tyrosol $C_8H_{10}O_2$ (4-hydroxybenzeneethanol) [501-94-0] YCCILVSKPBXVIP-UHFFFAOYSA-N	3.5×10^5		McFall et al. (2020)	Q	474
1,3-dimethoxy-2-hydroxybenzene $C_8H_{10}O_3$ (2,6-dimethoxyphenol) [91-10-1] KLIDCXVFHGNNTM-UHFFFAOYSA-N	3.7×10^1 5.0×10^1 1.2×10^2 1.6×10^1 1.2 7.8×10^2 4.9×10^2		Sagebiel et al. (1992) Sagebiel et al. (1992) Sagebiel et al. (1992) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M M V Q Q Q Q	
		6700			271, 243 244



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.9×10^3		Raventos-Duran et al. (2010)	Q	245
	3.5×10^2		Hilal et al. (2008)	Q	
	1.1×10^2		Modarresi et al. (2007)	Q	67
		7300	Kühne et al. (2005)	Q	
	4.3×10^1		Duchowicz et al. (2020)	?	185, 21
		7600	Kühne et al. (2005)	?	
hexahydro-1,3-isobenzofurandione $C_8H_{10}O_3$ (hexahydrophthalic anhydride) [85-42-7] MUTGBJKUEZFXGO-UHFFFAOYSA-N	4.7×10^{-1}		HSDB (2015)	Q	99
vanillyl alcohol $C_8H_{10}O_3$ [498-00-0] ZENOXNGFMSCLLL-UHFFFAOYSA-N	9.6×10^4 2.0×10^5		McFall et al. (2020) McFall et al. (2020)	M Q	474
1-methoxy-4-methylbenzene $C_8H_{10}O$ [104-93-8] CHLICZRVGXEOU-UHFFFAOYSA-N	2.1×10^{-3}		HSDB (2015)	Q	99
dimethoxane $C_8H_{14}O_4$ [828-00-2] PHMNXPYGVPEQSJ-UHFFFAOYSA-N	8.0×10^1		HSDB (2015)	Q	99
RO5R5 $C_8H_{14}O_4$ MESHXYGXEHAFFE-UHFFFAOYSA-N	1.3×10^5	17000	Wieser et al. (2023)	Q	437
5-hydroxy-2-octanone $C_8H_{16}O_2$ (C82CO5OH) KZPPEBIAPHLFQD-UHFFFAOYSA-N	1.6×10^3	11000	Wieser et al. (2023)	Q	437
metaldehyde $C_8H_{16}O_4$ [108-62-3] GKKDCARASOJPNG-UHFFFAOYSA-N	1.9×10^{-1} 2.9×10^{-1}		HSDB (2015) Maniere et al. (2011)	V ?	12, 165
diethyl carbitol $C_8H_{18}O_3$ (diethylene glycol diethyl ether) [112-36-7] RRQYJINTUHWNHU-UHFFFAOYSA-N	8.9×10^1 9.0×10^1 9.6×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186



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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-[2-(2-ethoxyethoxy)ethoxy]ethanol $C_8H_{18}O_4$ (triethylene glycol monoethyl ether) [112-50-5] WFSMVVDJSNMRAR-UHFFFAOYSA-N	2.1×10^8		HSDB (2015)	Q	99
tetraethylene glycol $C_8H_{18}O_5$ [112-60-7] UWHCKJMYHZGTIT-UHFFFAOYSA-N	1.8×10^{13}		HSDB (2015)	Q	99
vanillin $C_8H_8O_3$ [121-33-5] MWOOGQJBHARFG-UHFFFAOYSA-N	1.7×10^3 4.6×10^3 4.7×10^3 1.3×10^3 1.3×10^3 1.8×10^3 1.8×10^3 1.8×10^3 4.0×10^3 2.8×10^2 4.9×10^3 3.1×10^2 1.2×10^5 1.3×10^3	6800	Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Dupeux et al. (2022) Abney (2021) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010)	L V V X X Q Q Q Q Q Q Q Q Q Q	1 186 258 237 259 259 399 242, 243 244 245 246
ethylparaben $C_9H_{10}O_3$ [120-47-8] NUVBSKCKDOMJSU-UHFFFAOYSA-N	2.1×10^3		HSDB (2015)	Q	99
ethyl vanillin $C_9H_{10}O_3$ [121-32-4] CBOQJANXLMLOSS-UHFFFAOYSA-N	1.2×10^4		HSDB (2015)	V	
1-phenoxypropan-2-ol $C_9H_{12}O_2$ (propylene glycol phenyl ether) [770-35-4] IBLKWZIFZMJLFL-UHFFFAOYSA-N	3.4×10^2		HSDB (2015)	V	
triacetin $C_9H_{14}O_6$ [102-76-1] URAYPUMNDPQOKB-UHFFFAOYSA-N	8.0×10^2 8.2×10^2 2.7×10^2 2.0×10^3 2.5×10^2 6.2×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V V Q Q Q Q	186 242, 243 244 245



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tripropylene glycol $C_9H_{20}O_4$ [24800-44-0] LCZVXSXRMJUNFX-UHFFFAOYSA-N	3.0×10^9		HSDB (2015)	Q	99
coumarin $C_9H_6O_2$ [91-64-5] ZYGJZDHTFUPRJ-UHFFFAOYSA-N	9.9×10^1 1.0×10^2 1.3×10^2 5.1		Duchowicz et al. (2020) HSDB (2015) Dupeux et al. (2022) Duchowicz et al. (2020)	V V Q Q	186 259
4-ethylguaiacol $C_9H_{12}O_2$ (4-ethyl-2-methoxyphenol) [2785-89-9] CHWNEIVBYREQRF-UHFFFAOYSA-N	5.5		McFall et al. (2020)	Q	474
4-methylsyringol $C_9H_{12}O_3$ [6638-05-7] ZFBNSOJNZBLLS-UHFFFAOYSA-N	3.8×10^1		McFall et al. (2020)	Q	474
acetovanillone $C_9H_{10}O_3$ (apocynin) [498-02-2] DFYRUELUNQRZTB-UHFFFAOYSA-N	6.3×10^3		McFall et al. (2020)	Q	474
syringaldehyde $C_9H_{10}O_4$ [134-96-3] KCDXJAYRVLXPFO-UHFFFAOYSA-N	3.7×10^5		McFall et al. (2020)	Q	474
5-(1-propenyl)-1,3-benzodioxole $C_{10}H_{10}O_2$ (isosafrole) [120-58-1] VHVOLFRBFDOSH-UHFFFAOYSA-N	2.7×10^{-4}		HSDB (2015)	Q	99
safrole $C_{10}H_{10}O_2$ [94-59-7] ZMQAAUBTXCRIC-UHFFFAOYSA-N	1.1		HSDB (2015)	Q	99
5-propyl-1,3-benzodioxole $C_{10}H_{12}O_2$ (dihydrosafrole) [94-58-6] MYEIDJPOUKASEC-UHFFFAOYSA-N	8.2×10^{-1}		HSDB (2015)	Q	99



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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methoxy-4-(1-propenyl)phenol $C_{10}H_{12}O_2$ (isoeugenol) [97-54-1] BJIOGJUNALELMI-UHFFFAOYSA-N	2.7 1.7×10^1		HSDB (2015) McFall et al. (2020)	V Q	474
<i>p</i> -cresyl glycidyl ether $C_{10}H_{12}O_2$ [26447-14-3] CUFXMPWHOWYNSO-UHFFFAOYSA-N	1.3×10^1		HSDB (2015)	Q	99
4-(4-hydroxyphenyl)-2-butanone $C_{10}H_{12}O_2$ (raspberry ketone) [5471-51-2] NJGBTKGETPDVIK-UHFFFAOYSA-N	1.8×10^4		HSDB (2015)	Q	447
guaifenesin $C_{10}H_{14}O_4$ [93-14-1] HSRJKNPTNIJEKV-UHFFFAOYSA-N	2.2×10^5		HSDB (2015)	Q	99
RO5R4O2H $C_{10}H_{18}O_7$ YORZXZYHORHTRW-UHFFFAOYSA-N	3.6×10^{10}	24000	Wieser et al. (2023)	Q	437
levomenthol $C_{10}H_{20}O$ (<i>L</i> -menthol) [2216-51-5] NOOLISFMDJSKH-AEJSXWLSA-N	6.6×10^{-1}		HSDB (2015)	Q	99
diethylene glycol hexyl ether $C_{10}H_{22}O_3$ [112-59-4] GZMAAYIALGURDQ-UHFFFAOYSA-N	5.7×10^2 5.8×10^2 1.0×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
2-[2-(2-butoxyethoxy)ethoxy]ethanol $C_{10}H_{22}O_4$ (triethylene glycol monobutyl ether) [143-22-6] COBPKKZHLDDMTB-UHFFFAOYSA-N	1.0×10^8		HSDB (2015)	Q	99
4-propylguaiaicol $C_{10}H_{14}O_2$ (2-methoxy-4-propylphenol) [2785-87-7] PXIKRTCSSLJURC-UHFFFAOYSA-N	4.3 4.2		McFall et al. (2020) McFall et al. (2020)	M Q	474



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
vanillyl ethyl ether $C_{10}H_{14}O_3$	4.1×10^2 4.8×10^2		McFall et al. (2020) McFall et al. (2020)	M Q	474
(4-(ethoxymethyl)-2-methoxyphenol) [13184-86-6] KOCVACNWDMSLBM-UHFFFAOYSA-N					
4-ethylsyringol $C_{10}H_{14}O_3$ [14059-92-8] PJWDIHUFLXQRFF-UHFFFAOYSA-N	3.0×10^1		McFall et al. (2020)	Q	474
guaiacylacetone $C_{10}H_{12}O_3$	1.2×10^4 1.1×10^4		McFall et al. (2020) McFall et al. (2020)	M Q	474
(1-(4-hydroxy-3-methoxyphenyl)-2-propanone) [2503-46-0] LFVCJQWZGDLHSD-UHFFFAOYSA-N					
acetosyringone $C_{10}H_{12}O_4$ [2478-38-8] OJOBTAOGJIWAGB-UHFFFAOYSA-N	5.0×10^5		McFall et al. (2020)	Q	474
coniferylaldehyde $C_{10}H_{10}O_3$ [458-36-6] UCZOBXQKIUMJZ-UHFFFAOYSA-N	4.4×10^4		McFall et al. (2020)	Q	474
4-methoxy-6-(2-propenyl)-1,3-benzodioxole $C_{11}H_{12}O_3$ (myristicin) [607-91-0] BNWJOHGLIBDBOB-UHFFFAOYSA-N	1.8×10^1		HSDB (2015)	Q	99
butylparaben $C_{11}H_{14}O_3$ [94-26-8] QFOHBWFCKVYLES-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	Q	99
2-tert-butyl-4-methoxyphenol $C_{11}H_{16}O_2$ (butylated hydroxyanisole) [25013-16-5] MRBKEAMVRSRSLQPH-UHFFFAOYSA-N	8.4		HSDB (2015)	Q	99



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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-hydroxy-2-naphthalenecarboxylic acid $C_{11}H_8O_3$ [92-70-6] ALKYHXVLJMQRLQ-UHFFFAOYSA-N	7.0×10^3		HSDB (2015)	Q	99
4-propylsyringol $C_{11}H_{16}O_3$ [6766-82-1] YHEWWEXPVKCVFY-UHFFFAOYSA-N	7.2×10^3		Zhang et al. (2010)	Q	287, 288
	1.2×10^4		Zhang et al. (2010)	Q	287, 289
	3.8×10^5		Zhang et al. (2010)	Q	287, 290
	8.2×10^3		Zhang et al. (2010)	Q	287, 291
zingerone $C_{11}H_{14}O_3$ (vanillylacetone) [122-48-5] OJYLAHXKWMRDGS-UHFFFAOYSA-N	1.2×10^4 8.4×10^3		McFall et al. (2020) McFall et al. (2020)	M Q	474
allylsyringol $C_{11}H_{14}O_3$ [5438-54-0] IYIVYBWBUPWAW-UHFFFAOYSA-N	6.3×10^2		McFall et al. (2020)	Q	474
4-propenylsyringol $C_{11}H_{14}O_3$ [6635-22-9] YFHOHYAUMDHSBX-UHFFFAOYSA-N	1.1×10^3		McFall et al. (2020)	Q	474
propionylsyringol $C_{11}H_{14}O_4$ [5650-43-1] CXCPJZXJNRBTGF-UHFFFAOYSA-N	3.8×10^5		McFall et al. (2020)	Q	474
sinapylaldehyde $C_{11}H_{12}O_4$ [4206-58-0] CDICDSOGTRCHMG-ONEGZZNKSA-N	3.1×10^6		McFall et al. (2020)	Q	474
arbutin $C_{12}H_{16}O_7$ [497-76-7] BJRNKVDLDYUGJ-RMPHRYRLSA-N	8.2×10^{13}		HSDB (2015)	Q	99
butopyronoxyl $C_{12}H_{18}O_4$ (indalone) [532-34-3] OKIJSNGRQAOIGZ-UHFFFAOYSA-N	2.1×10^2		HSDB (2015)	Q	99



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diethylene glycol bis(methacrylate) $C_{12}H_{18}O_5$ [2358-84-1] XFCMNSHQOZQILR-UHFFFAOYSA-N	1.2×10^4		HSDB (2015)	Q	99
dikegulac $C_{12}H_{18}O_7$ [18467-77-1] FWCBATIDXGJRMF-FLNNQWLSA-N	5.2×10^{10}		HSDB (2015)	Q	99
propofol $C_{12}H_{18}O$ [2078-54-8] OLBCVFGFOZPWHH-UHFFFAOYSA-N	4.7		HSDB (2015)	Q	99
lactitol $C_{12}H_{24}O_{11}$ [585-86-4] VQHSOMBJVWLPSR-JVCRWLNRSA-N	1.2×10^{16}		HSDB (2015)	Q	99
maltitol $C_{12}H_{24}O_{11}$ [585-88-6] VQHSOMBJVWLPSR-WUJBLFYSA-N	2.3×10^{15}		HSDB (2015)	Q	99
naphthalic anhydride $C_{12}H_6O_3$ [81-84-5] GRSMWKLPSNHDHA-UHFFFAOYSA-N	1.6×10^1		HSDB (2015)	Q	99
methoxsalen $C_{12}H_8O_4$ (8-methoxypsoralen) [298-81-7] QXKHYNVANLEOEG-UHFFFAOYSA-N	2.5×10^2		HSDB (2015)	Q	99
syringylacetone $C_{12}H_{16}O_4$ [112468-41-4] NULBEPOZYDYWOV-UHFFFAOYSA-N	1.2×10^6 5.7×10^4		McFall et al. (2020) McFall et al. (2020)	M Q	474
butyrylsyringol $C_{12}H_{16}O_4$ [69271-91-6] QFHXMVPZYMTCS-UHFFFAOYSA-N	2.9×10^5		McFall et al. (2020)	Q	474
bisphenol F $C_{13}H_{12}O_2$ [620-92-8] PXKLMJQFEQBLVD-UHFFFAOYSA-N	1.9×10^6		HSDB (2015)	Q	447



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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ibuprofen $C_{13}H_{18}O_2$ [15687-27-1] HEFNWSXXWATRW-UHFFFAOYSA-N	6.6×10^1 2.0×10^2		HSDB (2015) Abraham et al. (2019)	V Q	
trinexapac-ethyl $C_{13}H_{16}O_5$ [95266-40-3] RVKCCVTZORVGD-QXMHVHEDSA-N	5.1 7.6×10^5 1.9×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 165
benzoyl peroxide $C_{14}H_{10}O_4$ [94-36-0] OMPJBNCRMGITSC-UHFFFAOYSA-N	2.8 2.8 1.1×10^2 4.1×10^2 4.3×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
oxybenzone $C_{14}H_{12}O_3$ (2-hydroxy-4-methoxybenzophenone) [131-57-7] DXGLGDHPHMLXJC-UHFFFAOYSA-N	6.6×10^2		HSDB (2015)	Q	99
resveratrol $C_{14}H_{12}O_3$ [501-36-0] LUKBXSAWLPMSZ-OWOJBTEDSA-N	7.0×10^{10}		HSDB (2015)	Q	447
pindone $C_{14}H_{14}O_3$ [83-26-1] RZKYEQDPDZUERB-UHFFFAOYSA-N	1.1×10^6		HSDB (2015)	Q	99
1,1'-[oxybis(methylene)]bisbenzene $C_{14}H_{14}O$ (dibenzyl ether) [103-50-4] MHDVGSVTJDSBDK-UHFFFAOYSA-N	1.5 3.7×10^{-1} 3.1×10^{-1} 1.2×10^2 3.6		Duchowicz et al. (2020) Dupeux et al. (2022) Duchowicz et al. (2020) HSDB (2015) Modarresi et al. (2007)	V Q Q Q Q	186 259 99 67
butanoic acid, 3,3-bis((1,1-dimethylethyl)dioxy)-, ethyl ester $C_{14}H_{28}O_6$ [55794-20-2] HARQWLDROVMFJE-UHFFFAOYSA-N	5.0 7.0×10^{-3} 1.3×10^2 2.4×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-hydroxy-9,10-anthracenedione $C_{14}H_8O_3$ (1-hydroxyanthraquinone) [129-43-1] BTLXPBYPYBNQNR-UHFFFAOYSA-N	1.4×10^3 1.4×10^3 3.5×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
danthron $C_{14}H_8O_4$ (1,8-dihydroxyanthraquinone) [117-10-2] QBPFLULOKWLNW-UHFFFAOYSA-N	1.8×10^5		HSDB (2015)	Q	99
bisphenol A $C_{15}H_{16}O_2$ [80-05-7] IISBACLAFKSPIT-UHFFFAOYSA-N	2.5×10^5		HSDB (2015)	V	
atractylenolide III $C_{15}H_{20}O_3$ [73030-71-4] FBMORZZOJSDNRQ-GLQYFDAESA-N	1.0×10^3		HSDB (2015)	Q	99
deoxynivalenol $C_{15}H_{20}O_6$ [51481-10-8] LINOMUASTDIRTM-WHNKEALZSA-N	4.9×10^8		HSDB (2015)	Q	447
nivalenol $C_{15}H_{20}O_7$ [23282-20-4] UKOTXHQERFPCBU-UHFFFAOYSA-N	1.4×10^{10}		HSDB (2015)	Q	99
tributylin $C_{15}H_{26}O_6$ [60-01-5] UYXTWWCETRIEDR-UHFFFAOYSA-N	1.0×10^3		HSDB (2015)	Q	99
diosmetin $C_{16}H_{12}O_6$ [520-34-3] MBNGWHIJMBWFHU-UHFFFAOYSA-N	3.3×10^{12}		HSDB (2015)	Q	447
shikonin $C_{16}H_{16}O_5$ [517-89-5] NEZONWMXZKDMKF-SNVBAGLBSA-N	1.2×10^9		HSDB (2015)	Q	447



Rolf Sander: Compilation of Henry's law constants

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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-bis(4-hydroxyphenyl)butane $C_{16}H_{18}O_2$ (bisphenol B) [77-40-7] HTVITOHKHWFKO-UHFFFAOYSA-N	8.2×10^5		HSDB (2015)	Q	447
ethyl 3,3-bis(<i>tert</i> -amylperoxy)butyrate $C_{16}H_{32}O_6$ [67567-23-1] NICWAKGKDAMIOM-UHFFFAOYSA-N	2.9		Zhang et al. (2010)	Q	287, 288
	3.7×10^{-3}		Zhang et al. (2010)	Q	287, 289
	3.0×10^1		Zhang et al. (2010)	Q	287, 290
	1.5×10^2		Zhang et al. (2010)	Q	287, 291
aflatoxin B1 $C_{17}H_{12}O_6$ [1162-65-8] OOIQSTLJSLGHID-UHFFFAOYSA-N	7.0×10^7		HSDB (2015)	Q	99
aflatoxin G1 $C_{17}H_{12}O_7$ [1165-39-5] XWIYFDMXXLINPU-UHFFFAOYSA-N	2.0×10^7		HSDB (2015)	Q	99
aflatoxin B2 $C_{17}H_{14}O_6$ [7220-81-7] WWSYXEZEXMQWHT-UHFFFAOYSA-N	3.3×10^9		HSDB (2015)	Q	99
aflatoxin G2 $C_{17}H_{14}O_7$ [7241-98-7] WPCVRWVBBXIRMA-UHFFFAOYSA-N	9.0×10^8		HSDB (2015)	Q	99
bisphenol C $C_{17}H_{20}O_2$ [79-97-0] YMTYZTXUZLQUSF-UHFFFAOYSA-N	9.0×10^5		HSDB (2015)	Q	447
PR-toxin $C_{17}H_{20}O_6$ [56299-00-4] GSPFUBNBRPVALJ-VIEAGMIOSA-N	1.6×10^8		HSDB (2015)	Q	99
fusarenon X $C_{17}H_{22}O_8$ [23255-69-8] XGCUCFKWVIWWNW-UHFFFAOYSA-N	2.1×10^{11}		HSDB (2015)	Q	99
dihydratanshinone I $C_{18}H_{14}O_3$ [87205-99-0] HARGZZNYNSYSGJ-JTQLQIEISA-N	7.6×10^4		HSDB (2015)	Q	99



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diethylstilbestrol $C_{18}H_{20}O_2$ [56-53-1] RGLYKWWBQGJZGM-ISLYRVAYSA-N	1.7×10^2		HSDB (2015)	Q	99
laminarin $C_{18}H_{32}O_{16}$ [9008-22-4] DBTMGCOVALSLOR-AWHOAIGYSA-N	$>2.9 \times 10^6$		Maniere et al. (2011)	?	72, 165
estrone $C_{18}H_{22}O_2$ [53-16-7] DNXHEGUUPJUMQT-UHFFFAOYSA-N	2.6×10^4		HSDB (2015)	Q	99
estradiol $C_{18}H_{24}O_2$ [50-28-2] VOXZDWNVPVJITMN-AWDGRILASA-N	2.7×10^5		HSDB (2015)	Q	99
estriol $C_{18}H_{24}O_3$ [50-27-1] PROQIPRRNZUXQM-PVGHXWSTSA-N	7.6×10^6		HSDB (2015)	Q	99
nandrolone $C_{18}H_{26}O_2$ [434-22-0] NPAGDVCDWIYMMC-SVXFNXITSA-N	3.7×10^3		HSDB (2015)	Q	99
diufenolan $C_{18}H_{20}O_4$ [63837-33-2] ZDOOQPFYGHZFCV-UHFFFAOYSA-N	1.5×10^2 1.2×10^3 1.5×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	186
dicumarol $C_{19}H_{12}O_6$ [66-76-2] DOBMPNYZJYQDGZ-UHFFFAOYSA-N	7.0×10^7		HSDB (2015)	Q	99
coumatetralyl $C_{19}H_{16}O_3$ [5836-29-3] ULSLJYXHZDTLQK-UHFFFAOYSA-N	1.7×10^8		HSDB (2015)	V	
warfarin $C_{19}H_{16}O_4$ [81-81-2] PJVVWTKQMONHTI-UHFFFAOYSA-N	3.7×10^4 3.6×10^2		HSDB (2015) Mackay et al. (2006d)	V V	



Rolf Sander: Compilation of Henry's law constants

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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tanshinone II $C_{19}H_{18}O_3$ [568-72-9] HYXITZLLTYIPOF-UHFFFAOYSA-N	2.0×10^3		HSDB (2015)	Q	99
gibberellic acid $C_{19}H_{22}O_6$ [77-06-5] IXORZMNAPKEEDV-UHFFFAOYSA-N	6.2×10^9 1.3×10^6		HSDB (2015) Maniere et al. (2011)	Q ?	99 165
prallethrin $C_{19}H_{24}O_3$ [23031-36-9] SMKRRQBMYOFFMU-UHFFFAOYSA-N	6.2		HSDB (2015)	V	
testolactone $C_{19}H_{24}O_3$ [968-93-4] BPEWUONYVDABNZ-LHXSAFEUSA-N	1.6×10^2		HSDB (2015)	Q	99
androstenedione $C_{19}H_{26}O_2$ [63-05-8] AEMFNILZOJQLW-JRCHKSGSSA-N	2.7×10^2		HSDB (2015)	Q	99
diacetoxyscirpenol $C_{19}H_{26}O_7$ [2270-40-8] AUGQEEXBDZUJY-UHFFFAOYSA-N	1.0×10^{11}		HSDB (2015)	Q	447
testosterone $C_{19}H_{28}O_2$ [58-22-0] MUMGGOZAMZWBJJ-JZJKZLICSA-N	2.8×10^3		HSDB (2015)	Q	99
5 α -androst-16-en-4-one $C_{19}H_{28}O$ (androstenone) [18339-16-7] HFVMLYAGWXSTQI-QYXZOKGRSA-N	3.4×10^{-2}		Amoore and Buttery (1978)	M	
oxandrolone $C_{19}H_{30}O_3$ [53-39-4] QSLJIVKCVHQPLV-WPMSWULFSA-N	4.3×10^2		HSDB (2015)	Q	99
piperonyl butoxide $C_{19}H_{30}O_5$ [51-03-6] FIPWRIJSWJWJAI-UHFFFAOYSA-N	1.1×10^5		HSDB (2015)	Q	99



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methoprene $C_{19}H_{34}O_3$ [40596-69-8] NFGXHKASABOEWE-LDRANXPESA-N	1.4		HSDB (2015)	V	
fluorescein $C_{20}H_{12}O_5$ [2321-07-5] GNBHRKFJIUOQI-UHFFFAOYSA-N	1.1×10^{11}		HSDB (2015)	Q	99
phenolphthalein $C_{20}H_{14}O_4$ [77-09-8] KJFMBFZCATUALV-UHFFFAOYSA-N	1.1×10^{10}		HSDB (2015)	Q	99
avobenzone $C_{20}H_{22}O_3$ [70356-09-1] XNEFYCZVKIDDMS-UHFFFAOYSA-N	4.9×10^4		HSDB (2015)	Q	447
ethinyl estradiol $C_{20}H_{24}O_2$ [57-63-6] BFPYWIDHMRZLRN-UHFFFAOYSA-N	1.2×10^6		HSDB (2015)	Q	99
norethnodrel $C_{20}H_{26}O_2$ [68-23-5] ICTXHFFSOAJUMG-CEVCPLMDSA-N	7.6×10^3		HSDB (2015)	Q	99
norethindrone $C_{20}H_{26}O$ [68-22-4] VIKNJXKGJWUCNN-BROHZWGRSA-N	1.7×10^4		HSDB (2015)	Q	99
methandrostenolone $C_{20}H_{28}O_2$ [72-63-9] XWALNWXMLVGSFR-NSDIEPNESA-N	4.5×10^3		HSDB (2015)	Q	99
cinerin I $C_{20}H_{28}O_3$ [25402-06-6] FMTFEIJHMMQUJI-FPLPWBNLSA-N	1.0×10^1		HSDB (2015)	Q	99
17-methyltestosterone $C_{20}H_{30}O_2$ [58-18-4] GCKMFJBGXUYNAG-NSDIEPNESA-N	2.1×10^3		HSDB (2015)	Q	99



Rolf Sander: Compilation of Henry's law constants

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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
drostanolone $C_{20}H_{32}O_2$ (dromostanolone) [58-19-5] IKXILDNPCZPPRV-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	Q	99
curcumin $C_{21}H_{20}O_6$ [458-37-7] VFLDPWHFBUODDF-FCXRPNKRSA-N	1.4×10^{16}		HSDB (2015)	Q	99
bisphenol A diglycidyl ether $C_{21}H_{24}O_4$ [1675-54-3] LCFVJGUPQDGYKZ-UHFFFAOYSA-N	2.2×10^5		HSDB (2015)	Q	99
mestranol $C_{21}H_{26}O_2$ [72-33-3] IMSSROKUHAOUJS-ALAWOQLPSA-N	2.2×10^3		HSDB (2015)	Q	99
prednisone $C_{21}H_{26}O_5$ [53-03-2] XOFYZVNMUHLCC-NUBBXXJUSA-N	3.5×10^4		HSDB (2015)	Q	99
norgestrel $C_{21}H_{28}O_2$ [6533-00-2] WWYNJERNGUHSO-ZUHHCLADSA-N	1.3×10^4		HSDB (2015)	Q	99
levonorgestrel $C_{21}H_{28}O_2$ [797-63-7] WWYNJERNGUHSO-XUDSTZEESA-N	1.3×10^4		HSDB (2015)	Q	99
pyrethrin I $C_{21}H_{28}O_3$ [121-21-1] ROVGZAWFACYCSP-CMDGGOBGSA-N	1.3×10^1 2.2×10^{-1} 8.4×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
cinerin II $C_{21}H_{28}O_5$ [121-20-0] SHCRDCOTRILILT-WOBDGSLYSA-N	1.1×10^4		HSDB (2015)	Q	99
prednisolone $C_{21}H_{28}O_5$ [50-24-8] OIGNJSKKLXVSLU-UHFFFAOYSA-N	3.7×10^2		HSDB (2015)	Q	99



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dronabinol $C_{21}H_{30}O_2$ (delta 9-tetrahydrocannabinol) [1972-08-3] CYQFCXCEBYINGO-UHFFFAOYSA-N	4.1×10^1		HSDB (2015)	Q	99
progesterone $C_{21}H_{30}O_2$ [57-83-0] RJKFOVLPORLFTN-UHFFFAOYSA-N	1.5×10^2		HSDB (2015)	Q	99
hydrocortisone $C_{21}H_{30}O_5$ [50-23-7] JYGXADMDTFJGBT-NDNUHCHRSA-N	1.7×10^2		HSDB (2015)	Q	99
calusterone $C_{21}H_{32}O_2$ [17021-26-0] IVFYLRMMHVYGH-UHFFFAOYSA-N	1.6×10^3		HSDB (2015)	Q	99
oxymetholone $C_{21}H_{32}O_3$ [434-07-1] ICMWWNHDUZJFDW-RCXBLOTCSA-N	6.6×10^3		HSDB (2015)	Q	99
resmethrin $C_{22}H_{26}O_3$ [10453-86-8] VEMKTZHVVJILDY-UHFFFAOYSA-N	4.7×10^{-2} 7.6×10^1 2.2×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
pyrethrin II $C_{22}H_{28}O_5$ [121-29-9] VJFUPGQZSXIULQ-VKTMSVCMSA-N	4.5×10^2 4.5×10^2 3.8×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
methylprednisolone $C_{22}H_{30}O_5$ [83-43-2] VHRSUDSXCMQTMA-UHFFFAOYSA-N	2.7×10^2		HSDB (2015)	Q	99
medroxyprogesterone $C_{22}H_{32}O_3$ [520-85-4] FRQMUZJSZHZSGN-HBNHAYAOSA-N	7.6×10^2		HSDB (2015)	Q	99
dimethirimol $C_{23}H_{24}O_5$ [5221-53-4] VNKCZJKGJAEOCW-WXUKJITCSA-N	$> 2.3 \times 10^{10}$		MacBean (2012a)	?	



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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
rotenone $C_{23}H_{22}O_6$ [83-79-4] JUUIOZPCNVVQFO-UHFFFAOYSA-N	8.8×10^7		HSDB (2015)	Q	99
phenothrin $C_{23}H_{26}O_3$ [26002-80-2] SBNFWQZLDJGRLK-UHFFFAOYSA-N	1.5		MacBean (2012b)	X	350
spiromesifen $C_{23}H_{30}O_4$ [283594-90-1] GOLXNESZPUPJE-UHFFFAOYSA-N	1.8×10^{-2}		HSDB (2015)	V	
digoxigenin $C_{23}H_{34}O_5$ [1672-46-4] SHIBSTMRCDXJLN-KCZCNTNESA-N	4.3×10^5		HSDB (2015)	Q	99
annatto $C_{24}H_{28}O_4$ [1393-63-1] ZVKOASAVGLETCT-LRRSNBNMSA-N	1.5×10^{11}		HSDB (2015)	Q	99
acequinocyl $C_{24}H_{32}O_4$ [57960-19-7] QDRXWCAVUNHOGA-UHFFFAOYSA-N	1.0×10^1 1.0×10^1		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
T-2 mycotoxin $C_{24}H_{34}O_9$ [21259-20-1] SSHHYBPAMCLKRH-UHFFFAOYSA-N	1.8×10^{12}		HSDB (2015)	Q	99
milk thistle extract $C_{25}H_{22}O_{10}$ [84604-20-6] SEBFKMXJBCUCAI-VGHNRKBZSA-N	6.2×10^{17}		HSDB (2015)	Q	99
simvastatin $C_{25}H_{38}O_5$ [79902-63-9] RYMZZMVNJRMUDD-UHFFFAOYSA-N	3.5×10^4		HSDB (2015)	Q	99
calcitriol $C_{27}H_{44}O_3$ (1,25-dihydroxycholecalciferol) [32222-06-3] GMRQFYUYWCNGIN-NKMMMEOESA-N	3.2×10^1		HSDB (2015)	Q	99



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
paricalcitol $C_{27}H_{44}O_3$ [131918-61-1] BPKAHTKRCLCHEA-UBFJEZKGSAN	2.6×10^1		HSDB (2015)	Q	99
cholecalciferol $C_{27}H_{44}O$ [67-97-0] QYSXJUF SXHHAJI-SMGPGMQOSA-N	4.3×10^{-2}		HSDB (2015)	Q	99
cholesterol $C_{27}H_{46}O$ [57-88-5] HVYWMOML DIMFJA-VUDDUNTSA-N	5.8×10^{-2}		HSDB (2015)	Q	99
ergosterol $C_{28}H_{44}O$ [57-87-4] DNVPQKQSNYMLRS-CVGRQQCSA-N	6.2×10^{-2}		HSDB (2015)	Q	99
dihydrotachysterol $C_{28}H_{46}O$ [67-96-9] DTSXXSAWQHPLEF-GFVAUXBKSA-N	2.7×10^{-2}		HSDB (2015)	Q	99
etoposide $C_{29}H_{32}O_{13}$ [33419-42-0] VJJPU SNTGOMMGY-KWGSHVRASA-N	5.8×10^{24}		HSDB (2015)	Q	99
stigmasterol $C_{29}H_{48}O$ [83-48-7] HCXVJBMSMIARIN-BASBAMEESA-N	3.8×10^{-2}		HSDB (2015)	Q	99
pseudohypericin $C_{30}H_{16}O_9$ [55954-61-5] YXBUQQDFTYOHQI-UHFFFAOYSA-N	5.5×10^{23}		HSDB (2015)	Q	99
gossypol $C_{30}H_{30}O_8$ [303-45-7] QBKSWRVVCFDOT-UHFFFAOYSA-N	4.3×10^{22}		HSDB (2015)	Q	99
maslinic acid $C_{30}H_{48}O_4$ [4373-41-5] MDZKJHQSJHYOHJ-LLICELPBSA-N	2.8×10^5		HSDB (2015)	Q	447



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Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
milbemectin $C_{31}H_{44}O_7$ [51596-10-2] ZLBGSRMUSVULIE-GSMJGMFJSA-N	6.5×10^2 3.9×10^2		Maniere et al. (2011) Maniere et al. (2011)	? ?	241, 165 241, 165
difenacoum $C_{31}H_{24}O_3$ [56073-07-5] FVQITOLQYMWVU-UHFFFAOYSA-N	7.0×10^6		HSDB (2015)	Q	447
nonoxynol 9 $C_{33}H_{60}O_{10}$ [26571-11-9] FBWNMEQMRUMQSO-UHFFFAOYSA-N	1.8×10^{16}		HSDB (2015)	Q	99
azadirachtin $C_{35}H_{44}O_{16}$ [11141-17-6] FTNJWQOZFUQQJ-GWTPYEAIISA-N	3.5×10^{19}		HSDB (2015)	V	
monensin $C_{36}H_{62}O_{11}$ [17090-79-8] GAOZTHIDHYLHMS-LXKLZWMJSA-N	4.9×10^{18}		HSDB (2015)	Q	99
gossypure $C_{36}H_{64}O_4$ [50933-33-0] BXJHOKLLMOYSRQ-QOXWLJPHSA-N	6.6×10^{-2}		HSDB (2015)	V	
capsanthin $C_{40}H_{56}O_3$ [465-42-9] VYIRVAXUEZSDNC-RDJLEWNRSA-N	3.4×10^2		HSDB (2015)	Q	99
heptamaloxyloglucan $C_{40}H_{70}O_{33}$ [870721-81-6] RAUODYOTTYNEJP-RQESCVSBSA-N	4.2×10^{13}		Maniere et al. (2011)	?	12, 165
digitoxin $C_{41}H_{64}O_{13}$ [71-63-6] WDJUZGPOPHTGOT-UCKSZOHFSA-N	7.6×10^{19}		HSDB (2015)	Q	99
digoxin $C_{41}H_{64}O_{14}$ [20830-75-5] LTMHDMANZUIPE-PUGKRICDSA-N	2.1×10^{21}		HSDB (2015)	Q	99



Table A3.12: Miscellaneous (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pyrethrum $C_{43}H_{56}O_8$ [8003-34-7] VXSIXFKKSNRRRO-YWUDCVDHSA-N	1.5×10^1 1.4×10^4 1.3×10^1		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011)	Q ? ?	99 165 165
punicalagin $C_{48}H_{28}O_{30}$ [65995-63-3] SKNLUADAGHCXKF-UHFFFAOYSA-N	5.5×10^{10}		HSDB (2015)	Q	99
abamectin $C_{48}H_{72}O_{14}$ [71751-41-2] RRZXIRBKKLTSOM-IGNCFFBFA-N	7.0×10^3 $>3.7 \times 10^2$		HSDB (2015) Maniere et al. (2011)	V ?	12, 165
notoginsenoside R1 $C_{48}H_{84}O_{18}$ [80418-24-2] ZBXDHDDTAIOMHK-UWGJVKBGSA-N	6.6×10^{25}		HSDB (2015)	Q	99
triolein $C_{57}H_{104}O_6$ [122-32-7] PHYFQTYBJUILEZ-IUPFWZBJSA-N	1.0×10^{-2}		HSDB (2015)	Q	447
tristearin $C_{57}H_{110}O_6$ [555-43-1] DCXXMTOCNZCJGO-UHFFFAOYSA-N	7.0×10^{-3}		HSDB (2015)	Q	99



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.3×10^{-1}		Yao et al. (2002)	Q	229
	9.5×10^{-1}		English and Carroll (2001)	Q	230, 231
	4.7×10^{-1}		Katritzky et al. (1998)	Q	
	4.6×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	2.4		Russell et al. (1992)	Q	279
	1.3		Suzuki et al. (1992)	Q	232
	8.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	9.9×10^{-1}		Mackay et al. (2006d)	?	
	3.8×10^{-1}		Yaws (1999)	?	21, 12
	8.0×10^{-1}		Abraham et al. (1990)	?	
		6500	Abraham (1984)	?	21
1H-1,2,4-triazole $C_2H_3N_3$ [288-88-0] NSPMIYGKQJPBQR-UHFFFAOYSA-N	6.6		HSDB (2015)	Q	99
dicyandiamide $C_2H_4N_4$ (cyanoguanidine) [461-58-5] QGBSISYHAICWAH-UHFFFAOYSA-N	4.3×10^4		HSDB (2015)	Q	99
ethylenimine C_2H_5N [151-56-4] NOWKCMXCCJGMRR-UHFFFAOYSA-N	8.2×10^{-1} 8.2×10^{-1} 2.9×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
1,2-dimethylhydrazine $C_2H_8N_2$ [540-73-8] DIIIISSCIXVANO-UHFFFAOYSA-N	1.8		HSDB (2015)	V	
1,1-dimethylhydrazine $C_2H_8N_2$ [57-14-7] RHUYHJGZVWXEHW-UHFFFAOYSA-N	7.6×10^{-1}		HSDB (2015)	V	
1-propanamine $C_3H_7NH_2$ (propylamine) [107-10-8] WGYKZJWCGVVSQN-UHFFFAOYSA-N	6.6×10^{-1} 6.6×10^{-1} 6.7×10^{-1} 5.6×10^{-1} 5.0×10^{-1} 6.6×10^{-1} 7.8×10^{-1} 6.6×10^{-1} 1.4 2.3 4.8×10^{-1} 2.1	6400 6700	Burkholder et al. (2019) Burkholder et al. (2015) Brockbank (2013) Leng et al. (2015a) Altschuh et al. (1999) Christie and Crisp (1967) Butler and Ramchandani (1935) Plyasunov et al. (2001) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	L L L M M M M T Q Q Q Q	184 67



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Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.7×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.6×10^{-1}		Yao et al. (2002)	Q	229
	5.2×10^{-1}		Katritzky et al. (1998)	Q	
	3.6×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.6		Russell et al. (1992)	Q	279
	1.0		Suzuki et al. (1992)	Q	232
	6.7×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	7.8×10^{-1}		Mackay et al. (2006d)	?	
	3.9×10^{-1}		Yaws (1999)	?	21
	6.7×10^{-1}		Abraham et al. (1990)	?	
		6700	Abraham (1984)	?	21
2-propanamine C_3H_9N (isopropylamine) [75-31-0] JJWLVOIRVHMVIS-UHFFFAOYSA-N	2.2×10^{-1}		Duchowicz et al. (2020)	V	186
	2.2×10^{-1}		Hilal et al. (2008)	C	
	8.9×10^{-1}		Duchowicz et al. (2020)	Q	
	2.1×10^{-1}		Hilal et al. (2008)	Q	
	2.4		Modarresi et al. (2007)	Q	67
	2.3×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	1.6×10^{-1}		Yao et al. (2002)	Q	229
	3.1×10^{-1}		Katritzky et al. (1998)	Q	
	1.3×10^{-1}		Yaws (1999)	?	21, 12
propanedinitrile $C_3H_2N_2$ (malononitrile) [109-77-3] CUONGYYJVDODC-UHFFFAOYSA-N	7.5×10^1		Duchowicz et al. (2020)	V	186
	2.0×10^1		Duchowicz et al. (2020)	Q	
	7.8×10^2		HSDB (2015)	Q	99
	2.0×10^1		Gharagheizi et al. (2012)	Q	
	6.3×10^1		Yaws (1999)	?	21, 12
2-methylaziridine C_3H_7N [75-55-8] OZDGMLOYKSFPLSE-UHFFFAOYSA-N	9.9×10^{-1}		Duchowicz et al. (2020)	V	186
	1.2×10^1		Duchowicz et al. (2020)	Q	
	1.2		Yaffe et al. (2003)	Q	248, 249
	1.5		Katritzky et al. (1998)	Q	
1,2-diaminopropane $C_3H_{10}N_2$ [78-90-0] AOHJOMDDJHIJH-UHFFFAOYSA-N	1.4×10^3	7400	Nguyen (2013)	M	11
1-butanamine $C_4H_9NH_2$ (butylamine) [109-73-9] HQABUPZFAYXKJW-UHFFFAOYSA-N	5.6×10^{-1}		Burkholder et al. (2019)	L	
	5.6×10^{-1}		Burkholder et al. (2015)	L	
	5.4×10^{-1}		Brockbank (2013)	L	
	5.6×10^{-1}		Altschuh et al. (1999)	M	
	5.2×10^{-1}		Rytting et al. (1978)	M	
	5.6×10^{-1}		Christie and Crisp (1967)	M	
	6.5×10^{-1}		Butler and Ramchandani (1935)	M	
	2.2×10^{-1}		Hwang et al. (1992)	V	
	4.5×10^{-1}		Amoore and Buttery (1978)	V	
	3.7×10^{-1}		Yaws (2003)	X	258
	3.6×10^{-1}		Yaws (2003)	X	237
	2.1×10^{-1}		Dupeux et al. (2022)	Q	259



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-1}		Keshavarz et al. (2022)	Q	
	2.3		Duchowicz et al. (2020)	Q	299
	6.5×10^{-1}		Li et al. (2014)	Q	241
	4.0×10^{-1}		Gharagheizi et al. (2010)	Q	246
	2.9×10^{-1}		Hilal et al. (2008)	Q	
	1.5		Modarresi et al. (2007)	Q	67
	5.2×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.4×10^{-1}		Yao et al. (2002)	Q	229
	7.3×10^{-1}		English and Carroll (2001)	Q	230, 231
	4.0×10^{-1}		Katritzky et al. (1998)	Q	
	2.8×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.1		Russell et al. (1992)	Q	279
	7.9×10^{-1}		Suzuki et al. (1992)	Q	232
	5.7×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	6.6×10^{-1}		Mackay et al. (2006d)	?	
	2.2×10^{-1}		Yaws (1999)	?	21
	5.2×10^{-1}		Abraham et al. (1990)	?	
		7100	Abraham (1984)	?	21
2-butanamine $C_4H_{11}N$ (<i>sec</i> -butylamine) [13952-84-6] BHRZNVHARXXAHW-UHFFFAOYSA-N	4.0×10^{-1}	7700	Kish et al. (2013)	M	548
	6.5×10^{-2}		Duchowicz et al. (2020)	V	186
	6.5×10^{-2}		Hilal et al. (2008)	C	
	9.1×10^{-1}		Duchowicz et al. (2020)	Q	
	1.6×10^{-1}		Hilal et al. (2008)	Q	
	1.7		Modarresi et al. (2007)	Q	67
	2.2×10^{-1}		Katritzky et al. (1998)	Q	
2-methyl-1-propanamine $C_4H_{11}N$ (<i>isobutylamine</i>) [78-81-9] KDSNLYIMUZNERS-UHFFFAOYSA-N	7.3×10^{-1}		Duchowicz et al. (2020)	V	186
	7.2×10^{-1}		Hilal et al. (2008)	C	
	9.1×10^{-1}		Duchowicz et al. (2020)	Q	
	2.4×10^{-1}		Hilal et al. (2008)	Q	
	2.0		Modarresi et al. (2007)	Q	67
	5.2×10^{-1}		Yaffe et al. (2003)	Q	248, 272
	1.5×10^{-1}		Yao et al. (2002)	Q	229, 267
	3.9×10^{-1}		Katritzky et al. (1998)	Q	
	4.4×10^{-1}		Yaws (1999)	?	21, 12
2-methyl-2-propanamine $C_4H_{11}N$ (<i>tert</i> -butylamine) [75-64-9] YBRBMKDOPFTVDT-UHFFFAOYSA-N	2.8×10^{-1}		Duchowicz et al. (2020)	V	186
	2.8×10^{-1}		Hilal et al. (2008)	C	
	4.0×10^{-1}		Duchowicz et al. (2020)	Q	
	5.0×10^{-2}		Hilal et al. (2008)	Q	
	1.0×10^{-1}		Modarresi et al. (2007)	Q	67
	2.9×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.1×10^{-1}		Katritzky et al. (1998)	Q	
dimethylethylamine $C_4H_{11}N$ [598-56-1] DAZXVJBURMXXJP-UHFFFAOYSA-N	1.1×10^{-1}		Yaws (2003)	X	237
	9.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-1}		Gharagheizi et al. (2010)	Q	246



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Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-propylguanidine $C_4H_{11}N_3$ [462-25-9] BWMDMTSXSXYSP-UHFFFAOYSA-N	4.1×10^4		Ebert et al. (2023)	?	365
1,2-diethylhydrazine $C_4H_{12}N_2$ [1615-80-1] YCBOYOYVDUOXLH-UHFFFAOYSA-N	8.2×10^1		HSDB (2015)	Q	99
N-(2-aminoethyl)-1,2-ethanediamine $C_4H_{13}N_3$ (diethylenetriamine) [111-40-0] RPNUMPOLZDHAAY-UHFFFAOYSA-N	9.9×10^8		HSDB (2015)	Q	99
butanedinitrile $C_4H_4N_2$ [110-61-2] IAHFWCOBPZCAEA-UHFFFAOYSA-N	8.7×10^2 1.5×10^3 1.5×10^3 4.0×10^3 2.6×10^1 3.9×10^3	7000	Plyasunov et al. (2006) Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010)	L V V X Q Q	186 237, 12 246
2-methyl-1H-imidazole $C_4H_6N_2$ [693-98-1] LXBGSDVWAMZHDD-UHFFFAOYSA-N	8.1×10^2 1.8×10^3 1.1×10^3 2.2		Du et al. (2017) Du et al. (2017) Du et al. (2017) HSDB (2015)	M Q Q Q	478 549 99
4-methyl-1H-imidazole $C_4H_6N_2$ [822-36-6] XLSZMDLNRCEVJ-UHFFFAOYSA-N	2.4		HSDB (2015)	Q	99
N-methyl-1,3-propanediamine $C_4H_{12}N_2$ (3-(methylamino)propylamine) [6291-84-5] QHJABUZHRTCAR-UHFFFAOYSA-N	1.4×10^3 2.1×10^3	7600 8800	Nguyen (2013) Kim et al. (2008)	M M	11 550
1-pentanamine $C_5H_{11}NH_2$ (1-pentylamine) [110-58-7] DPBLXKKOBLCELK-UHFFFAOYSA-N	4.3×10^{-1} 4.0×10^{-1} 3.1×10^{-1} 4.0×10^{-1} 1.7×10^{-1} 2.4 1.6×10^{-1} 1.2 4.0×10^{-1} 5.6×10^{-1}		Brockbank (2013) Rytting et al. (1978) Amoore and Buttery (1978) Christie and Crisp (1967) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001)	L M M M Q Q Q Q Q Q	299 67 248, 249 230, 260



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.0×10^{-1}		Katritzky et al. (1998)	Q	
	2.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	7.2×10^{-1}		Russell et al. (1992)	Q	358
	1.5×10^{-1}		Suzuki et al. (1992)	Q	232
	4.1×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	4.0×10^{-1}		Abraham et al. (1990)	?	
		7500	Abraham (1984)	?	21
3-methyl-1-butanamine $C_5H_{13}N$ [107-85-7] BMFVGAAISNGQNM-UHFFFAOYSA-N	3.2×10^{-1}		Yaws (2003)	X	237
	3.1×10^{-1}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-1}		Hilal et al. (2008)	Q	
1,2-dimethylpropylamine $C_5H_{13}N$ [598-74-3] JOZZAIIIGWFLONA-UHFFFAOYSA-N	4.0×10^{-1}		Yaws (2003)	X	237
	3.8×10^{-1}		Gharagheizi et al. (2010)	Q	246
dimethylpropylamine $C_5H_{13}N$ [926-63-6] ZUHZZVMEUJAUWHY-UHFFFAOYSA-N	7.9×10^{-2}		Yaws (2003)	X	237
	5.3×10^{-2}		Gharagheizi et al. (2012)	Q	
	9.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
dimethylisopropylamine $C_5H_{13}N$ [996-35-0] VMOWKUTXPNPTEN-UHFFFAOYSA-N	7.9×10^{-2}		Yaws (2003)	X	237
	1.2×10^{-1}		Gharagheizi et al. (2010)	Q	246
ethylpropylamine $C_5H_{13}N$ [20193-20-8] XCVNDBIXFPGMIW-UHFFFAOYSA-N	1.7×10^{-1}		Yaws (2003)	X	237
	1.6×10^{-1}		Gharagheizi et al. (2010)	Q	246
ethylisopropylamine $C_5H_{13}N$ [19961-27-4] RIVIDPPYRINTTH-UHFFFAOYSA-N	1.8×10^{-1}		Yaws (2003)	X	237
	1.8×10^{-1}		Gharagheizi et al. (2010)	Q	246
methyldiethylamine $C_5H_{13}N$ [616-39-7] GNVRJGIVDSQCOP-UHFFFAOYSA-N	7.9×10^{-2}		Yaws (2003)	X	237
	1.1×10^{-1}		Gharagheizi et al. (2010)	Q	246
2-methylpiperazine $C_5H_{12}N_2$ [109-07-9] JOMNTHCQHJPVAZ-UHFFFAOYSA-N	5.0×10^3	9200	Nguyen (2013)	M	11



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Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-hexanamine $C_6H_{13}NH_2$ (hexylamine) [111-26-2] BMVXCPBXGZKUPN-UHFFFAOYSA-N	3.5×10^{-1} 3.2×10^{-1} 3.7×10^{-1} 1.0×10^{-1} 2.3×10^{-1}		Brockbank (2013) Rytting et al. (1978) Christie and Crisp (1967) Yaws (2003) Keshavarz et al. (2022)	L M M X Q	
	2.4 1.4×10^{-1} 3.7×10^{-1} 1.0 3.2×10^{-1} 9.2×10^{-2} 4.3×10^{-1} 3.3×10^{-1} 1.8×10^{-1} 3.4×10^{-1} 4.6×10^{-1} 3.7×10^{-1} 1.0×10^{-1} 3.2×10^{-1}		Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yao et al. (2002) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Russell et al. (1992) Suzuki et al. (1992) Duchowicz et al. (2020) Yaws (1999) Abraham et al. (1990) Abraham (1984)	Q Q Q Q Q Q Q Q Q Q Q ? ? ?	237 184 246 67 248, 249 229, 267 230, 274 ? 279 232 185, 21 21 21
2-hexanamine $C_6H_{15}N$ [5329-79-3] WGBBUURBXLGFM-UHFFFAOYSA-N	1.9×10^{-1} 1.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
3-hexanamine $C_6H_{15}N$ [16751-58-9] HQLZFBUAULNEGP-UHFFFAOYSA-N	1.8×10^{-1} 1.5×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
1-amino-2-methylpentane $C_6H_{15}N$ [13364-16-4] WNDXRJBYZOSNQO-UHFFFAOYSA-N	2.0×10^{-1} 1.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
1-amino-3-methylpentane $C_6H_{15}N$ [42245-37-4] JLAUIBFZZUVOBB-UHFFFAOYSA-N	2.0×10^{-1} 1.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
1-amino-4-methylpentane $C_6H_{15}N$ [5344-20-7] QVIAMKXOQGCV-UHFFFAOYSA-N	2.0×10^{-1} 1.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2-amino-3-methylpentane $C_6H_{15}N$ [35399-81-6] ZFAGOADKDXTSV-UHFFFAOYSA-N	1.7×10^{-1} 2.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-amino-4-methylpentane $C_6H_{15}N$ [108-09-8] UNBMPKNTYKDYCG-UHFFFAOYSA-N	2.3×10^{-1} 2.3×10^{-1} 3.6×10^{-1} 2.0×10^{-1} 3.2×10^{-1}		Yaws (2003) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2010) Duchowicz et al. (2020)	X Q Q Q ?	237 184 246 185, 21
3-amino-2-methylpentane $C_6H_{15}N$ [54287-41-1] JYNQKCFJPQEXSL-UHFFFAOYSA-N	1.7×10^{-1} 2.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
1-amino-2-ethylbutane $C_6H_{15}N$ [617-79-8] MGWAGIQQTULHGU-UHFFFAOYSA-N	1.8×10^{-1} 1.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
1-amino-2,2-dimethylbutane $C_6H_{15}N$ [41781-17-3] PZVPOYBHOPRJNP-UHFFFAOYSA-N	2.1×10^{-1} 2.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
1-amino-2,3-dimethylbutane $C_6H_{15}N$ [66553-05-7] GBMSZXWHMSSBGP-UHFFFAOYSA-N	2.5×10^{-1} 2.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
1-amino-3,3-dimethylbutane $C_6H_{15}N$ [15673-00-4] GPWHFPWZAPOYNO-UHFFFAOYSA-N	1.6×10^{-1} 2.0×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
2-amino-3,3-dimethylbutane $C_6H_{15}N$ [3850-30-4] DXSUORGKJZADET-UHFFFAOYSA-N	2.4×10^{-1} 2.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
dimethylbutylamine $C_6H_{15}N$ [927-62-8] DJEQZVQFEPKLOY-UHFFFAOYSA-N	8.9×10^{-2} 4.8×10^{-2} 6.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethyl- <i>sec</i> -butylamine $C_6H_{15}N$ [921-04-0] USSPHSVODLAWSA-UHFFFAOYSA-N	1.0×10^{-1} 1.2×10^{-1} 8.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethyl- <i>tert</i> -butylamine $C_6H_{15}N$ [918-02-5] OXQMIXBVXHWDPX-UHFFFAOYSA-N	1.0×10^{-1} 9.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246



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Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethylbutylamine $C_6H_{15}N$ [13360-63-9] QHCCDDQKNUYGNC-UHFFFAOYSA-N	1.3×10^{-1} 1.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
ethylisobutylamine $C_6H_{15}N$ [13205-60-2] FNLUJDLKYOWMMF-UHFFFAOYSA-N	1.5×10^{-1} 1.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
ethyl- <i>sec</i> -butylamine $C_6H_{15}N$ [21035-44-9] KFKYKZKISJBGVMR-UHFFFAOYSA-N	1.5×10^{-1} 1.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
methyl-1,1-dimethylpropylamine $C_6H_{15}N$ [2978-64-5] BUJFTKQXSIZFX-UHFFFAOYSA-N	1.1×10^{-1} 1.8×10^{-1} 1.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246 246
methyl-1,2-dimethylpropylamine $C_6H_{15}N$ [34317-39-0] LJLWVVCWBURGCC-UHFFFAOYSA-N	1.2×10^{-1} 5.9×10^{-2} 1.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246 246
methyl-2,2-dimethylpropylamine $C_6H_{15}N$ [26153-91-3] UQGXHNDRCRTZAC-UHFFFAOYSA-N	1.1×10^{-1} 1.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
methyl-1-methylbutylamine $C_6H_{15}N$ [51932-19-5] IPBXLJFBVNLKFE-UHFFFAOYSA-N	1.2×10^{-1} 8.7×10^{-2} 1.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246 246
methylethylpropylamine $C_6H_{15}N$ [4458-32-6] SMBYUOXUISCLCF-UHFFFAOYSA-N	1.1×10^{-1} 1.0×10^{-1} 8.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246 246
methylethylisopropylamine $C_6H_{15}N$ [39198-07-7] UTLDDSNRFHWERZ-UHFFFAOYSA-N	1.1×10^{-1} 9.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
methylpentylamine $C_6H_{15}N$ [25419-06-1] UOIWOHLGKIYFE-UHFFFAOYSA-N	1.2×10^{-1} 1.1×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propylisopropylamine $C_6H_{15}N$ [21968-17-2] VLSTXUUYLIALPB-UHFFFAOYSA-N	1.4×10^{-1} 1.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
1,6-hexanediamine $C_6H_{16}N_2$ (hexamethylenediamine) [124-09-4] NAQMVNRVTILPCV-UHFFFAOYSA-N	1.0×10^3 3.1×10^3	5000	Nguyen (2013) HSDB (2015)	M Q	11 99
N,N'-methanetetraylbis-2-propanamine $C_7H_{14}N_2$ (1,3-diisopropylcarbodiimide) [693-13-0] BDNKZNFMDZQMI-UHFFFAOYSA-N	9.9×10^{-3}		HSDB (2015)	Q	447
4-methyl-2-hexanamine $C_7H_{17}N$ [105-41-9] YAHRDLCUYEDAU-UHFFFAOYSA-N	2.3×10^{-1}		HSDB (2015)	Q	447
1-heptanamine $C_7H_{17}N$ (1-heptylamine) [111-68-2] WJYIASZWHGOTOU-UHFFFAOYSA-N	2.8×10^{-1} 2.4×10^{-1} 8.0×10^{-2} 8.3×10^{-2} 4.5×10^{-1}		Brockbank (2013) Rytting et al. (1978) Yaws (2003) Gharagheizi et al. (2010) Hilal et al. (2008)	L M X Q Q	 237 246
	9.6×10^{-1} 2.1×10^{-1} 3.3×10^{-1} 1.4×10^{-1} 2.4×10^{-1}		Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Nirmalakhandan et al. (1997) Abraham et al. (1990)	Q Q Q Q ?	67 248, 272 230, 231
diethylisopropylamine $C_7H_{17}N$ [6006-15-1] ULWOJODHECIZAU-UHFFFAOYSA-N	7.7×10^{-2} 8.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
diethylpropylamine $C_7H_{17}N$ [4458-31-5] PQZTVVWYCLIJY-UHFFFAOYSA-N	7.7×10^{-2} 1.5×10^{-1} 7.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethyl-1,1-dimethylpropylamine $C_7H_{17}N$ [57757-60-5] CUHMMDPUXJFCNB-UHFFFAOYSA-N	6.3×10^{-2} 6.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246



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Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethyl-1,2-dimethylpropylamine $C_7H_{17}N$ [66225-38-5] FWBCYOHCOBOARU-UHFFFAOYSA-N	6.9×10^{-2} 5.7×10^{-2} 7.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethyl-2,2-dimethylpropylamine $C_7H_{17}N$ [10076-31-0] FUIRUFXAVIHAQB-UHFFFAOYSA-N	6.3×10^{-2} 1.8×10^{-2} 5.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethyl-2-methylbutylamine $C_7H_{17}N$ [66225-39-6] BHMZPPHMJQHCHQ-UHFFFAOYSA-N	7.1×10^{-2} 2.4×10^{-2} 6.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethyl-3-methylbutylamine $C_7H_{17}N$ [2315-43-7] KOOQJINBDNZUTB-UHFFFAOYSA-N	7.2×10^{-2} 3.5×10^{-2} 5.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethylpentylamine $C_7H_{17}N$ [26153-88-8] IDFANOPDMXWIOP-UHFFFAOYSA-N	5.3×10^{-2} 4.1×10^{-2} 5.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethyl-2-pentylamine $C_7H_{17}N$ [57303-85-2] LSTZYJQHGEVKH-UHFFFAOYSA-N	7.7×10^{-2} 6.6×10^{-2} 6.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethyl-3-pentylamine $C_7H_{17}N$ [18636-94-7] SUEKSPIQIGIMSQM-UHFFFAOYSA-N	7.0×10^{-2} 5.5×10^{-2} 6.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
ethylpentylamine $C_7H_{17}N$ [17839-26-8] ICVFPLUSMYSIFO-UHFFFAOYSA-N	8.6×10^{-2} 5.6×10^{-2} 9.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
methyl-diisopropylamine $C_7H_{17}N$ [10342-97-9] ISRXMAYARGEVIU-UHFFFAOYSA-N	7.1×10^{-2} 7.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
methyldipropylamine $C_7H_{17}N$ [3405-42-3] UVBMZKBIZUWTLV-UHFFFAOYSA-N	7.5×10^{-2} 5.1×10^{-2} 6.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methylethylbutylamine $C_7H_{17}N$ [66225-40-9] WOLFCKKMHUVEPN-UHFFFAOYSA-N	7.2×10^{-2}		Yaws (2003)	X	237
	8.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.0×10^{-2}		Gharagheizi et al. (2010)	Q	246
methylethylisobutylamine $C_7H_{17}N$ [60247-14-5] QQWXQKMMVASVXCI-UHFFFAOYSA-N	7.8×10^{-2}		Yaws (2003)	X	237
	4.3×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.9×10^{-2}		Gharagheizi et al. (2010)	Q	246
methylethyl-sec-butylamine $C_7H_{17}N$ [66225-41-0] HAFZSBASGRZPLA-UHFFFAOYSA-N	8.2×10^{-2}		Yaws (2003)	X	237
	7.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
methylethyl-tert-butylamine $C_7H_{17}N$ [52841-28-8] BWWLCYLGIWOHK-UHFFFAOYSA-N	7.0×10^{-2}		Yaws (2003)	X	237
	7.6×10^{-2}		Gharagheizi et al. (2010)	Q	246
methylhexylamine $C_7H_{17}N$ [35161-70-7] XJINZNWPEQMMBV-UHFFFAOYSA-N	8.3×10^{-2}		Yaws (2003)	X	237
	3.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	8.6×10^{-2}		Gharagheizi et al. (2010)	Q	246
methylpropylisopropylamine $C_7H_{17}N$ [66225-42-1] OYQDUCLFZSKBCZ-UHFFFAOYSA-N	7.3×10^{-2}		Yaws (2003)	X	237
	1.6×10^{-1}		Gharagheizi et al. (2012)	Q	
	7.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
1-octanamine $C_8H_{19}N$ (octylamine) [111-86-4] IOQPZZOEVPZRBK-UHFFFAOYSA-N	2.2×10^{-1}		Brockbank (2013)	L	
	1.9×10^{-1}		Rytting et al. (1978)	M	
	1.2×10^{-2}		Duchowicz et al. (2020)	V	186
	2.4		Duchowicz et al. (2020)	Q	
	1.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.3×10^{-1}	7400	Hilal et al. (2008)	Q	
			Kühne et al. (2005)	Q	
	2.1×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.5×10^{-1}		English and Carroll (2001)	Q	230, 231
	1.1×10^{-1}		Nirmalakhandan et al. (1997)	Q	
		6600	Kühne et al. (2005)	?	
1.2×10^{-2}		Yaws (1999)	?	21	
1.9×10^{-1}		Abraham et al. (1990)	?		
2-ethyl-1-hexanamine $C_8H_{19}N$ (2-ethylhexylamine) [104-75-6] LTHNHFOGQMKPOV-UHFFFAOYSA-N	1.0×10^{-1}		Duchowicz et al. (2020)	V	186
	9.4×10^{-1}		Duchowicz et al. (2020)	Q	
	3.7×10^{-1}		Hilal et al. (2008)	Q	
	9.7×10^{-1}		Modarresi et al. (2007)	Q	67
		7400	Kühne et al. (2005)	Q	
		7400	Kühne et al. (2005)	?	



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Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diethylbutylamine $C_8H_{19}N$ [4444-68-2] ORSUTASIQKBEFU-UHFFFAOYSA-N	5.2×10^{-2} 1.2×10^{-1} 5.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethylhexylamine $C_8H_{19}N$ [4385-04-0] QMHNQZGXPNMCO-UHFFFAOYSA-N	3.4×10^{-2} 3.1×10^{-2} 3.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
ethylhexylamine $C_8H_{19}N$ [20352-67-4] WSTNFGAKGUERTC-UHFFFAOYSA-N	6.2×10^{-2} 4.5×10^{-2} 7.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
methylheptylamine $C_8H_{19}N$ [36343-05-2] LTGYRKOQQQWWAF-UHFFFAOYSA-N	6.2×10^{-2} 2.6×10^{-2} 7.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
2,2'-azobis-(2-methylpropanenitrile) $C_8H_{12}N_4$ [78-67-1] OZAIFHULBGXAKX-UHFFFAOYSA-N	2.4 8.0×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
diethylpentylamine $C_9H_{21}N$ [2162-91-6] YZULHOOBWDXEOT-UHFFFAOYSA-N	4.0×10^{-2} 8.6×10^{-2} 4.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethylheptylamine $C_9H_{21}N$ [5277-11-2] LSICDRUYCNGRIF-UHFFFAOYSA-N	2.5×10^{-2} 2.7×10^{-2} 3.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
ethylheptylamine $C_9H_{21}N$ [66793-76-8] IUZZLNVABCISOI-UHFFFAOYSA-N	5.2×10^{-2} 5.3×10^{-2} 6.3×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
methyloctylamine $C_9H_{21}N$ [2439-54-5] SEGJNMCIMOLEDM-UHFFFAOYSA-N	5.4×10^{-2} 3.0×10^{-2} 6.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
nonylamine $C_9H_{21}N$ [112-20-9] FJDUDHYHRVPMJZ-UHFFFAOYSA-N	5.9×10^{-2} 2.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246



Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diethylhexylamine $C_{10}H_{23}N$ [44979-90-0] XHDKYWMKOLURNK-UHFFFAOYSA-N	3.3×10^{-2} 6.7×10^{-2} 3.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethyloctylamine $C_{10}H_{23}N$ [7378-99-6] UQKAOAFEFCDGT-UHFFFAOYSA-N	2.0×10^{-2} 4.5×10^{-2} 2.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dipentylamine $C_{10}H_{23}N$ [2050-92-2] JACMPVXHEARCBO-UHFFFAOYSA-N	5.3×10^{-2} 4.4×10^{-2} 6.4×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
ethyloctylamine $C_{10}H_{23}N$ [4088-36-2] SDQCOADWEMMSGK-UHFFFAOYSA-N	5.2×10^{-2} 6.2×10^{-2} 6.0×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
methylnonylamine $C_{10}H_{23}N$ [39093-27-1] OZIXTIPURXIEMB-UHFFFAOYSA-N	5.6×10^{-2} 2.2×10^{-2} 6.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
diethylheptylamine $C_{11}H_{25}N$ [26981-81-7] YUCNJMBRLIZNMO-UHFFFAOYSA-N	2.3×10^{-2} 1.1×10^{-1} 2.7×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
dimethylnonylamine $C_{11}H_{25}N$ [17373-27-2] AMAADDMFZSZCNT-UHFFFAOYSA-N	1.5×10^{-2} 3.7×10^{-2} 2.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246
diethyloctylamine $C_{12}H_{27}N$ [4088-37-3] BVUGARXRRGZONH-UHFFFAOYSA-N	2.3×10^{-2} 2.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
dihexylamine $C_{12}H_{27}N$ [143-16-8] PXSXRABJBXYMFT-UHFFFAOYSA-N	1.3×10^{-1} 8.9×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
dimethyldecylamine $C_{12}H_{27}N$ [1120-24-7] YWWNNLPSZSEZNZ-UHFFFAOYSA-N	1.6×10^{-2} 4.3×10^{-2} 2.2×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246



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Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methylundecylamine $C_{12}H_{27}N$ [66553-53-5] JCJFBKQQLFMABE-UHFFFAOYSA-N	1.3×10^{-1} 8.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
diethylnonylamine $C_{13}H_{29}N$ [45124-35-4] IBTOMDSHMLGUHA-UHFFFAOYSA-N	3.1×10^{-2} 1.2×10^{-1} 2.8×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246 246
dimethylundecylamine $C_{13}H_{29}N$ [17373-28-3] MMWFTWUMBYZIRZ-UHFFFAOYSA-N	2.7×10^{-2} 4.6×10^{-2} 2.6×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246 246
ethylundecylamine $C_{13}H_{29}N$ [59570-04-6] LKV BHKWFYHKTSM-UHFFFAOYSA-N	1.4×10^{-1} 1.2×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
methyldodecylamine $C_{13}H_{29}N$ [7311-30-0] OMEMQVZNTDHENJ-UHFFFAOYSA-N	1.5×10^{-1} 1.4×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
diethyldecylamine $C_{14}H_{31}N$ [6308-94-7] UFFQZCPLBHYOFV-UHFFFAOYSA-N	4.2×10^{-2} 3.5×10^{-2}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
diheptylamine $C_{14}H_{31}N$ [2470-68-0] NJWMENBYMFZACG-UHFFFAOYSA-N	1.7×10^{-1} 2.7×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
ethyldodecylamine $C_{14}H_{31}N$ [35902-57-9] LWIPGCTWFZCIX-UHFFFAOYSA-N	1.8×10^{-1} 2.3×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
methyltridecylamine $C_{14}H_{31}N$ [45165-81-9] XMRPIOZXPHTSCE-UHFFFAOYSA-N	2.0×10^{-1} 2.8×10^{-1}		Yaws (2003) Gharagheizi et al. (2010)	X Q	237 246
tripentylamine $C_{15}H_{33}N$ [621-77-2] OOHAUGDGCWURIT-UHFFFAOYSA-N	6.7×10^{-2} 3.1×10^{-2} 7.1×10^{-2}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q	237 246 246



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Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dipropylamine (C_3H_7) ₂ NH [142-84-7] WEHWNAOGRSTTBQ-UHFFFAOYSA-N	2.0×10^{-1}		Burkholder et al. (2019)	L	
	2.0×10^{-1}		Burkholder et al. (2015)	L	
	2.1×10^{-1}		Brockbank (2013)	L	
	1.2×10^{-1}	8900	Leng et al. (2015a)	M	
	1.9×10^{-1}		Christie and Crisp (1967)	M	
	2.3×10^{-1}		Keshavarz et al. (2022)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	Q	
	7.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.1×10^{-1}		Hilal et al. (2008)	Q	
	2.7×10^{-1}		Modarresi et al. (2007)	Q	67
		6900	Kühne et al. (2005)	Q	
	2.1×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	9.6×10^{-2}		Yao et al. (2002)	Q	229
	1.9×10^{-1}		English and Carroll (2001)	Q	230, 260
	1.1×10^{-1}		Katritzky et al. (1998)	Q	
2.3×10^{-1}		Nirmalakhandan et al. (1997)	Q		
2.8×10^{-1}		Suzuki et al. (1992)	Q	232	
1.9×10^{-1}		Duchowicz et al. (2020)	?	185, 21	
	8100	Kühne et al. (2005)	?		
		Yaws (1999)	?	21, 551	
		Abraham et al. (1990)	?		
		Betterton (1992)	W	552	
N-methylpropanamine $\text{C}_4\text{H}_{11}\text{N}$ [627-35-0] GVWISOJSERXQBM-UHFFFAOYSA-N	1.9×10^{-1}		Hilal et al. (2008)	Q	
N-methyl-2-propanamine $\text{C}_4\text{H}_{11}\text{N}$ [4747-21-1] XHFGWHUWQXTGAT-UHFFFAOYSA-N	1.6×10^{-1}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-1}		Hilal et al. (2008)	Q	
N-(1-methylethyl)-2-propanamine $\text{C}_6\text{H}_{15}\text{N}$ (diisopropylamine) [108-18-9] UAOMVDZJSHZZME-UHFFFAOYSA-N	1.0×10^{-1}		Duchowicz et al. (2020)	V	186
	1.3×10^{-1}		Yaws (2003)	X	237
	3.3×10^{-2}		Duchowicz et al. (2020)	Q	
	1.4×10^{-1}		Gharagheizi et al. (2010)	Q	246
	6.2×10^{-2}		Hilal et al. (2008)	Q	
	4.1×10^{-1}		Modarresi et al. (2007)	Q	67
		6900	Kühne et al. (2005)	Q	
	9.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	9.5×10^{-2}		English and Carroll (2001)	Q	230, 274
	6.7×10^{-2}		Katritzky et al. (1998)	Q	
	1.8×10^{-1}		Nirmalakhandan et al. (1997)	Q	
		8600	Kühne et al. (2005)	?	
9.2×10^{-2}		Abraham et al. (1990)	?		



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N,N-dipropyl-1-propanamine $C_9H_{21}N$ (tripropylamine) [102-69-2] YFTHZRP MJXBUME-UHFFFAOYSA-N	2.6×10^{-2}		Duchowicz et al. (2020)	V	186
	2.6×10^{-2}		HSDB (2015)	V	
	2.6×10^{-2}		Yaws (2003)	X	237
	2.6×10^{-2}		Hilal et al. (2008)	C	
	5.1×10^{-2}		Duchowicz et al. (2020)	Q	
	3.6×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.4×10^{-2}		Gharagheizi et al. (2010)	Q	246
	6.7×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-2}		Modarresi et al. (2007)	Q	67
	2.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
2.1×10^{-2}		Yao et al. (2002)	Q	229	
4.2×10^{-2}		Katritzky et al. (1998)	Q		
2.6×10^{-2}		Yaws (1999)	?	21	
N-methyl-1-butanamine $C_5H_{13}N$ (N-methylbutylamine) [110-68-9] QCOGKXLOEWLIDC-UHFFFAOYSA-N	1.3×10^{-1}		Yaws (2003)	X	237
	5.7×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-1}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-1}		Hilal et al. (2008)	Q	
		6600 5000	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
dibutylamine $(C_4H_9)_2NH$ [111-92-2] JQVDAXLFBXTEQA-UHFFFAOYSA-N	1.3×10^{-1}		Brockbank (2013)	L	
	1.0		Altschuh et al. (1999)	M	
	1.1×10^{-1}		Christie and Crisp (1967)	M	
	1.2×10^{-1}		Mackay et al. (2006d)	V	
	1.2×10^{-1}		Mackay et al. (1995)	V	
	7.0×10^{-2}		Yaws (2003)	X	237
	4.1×10^{-1}		Keshavarz et al. (2022)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	Q	299
	4.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	7.6×10^{-2}		Gharagheizi et al. (2010)	Q	246
	2.4×10^{-1}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	67
		7600	Kühne et al. (2005)	Q	
	9.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	6.2×10^{-2}		Yao et al. (2002)	Q	229
	1.2×10^{-1}		English and Carroll (2001)	Q	230, 231
	8.8×10^{-2}		Katritzky et al. (1998)	Q	
1.4×10^{-1}		Nirmalakhandan et al. (1997)	Q		
1.6×10^{-1}		Suzuki et al. (1992)	Q	232	
1.1×10^{-1}		Duchowicz et al. (2020)	?	185, 21	
	7400	Kühne et al. (2005)	?		
7.0×10^{-2}		Yaws (1999)	?	21	
9.7×10^{-2}		Abraham et al. (1990)	?		



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
triethylamine (C_2H_5) ₃ N [121-44-8] ZMANZCXSJIPKH-UHFFFAOYSA-N	6.6×10^{-2}		Burkholder et al. (2019)	L		
	6.6×10^{-2}		Burkholder et al. (2015)	L		
	9.3×10^{-2}		Brockbank (2013)	L		
	5.0×10^{-2}	8300	Leng et al. (2015b)	M		
	6.6×10^{-2}		Christie and Crisp (1967)	M		
	7.1×10^{-2}		Mackay et al. (2006d)	V		
	7.1×10^{-2}		Mackay et al. (1995)	V		
	8.6×10^{-2}		Yaws (2003)	X	258	
	8.5×10^{-2}		Yaws (2003)	X	237	
	5.0×10^{-3}		Dupeux et al. (2022)	Q	259	
	9.2×10^{-3}		Hayer et al. (2022)	Q	20	
	2.3×10^{-1}		Keshavarz et al. (2022)	Q		
	5.1×10^{-2}		Duchowicz et al. (2020)	Q	299	
	6.7×10^{-2}		Li et al. (2014)	Q	241	
	9.5×10^{-2}		Gharagheizi et al. (2010)	Q	246	
	8.6×10^{-2}		Hilal et al. (2008)	Q		
	2.3×10^{-2}		Modarresi et al. (2007)	Q	67	
			6700	Kühne et al. (2005)	Q	
		2.1×10^{-1}		Yaffe et al. (2003)	Q	248, 272
7.8×10^{-2}			Yao et al. (2002)	Q	229	
1.3×10^{-1}			English and Carroll (2001)	Q	230, 231	
8.8×10^{-2}			Katritzky et al. (1998)	Q		
3.3×10^{-1}			Nirmalakhandan et al. (1997)	Q		
3.1×10^{-2}			Russell et al. (1992)	Q	279	
6.1×10^{-2}			Suzuki et al. (1992)	Q	232	
6.6×10^{-2}			Duchowicz et al. (2020)	?	185, 21	
		9000	Kühne et al. (2005)	?		
			Yaws (1999)	?	21	
		Abraham et al. (1990)	?			
tributylamine $\text{C}_{12}\text{H}_{27}\text{N}$ [102-82-9] IMFACGCPASFAPR-UHFFFAOYSA-N	3.7×10^{-1}	8700	Brockbank (2013)	L	1	
	4.0×10^{-1}		Altschuh et al. (1999)	M		
	6.2×10^{-2}		Duchowicz et al. (2020)	V	186	
	4.0×10^{-5}		Mackay et al. (2006d)	V		
	4.0×10^{-5}		Mackay et al. (1995)	V		
	4.9×10^{-2}		Yaws (2003)	X	237	
	5.2×10^{-2}		Duchowicz et al. (2020)	Q		
	2.9×10^{-2}		Gharagheizi et al. (2010)	Q	246	
		8700	Kühne et al. (2005)	Q		
		7500	Kühne et al. (2005)	?		
		Yaws (1999)	?	21		
	6.1×10^{-2}					
N,N-dimethyl-1-dodecanamine $\text{C}_{14}\text{H}_{31}\text{N}$ [112-18-5] YWFWDNVOPHGWXM-UHFFFAOYSA-N	>4.0		Altschuh et al. (1999)	M		
	4.6×10^{-2}		Yaws (2003)	X	237	
	2.0×10^{-3}		HSDB (2015)	Q	99	
	4.9×10^{-2}		Gharagheizi et al. (2012)	Q		
	3.5×10^{-2}		Gharagheizi et al. (2010)	Q	246	



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Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethylenediamine $\text{H}_2\text{NCH}_2\text{CH}_2\text{NH}_2$ [107-15-3] PIICEJLVQHRZGT-UHFFFAOYSA-N	1.8×10^3	6700	Nguyen (2013)	M	11
	5.8×10^3		Westheimer and Ingraham (1956)	M	
	1.5×10^2	9200	Cabani et al. (1978)	T	
	6.7×10^3		Keshavarz et al. (2022)	Q	
	2.2×10^3		Duchowicz et al. (2020)	Q	
	5.6×10^3		Hilal et al. (2008)	Q	
	1.4×10^4		Modarresi et al. (2007)	Q	67
	6.2×10^2		Yao et al. (2002)	Q	229
2-propen-1-amine $\text{C}_3\text{H}_7\text{N}$ (allylamine) [107-11-9] VVJKKWFAADXJK-UHFFFAOYSA-N	5.7×10^3		Duchowicz et al. (2020)	?	185, 21
	2.3×10^2		Yaws (1999)	?	21, 12
	1.0	5400	Leng et al. (2015a)	M	
	5.4×10^{-1}		Duchowicz et al. (2020)	V	186
	5.4×10^{-1}		HSDB (2015)	V	
	5.4×10^{-1}		Hilal et al. (2008)	C	
di-2-propenylamine $\text{C}_6\text{H}_{11}\text{N}$ (diallylamine) [124-02-7] DYUWTXWIYMHBS-UHFFFAOYSA-N	7.7		Duchowicz et al. (2020)	Q	
	2.4		Hilal et al. (2008)	Q	
	4.4		Modarresi et al. (2007)	Q	67
	3.3×10^{-1}		Duchowicz et al. (2020)	V	186
	3.3×10^{-1}		HSDB (2015)	V	
hexamethyleneimine $(\text{CH}_2)_6\text{NH}$ [111-49-9] ZSIQJIWKELUFRJ-UHFFFAOYSA-N	2.6		Duchowicz et al. (2020)	Q	
		7200	Kühne et al. (2005)	Q	
		8000	Kühne et al. (2005)	?	
	1.6	8200	Cabani et al. (1971a)	T	
	1.0		Keshavarz et al. (2022)	Q	
	1.3×10^1		Duchowicz et al. (2020)	Q	184
	6.4		Hilal et al. (2008)	Q	
cyclohexanamine $\text{C}_6\text{H}_{13}\text{N}$ (cyclohexylamine) [108-91-8] PAFZNILMFXTMIIY-UHFFFAOYSA-N	3.5×10^{-1}		Modarresi et al. (2007)	Q	67
	1.2		Suzuki et al. (1992)	Q	232
	4.3×10^{-1}		Meylan and Howard (1991)	Q	
	1.6		Duchowicz et al. (2020)	?	185, 21
	2.2	7500	Brockbank (2013)	L	1
	2.4		Altschuh et al. (1999)	M	
cyclohexylamine [108-91-8] PAFZNILMFXTMIIY-UHFFFAOYSA-N	2.2	7800	Bernauer et al. (2006)	V	1
	9.4×10^{-1}		Amoore and Buttery (1978)	V	
	3.3		Keshavarz et al. (2022)	Q	
	7.3		Duchowicz et al. (2020)	Q	299
	6.7×10^{-1}		Hilal et al. (2008)	Q	
	4.2		Modarresi et al. (2007)	Q	67
	9.5×10^{-1}		English and Carroll (2001)	Q	230, 231
	1.2		Nirmalakhandan et al. (1997)	Q	
	2.4		Duchowicz et al. (2020)	?	185, 21
	9.5×10^{-1}		Abraham et al. (1990)	?	



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methylcyclohexylamine $C_7H_{15}N$ [6850-35-7] JYDYHSHPBZRPJU-UHFFFAOYSA-N	1.1		Hilal et al. (2008)	Q	
N-ethylcyclohexylamine $C_8H_{17}N$ (N-ethylcyclohexylamine) [5459-93-8] AGVKXDPPPSLISR-UHFFFAOYSA-N		7200 6500	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
N,N-dimethylcyclohexylamine $C_8H_{17}N$ [98-94-2] SVYKKECYCPFKGB-UHFFFAOYSA-N	4.2×10^{-1} 4.1×10^{-1} 1.4 5.1×10^{-1} 8.5×10^{-2}		Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005)	M Q Q Q Q Q ?	299 67 185, 21
hexamethylenetetramine $C_6H_{12}N_4$ [100-97-0] VKYKSIONXSXAKP-UHFFFAOYSA-N	6.2×10^3 6.1×10^{-5} 5.8×10^5 9.2×10^2 5.4×10^7 1.3×10^4 5.8×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q	287, 288 287, 289 287, 290 287, 291 67
1-decanamine $C_{10}H_{23}N$ [2016-57-1] MHZGKXUYDGKKIU-UHFFFAOYSA-N	2.6×10^{-1} 1.5×10^{-1} 2.4		Duchowicz et al. (2020) Yaws et al. (2001) Duchowicz et al. (2020)	V X Q	186 350
N-cyclohexylcyclohexylamine $C_{12}H_{23}N$ (dicyclohexylamine) [101-83-7] XBPCUCUWBYBCDP-UHFFFAOYSA-N	1.8×10^{-1}		HSDB (2015)	Q	99
1-dodecanamine $C_{12}H_{27}N$ [124-22-1] JRBPAEWTRLWTQC-UHFFFAOYSA-N	3.7×10^{-2}		HSDB (2015)	Q	99
1-octadecanamine $C_{18}H_{39}N$ [124-30-1] REYJPSVUYRZGE-UHFFFAOYSA-N	1.0×10^{-2}		HSDB (2015)	Q	99



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylbenzenamine C_7H_9N	4.8	7100	Brockbank (2013)	L	1
(2-methylaniline; <i>o</i> -toluidine) [95-53-4] RNVCVTLRINQCPJ-UHFFFAOYSA-N	3.0		Chao et al. (2017)	M	
	5.0		Altschuh et al. (1999)	M	
	4.0		Chao et al. (2017)	V	
	1.1×10^1		Mackay et al. (2006d)	V	
	4.1		Schüürmann (2000)	V	
	1.1×10^1		Mackay et al. (1995)	V	
	1.1×10^1		Mackay et al. (1995)	V	
	3.4		Yoshida et al. (1983)	V	
	4.6		Abraham et al. (1994a)	R	
	4.1		Yaws (2003)	X	237
	3.0×10^{-1}		Keshavarz et al. (2022)	Q	
	2.7		Duchowicz et al. (2020)	Q	299
	3.3		Gharagheizi et al. (2012)	Q	
	4.4		Gharagheizi et al. (2010)	Q	246
	3.1		Hilal et al. (2008)	Q	
	1.0		Modarresi et al. (2007)	Q	67
	1.6		Yao et al. (2002)	Q	229
	4.0		English and Carroll (2001)	Q	230, 231
	4.4		Katritzky et al. (1998)	Q	
	2.0		Nirmalakhandan et al. (1997)	Q	
	5.0		Duchowicz et al. (2020)	?	185, 21
	4.1		Yaws (1999)	?	21
3-methylbenzenamine C_7H_9N	5.6	7200	Brockbank (2013)	L	1
(3-methylaniline; <i>m</i> -toluidine) [108-44-1] JJYPMNFTHPTDI-UHFFFAOYSA-N	3.2		Chao et al. (2017)	M	
	5.9		Altschuh et al. (1999)	M	
	3.9		Chao et al. (2017)	V	
	3.9		Mackay et al. (2006d)	V	
	3.9		Mackay et al. (1995)	V	
	5.1		Yaws (2003)	X	237, 12
	4.5		Keshavarz et al. (2022)	Q	
	2.7		Duchowicz et al. (2020)	Q	299
	4.7		Gharagheizi et al. (2012)	Q	
	4.4		Gharagheizi et al. (2010)	Q	246
	4.8		Hilal et al. (2008)	Q	
	3.9		Modarresi et al. (2007)	Q	67
	1.5		Yao et al. (2002)	Q	229
	6.4		Katritzky et al. (1998)	Q	
	5.9		Duchowicz et al. (2020)	?	185, 21
	3.5		Yaws (1999)	?	21, 12



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Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methylbenzenamine C_7H_9N	2.9	4400	Brockbank (2013)	L	1
(4-methylaniline; <i>p</i> -toluidine) [106-49-0] RZXMPFPFUUCRFN-UHFFFAOYSA-N	4.4		Chao et al. (2017)	M	
	1.3×10^1		Altschuh et al. (1999)	M	
	4.4		Jayasinghe et al. (1992)	M	
	1.5		Mackay et al. (2006d)	V	
	1.5		Mackay et al. (1995)	V	
	1.6		Yoshida et al. (1983)	V	
	5.0		Abraham et al. (1994a)	R	
	4.5		Keshavarz et al. (2022)	Q	
	2.7		Duchowicz et al. (2020)	Q	
	3.9		Gharagheizi et al. (2012)	Q	
	5.3		Hilal et al. (2008)	Q	
	5.0		Modarresi et al. (2007)	Q	67
	4.0		English and Carroll (2001)	Q	230, 231
	6.1		Katritzky et al. (1998)	Q	
	2.0		Nirmalakhandan et al. (1997)	Q	
	4.9		Duchowicz et al. (2020)	?	185, 21
2-ethylaniline $C_8H_{11}N$	2.6	7300	Brockbank (2013)	L	1, 554
(<i>o</i> -ethylaniline) [578-54-1] MLPVBWIRCKMJV-UHFFFAOYSA-N	2.7		HSDB (2015)	Q	99
		7200	Kühne et al. (2005)	Q	
		7500	Kühne et al. (2005)	?	
4-ethylaniline $C_8H_{11}N$	3.1		Mackay et al. (2006d)	V	
(<i>p</i> -ethylaniline) [589-16-2] HRXZRAXKKNUKRF-UHFFFAOYSA-N	3.1		Mackay et al. (1995)	V	
		6900	Kühne et al. (2005)	Q	
		8100	Kühne et al. (2005)	?	
2,4-dimethylbenzenamine $C_8H_{11}N$	2.8	7700	Brockbank (2013)	L	1
(2,4-dimethylaniline; 2,4-xylidine) [95-68-1] CZZZABOKJQXEBO-UHFFFAOYSA-N	2.4		Mackay et al. (2006d)	V	
	1.4×10^{-1}		Schüürmann (2000)	V	
	2.4		Mackay et al. (1995)	V	
	3.9		HSDB (2015)	Q	99
		7200	Kühne et al. (2005)	Q	
		7400	Kühne et al. (2005)	?	
3,4-dimethylbenzenamine $C_8H_{11}N$	5.3		Jayasinghe et al. (1992)	M	
(3,4-dimethylaniline; 3,4-xylidine) [95-64-7] DOLQYFPDPKQSS-UHFFFAOYSA-N	6.0		Keshavarz et al. (2022)	Q	
	1.4		Duchowicz et al. (2020)	Q	
	6.7		Hilal et al. (2008)	Q	
	1.6		Modarresi et al. (2007)	Q	67
	9.0		Katritzky et al. (1998)	Q	
	5.3		Duchowicz et al. (2020)	?	185, 21



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-dimethylbenzenamine $C_8H_{11}N$	2.3		Duchowicz et al. (2020)	V	186
	1.4		Duchowicz et al. (2020)	Q	
(2,5-dimethylaniline; 2,5-xylidine)	3.9		HSDB (2015)	Q	99
[95-78-3]	7.7×10^{-1}		Modarresi et al. (2007)	Q	67
VOWZNBNDMFLQGM-UHFFFAOYSA-N		7200	Kühne et al. (2005)	Q	
		7700	Kühne et al. (2005)	?	
2,6-dimethylbenzenamine $C_8H_{11}N$	3.9		Duchowicz et al. (2020)	V	186
	3.9		HSDB (2015)	V	
(2,6-dimethylaniline; 2,6-xylidine)	5.8×10^{-2}		Mackay et al. (2006d)	V	
[87-62-7]	5.8×10^{-2}		Mackay et al. (1995)	V	
UFFBMTBHGFIHF-UHFFFAOYSA-N	2.7		Abraham et al. (1994a)	R	
	2.9×10^{-1}		Duchowicz et al. (2020)	Q	
	3.3		Hilal et al. (2008)	Q	
	1.7×10^1		Modarresi et al. (2007)	Q	67
		7500	Kühne et al. (2005)	Q	
	2.1		English and Carroll (2001)	Q	230, 231
	4.2		Katritzky et al. (1998)	Q	
	1.4		Nirmalakhandan et al. (1997)	Q	
		7600	Kühne et al. (2005)	?	
2,4,5-trimethylbenzenamine $C_9H_{13}N$	3.9		Jayasinghe et al. (1992)	M	
	5.5×10^{-1}		Keshavarz et al. (2022)	Q	
(2,4,5-trimethylaniline)	7.3×10^{-1}		Duchowicz et al. (2020)	Q	184
[137-17-7]	6.0		Hilal et al. (2008)	Q	
BMIPMQAAJKBKP-UHFFFAOYSA-N	3.5×10^{-1}		Modarresi et al. (2007)	Q	67
	4.0		Duchowicz et al. (2020)	?	185, 21
2-(1-methylethyl)-benzenamine $C_9H_{13}N$		7500	Kühne et al. (2005)	Q	
(2-isopropylaniline)		6400	Kühne et al. (2005)	?	
[643-28-7]					
YKOLZVXSPGIIIBJ-UHFFFAOYSA-N					
2,6-diethylbenzenamine $C_{10}H_{15}N$	8.8		Duchowicz et al. (2020)	V	186
	9.0		HSDB (2015)	V	
(2,6-diethylaniline)	3.0×10^{-1}		Duchowicz et al. (2020)	Q	
[579-66-8]	9.0×10^{-1}		Hilal et al. (2008)	Q	
FOYHNROGBXVLLX-UHFFFAOYSA-N	6.8		Modarresi et al. (2007)	Q	67
	8.8		Yaffe et al. (2003)	Q	248, 249
	5.0		Katritzky et al. (1998)	Q	
	8.8		Yaws (1999)	?	21, 402
1,2-benzenediamine $C_6H_8N_2$	1.4×10^3		Duchowicz et al. (2020)	V	186
	1.4×10^3		HSDB (2015)	V	
(<i>o</i> -phenylenediamine)	7.6×10^1		Schüürmann (2000)	V	
[95-54-5]	1.0×10^2		Yaws (2003)	X	237, 555
GEYOCULIXLDCMW-UHFFFAOYSA-N	2.9×10^3		Duchowicz et al. (2020)	Q	
	1.2×10^2		Gharagheizi et al. (2012)	Q	
	1.0×10^2		Gharagheizi et al. (2010)	Q	246



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Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^3		Hilal et al. (2008)	Q	
1,3-benzenediamine $C_6H_8N_2$ (<i>m</i> -phenylenediamine) [108-45-2] WZCQRUWWHSTZEM-UHFFFAOYSA-N	7.9×10^3 7.6×10^3 1.3×10^4 6.9×10^3		Duchowicz et al. (2020) HSDB (2015) Schüürmann (2000) Yaws (2003)	V V V X	186 237
	2.8×10^3 2.8×10^2 2.2×10^3 1.1×10^5 3.7×10^4		Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	Q Q Q Q Q	 246 67
1,4-benzenediamine $C_6H_8N_2$ (<i>p</i> -phenylenediamine) [106-50-3] CBCKQZAAMUWICA-UHFFFAOYSA-N	7.1×10^2 1.5×10^4 1.7×10^2 2.2×10^3		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q	237, 79 99 246
2-methyl-1,3-benzenediamine $C_7H_{10}N_2$ [823-40-5] RLYCRLGLCUXUPO-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	Q	99
2-methyl-1,4-benzenediamine $C_7H_{10}N_2$ [95-70-5] OBCSAIDCZQSFQH-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	Q	99
3-methyl-1,2-benzenediamine $C_7H_{10}N_2$ (2,3-diaminotoluene) [2687-25-4] AXNUJYHFQHQZBE-UHFFFAOYSA-N	1.0×10^4		HSDB (2015)	Q	99
4-methyl-1,3-benzenediamine $C_7H_{10}N_2$ (toluene-2,4-diamine) [95-80-7] VOZKJLKRJDJLL-UHFFFAOYSA-N	1.0×10^4		HSDB (2015)	Q	99
3,5-diaminotoluene $C_7H_{10}N_2$ [108-71-4] LVNDUJYMLJDECN-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	Q	545
phenylhydrazine $C_6H_8N_2$ [100-63-0] HKOOXMFOWEVEGF-UHFFFAOYSA-N	2.2×10^3 3.4×10^2 9.6 6.9×10^2 8.3×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	186 67



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(methylamino)-benzene C_7H_9N (N-methylaniline) [100-61-8] AFBPFWSMIHJQDM-UHFFFAOYSA-N	8.7×10^{-1}		HSDB (2015)	V	
	8.7×10^{-1}		Schüürmann (2000)	V	
	1.1		Abraham et al. (1994a)	R	
	3.0×10^{-1}		Keshavarz et al. (2022)	Q	
	3.7		Duchowicz et al. (2020)	Q	299
	1.5		Hilal et al. (2008)	Q	
	5.7×10^{-1}		Modarresi et al. (2007)	Q	67
	6.1×10^{-1}		Yaffe et al. (2003)	Q	248, 272
	2.0		Yao et al. (2002)	Q	229
	7.3×10^{-1}		English and Carroll (2001)	Q	230, 231
(ethylamino)-benzene $C_8H_{11}N$ (N-ethylaniline) [103-69-5] OJGMBLNIHDZDGS-UHFFFAOYSA-N	4.5		Katritzky et al. (1998)	Q	
	2.7		Nirmalakhandan et al. (1997)	Q	
	1.1		Duchowicz et al. (2020)	?	185, 21
	8.7×10^{-1}		Yaws (1999)	?	21
	8.1×10^{-1}	7900	Brockbank (2013)	L	1, 556
	1.0		Altschuh et al. (1999)	M	
	4.1×10^{-1}		Keshavarz et al. (2022)	Q	
	1.3		Duchowicz et al. (2020)	Q	184
	6.2×10^{-1}		HSDB (2015)	Q	99
	7.0×10^{-1}		Hilal et al. (2008)	Q	
(dimethylamino)-benzene $C_8H_{11}N$ (N,N-dimethylaniline) [121-69-7] JLTDJTHDQAWBAV-UHFFFAOYSA-N	9.5×10^{-1}		Modarresi et al. (2007)	Q	67
	6.1×10^{-1}	7100	Kühne et al. (2005)	Q	
	6.1×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	3.1		Katritzky et al. (1998)	Q	
	1.0		Duchowicz et al. (2020)	?	185, 21
		7600	Kühne et al. (2005)	?	
	1.7×10^{-1}		HSDB (2015)	V	
	8.5×10^{-2}		Mackay et al. (2006d)	V	
	8.5×10^{-2}		Mackay et al. (1995)	V	
	1.3×10^{-1}		Meylan and Howard (1991)	V	
1.6×10^{-1}		Yoshida et al. (1983)	V		
(dimethylamino)-benzene $C_8H_{11}N$ (N,N-dimethylaniline) [121-69-7] JLTDJTHDQAWBAV-UHFFFAOYSA-N	9.9×10^{-2}		Hilal et al. (2008)	Q	
	1.0×10^{-1}		Modarresi et al. (2007)	Q	67
		6900	Kühne et al. (2005)	Q	
	1.4×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.5		Katritzky et al. (1998)	Q	
	2.4		Nirmalakhandan et al. (1997)	Q	
	1.1		Meylan and Howard (1991)	Q	
		6300	Kühne et al. (2005)	?	
	9.7×10^{-2}		Yaws (1999)	?	21
	1.4×10^{-1}		Abraham et al. (1990)	?	



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Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzeneethanamine $C_8H_{11}N$ (2-phenylethylamine) [64-04-0] BHHGXPLMPWCGHP-UHFFFAOYSA-N	1.2×10^1		HSDB (2015)	Q	99
2,3-dimethylbenzenamine $C_8H_{11}N$ (2,3-xylydine) [87-59-2] VVAKEQGKZKNKUSU-UHFFFAOYSA-N	3.9		HSDB (2015)	Q	99
3,5-dimethylbenzenamine $C_8H_{11}N$ [108-69-0] MKARNSWMMBGSHX-UHFFFAOYSA-N	3.9		HSDB (2015)	Q	99
dimethylaniline $C_8H_{11}N$ (xylydine) [1300-73-8] CDULGHZNHURECF-UHFFFAOYSA-N	3.9		HSDB (2015)	Q	99
phenelzine $C_8H_{12}N_2$ [51-71-8] RMUCZJUITONUFY-UHFFFAOYSA-N	2.9×10^3		HSDB (2015)	Q	99
N,N-dimethyl-1,4-benzenediamine $C_8H_{12}N_2$ [99-98-9] BZORFPDSXLZWF-UHFFFAOYSA-N	3.3×10^2		HSDB (2015)	Q	99
2,4,6-trimethylbenzenamine $C_9H_{13}N$ (2,4,6-trimethylaniline) [88-05-1] KWVPRPSXBZNOHS-UHFFFAOYSA-N	3.7		HSDB (2015)	Q	99
N-ethyl-3-methylbenzenamine $C_9H_{13}N$ [102-27-2] GUYMMHOQXYZMJQ-UHFFFAOYSA-N	1.6		HSDB (2015)	Q	99
N-(1-methylethyl)benzenamine $C_9H_{13}N$ [768-52-5] FRCFWPVMFJMNDP-UHFFFAOYSA-N	1.3		HSDB (2015)	Q	99



Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-ethyl-6-methylbenzenamine $C_9H_{13}N$ [24549-06-2] JJVKJJCILLRP-UHFFFAOYSA-N	3.2 2.1 1.0 8.4×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
N,N-dimethylbenzylamine $C_9H_{13}N$ [103-83-3] XXBDWLFCJWSEKW-UHFFFAOYSA-N		7700 7700	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
N,N,4-trimethylbenzenamine $C_9H_{13}N$ [99-97-8] GYVGXEWAQAAJEU-UHFFFAOYSA-N	2.0×10^{-1} 1.1×10^{-1} 1.4×10^{-1} 4.0×10^{-2}		Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q	186 67
N,N'-di- <i>tert</i> -butylethylenediamine $C_{10}H_{24}N_2$ [4062-60-6] KGHYGBGIWLNFAV-UHFFFAOYSA-N	3.6×10^2 2.3 9.9×10^{-1} 1.2×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
(diethylamino)-benzene $C_{10}H_{15}N$ (N,N-diethylaniline) [91-66-7] GGSUCNLOZRCGPQ-UHFFFAOYSA-N	6.7×10^{-2} 5.1×10^{-2} 5.2×10^{-2} 4.6×10^{-1} 4.6×10^{-1} 2.4×10^{-2} 9.9×10^{-2} 6.0×10^{-2}	6700	Brockbank (2013) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	L V V V V Q Q Q	1 186 67
		7600	Kühne et al. (2005) Katritzky et al. (1998)	Q Q	
	2.4		Kühne et al. (2005)	?	
	5.2	5800	Yaws (1999)	?	21, 557
1-naphthylamine $C_{10}H_9N$ [134-32-7] RUFPHBVGCFYCNW-UHFFFAOYSA-N	1.6×10^2 2.1×10^1 8.8×10^1 6.2×10^2 2.0×10^1 3.0×10^1 8.3×10^1 1.2×10^2 4.6×10^2 8.9×10^1		Altschuh et al. (1999) HSDB (2015) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	M V R Q Q Q Q Q Q Q ?	 184 67 230, 231 185, 21



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Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-naphthylamine $C_{10}H_9N$ [91-59-8] JBIJLHTVPXGSAM-UHFFFAOYSA-N	1.2×10^2		Abraham et al. (1994a)	R	
	1.2×10^2		Keshavarz et al. (2022)	Q	
	2.0×10^1		Duchowicz et al. (2020)	Q	299
	8.0×10^1		Hilal et al. (2008)	Q	
	1.0×10^2		Modarresi et al. (2007)	Q	67
	1.2×10^2		English and Carroll (2001)	Q	230, 274
	4.5×10^2		Nirmalakhandan et al. (1997)	Q	
	1.2×10^2		Duchowicz et al. (2020)	?	185, 21
	1.2×10^2		HSDB (2015)	?	419
1,5-naphthalenediamine $C_{10}H_{10}N_2$ [2243-62-1] KQSABULTKYLFEV-UHFFFAOYSA-N	1.5×10^5		HSDB (2015)	Q	99
phentermine $C_{10}H_{15}N$ [122-09-8] DHHVAGZRURJOKS-UHFFFAOYSA-N	7.0		HSDB (2015)	Q	99
N,N-diethyl-1,4-benzenediamine $C_{10}H_{16}N_2$ [93-05-0] QNGVNLMMQUVQK-UHFFFAOYSA-N	1.9×10^2		HSDB (2015)	Q	99
3,5-diethyltoluene-2,6-diamine $C_{11}H_{18}N_2$ [2095-01-4] RQEOBXYYEPMCPJ-UHFFFAOYSA-N	6.2×10^3		Zhang et al. (2010)	Q	287, 288
	6.9×10^3		Zhang et al. (2010)	Q	287, 289
	6.1×10^1		Zhang et al. (2010)	Q	287, 290
	2.1×10^2		Zhang et al. (2010)	Q	287, 291
2,4-diethyl-6-methylbenzene-1,3-diamine $C_{11}H_{18}N_2$ [2095-02-5] PISLZQACAJMAIO-UHFFFAOYSA-N	6.2×10^3		Zhang et al. (2010)	Q	287, 288
	7.0×10^3		Zhang et al. (2010)	Q	287, 289
	6.2×10^1		Zhang et al. (2010)	Q	287, 290
	2.1×10^2		Zhang et al. (2010)	Q	287, 291
diphenylamine $C_{12}H_{11}N$ [122-39-4] DMBHRLKUKUOEG-UHFFFAOYSA-N	3.7		Duchowicz et al. (2020)	V	186
	3.7		HSDB (2015)	V	
	2.9×10^1		Mackay et al. (2006d)	V	
	2.9×10^1		Mackay et al. (1995)	V	
	3.5		Meylan and Howard (1991)	V	
	1.5		Yaws (2003)	X	237, 12
	3.5		Howard et al. (1991)	X	412
	4.1×10^1		Duchowicz et al. (2020)	Q	
	1.5		Gharagheizi et al. (2010)	Q	246
3.0		Hilal et al. (2008)	Q		
9.4		Meylan and Howard (1991)	Q		



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzidine $C_{12}H_{12}N_2$ [92-87-5] HFACYLZERDEVXS-UHFFFAOYSA-N	2.2×10^6 2.6×10^5 2.2×10^6 2.5×10^1 1.9×10^5		Mackay et al. (2006d) Lide and Frederikse (1995) Mackay et al. (1995) Mackay et al. (1995) HSDB (2015)	V V V C Q	 99
1,1-diphenylhydrazine $C_{12}H_{12}N_2$ [530-50-7] YHYKLKNNBYLTQY-UHFFFAOYSA-N	2.4×10^2		HSDB (2015)	Q	99
1,2-diphenylhydrazine $C_{12}H_{12}N_2$ (N,N'-bianiline) [122-66-7] YBQZXXMEJHZYMB-UHFFFAOYSA-N	2.1×10^1 2.1×10^1 2.9×10^3 2.3×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Duchowicz et al. (2020)	V V V V Q	186 558
4-(phenylazo)-benzenamine $C_{12}H_{11}N_3$ (4-aminoazobenzene) [60-09-3] QPQKUYYSJWQSDY-UHFFFAOYSA-N	1.1×10^5 9.3×10^2 1.9×10^3 3.2×10^3 7.3×10^5 3.4×10^2		HSDB (2015) Gharagheizi et al. (2012) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
azobenzene $C_{12}H_{10}N_2$ [103-33-3] DMLAVOWQYNRWNG-UHFFFAOYSA-N	7.3×10^{-1} 7.0×10^{-1} 2.6		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
2-aminobiphenyl $C_{12}H_{11}N$ [90-41-5] TWBPWPBPGNQWFSJ-UHFFFAOYSA-N	6.6×10^1		HSDB (2015)	Q	99
4-aminobiphenyl $C_{12}H_{11}N$ [92-67-1] DMVOXQPQNTYEKQ-UHFFFAOYSA-N	6.6×10^1		HSDB (2015)	Q	99
N-phenyl-1,4-benzenediamine $C_{12}H_{12}N_2$ (<i>p</i> -aminodiphenylamine) [101-54-2] ATGUVKSASEFFO-UHFFFAOYSA-N	1.5×10^3 2.7×10^4 5.9×10^2 3.6×10^3		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	X Q Q Q	237 99 246
2-fluorenamine $C_{13}H_{11}N$ [153-78-6] CFRFHWQYWJMEJN-UHFFFAOYSA-N	2.7×10^2		HSDB (2015)	Q	545



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Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4'-methylenebisbenzenamine $C_{13}H_{14}N_2$ [101-77-9] YBRVSVVWCFQMG-UHFFFAOYSA-N	1.9×10^5		HSDB (2015)	V	
2-anthracenamine $C_{14}H_{11}N$ [613-13-8] YCSBALJAGZKWWFF-UHFFFAOYSA-N	3.3×10^1		HSDB (2015)	Q	545
3,3'-dimethylbenzidine $C_{14}H_{16}N_2$ [119-93-7] NUIURNJTPRWVAP-UHFFFAOYSA-N	1.6×10^5		HSDB (2015)	Q	447
N,N-dimethyl-4-(phenylazo)- benzenamine $C_{14}H_{15}N_3$ [60-11-7] JCYPECIVGRXBMO-UHFFFAOYSA-N	1.4×10^3		HSDB (2015)	V	
	4.2×10^1		Zhang et al. (2010)	Q	287, 288
	4.1×10^1		Zhang et al. (2010)	Q	287, 289
	8.2×10^1		Zhang et al. (2010)	Q	287, 290
	1.0×10^1		Zhang et al. (2010)	Q	287, 291
<i>o</i> -aminoazotoluene $C_{14}H_{15}N_3$ [97-56-3] PFRYFZZSECNQOL-UHFFFAOYSA-N	3.1×10^2		Duchowicz et al. (2020)	V	186
	3.8×10^2		Duchowicz et al. (2020)	Q	
N-ethyl-N- phenylbenzenemethanamine $C_{15}H_{17}N$ [92-59-1] HSZCJVZRHXPICIA-UHFFFAOYSA-N	1.1		Zhang et al. (2010)	Q	287, 288
	1.1		Zhang et al. (2010)	Q	287, 289
	4.6×10^{-1}		Zhang et al. (2010)	Q	287, 290
	6.7		Zhang et al. (2010)	Q	287, 291
N-(1-methylethyl)-N'-phenyl-1,4- benzenediamine $C_{15}H_{18}N_2$ (4-(iso- propylamino)diphenylamine) [101-72-4] OUBMGJOQLXMSNT-UHFFFAOYSA-N	7.0×10^3		HSDB (2015)	Q	99
4,4'-methylene-bis-(N- methylaniline) $C_{15}H_{18}N_2$ [1807-55-2] ZMVMYBGDGLJCHV-UHFFFAOYSA-N	3.4×10^4		HSDB (2015)	Q	99
C.I. Food Yellow 10 $C_{16}H_{13}N_3$ [85-84-7] KLCDSGLLRINHY-UHFFFAOYSA-N	1.9×10^4		HSDB (2015)	Q	99



Table A4.1: Amines (C, H, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3',5,5'-tetramethylbenzidine $C_{16}H_{20}N_2$ [54827-17-7] UAIUNKRWKOVEES-UHFFFAOYSA-N	1.3×10^5		HSDB (2015)	Q	99
N-phenyl-1-naphthalenamine $C_{16}H_{13}N$ [90-30-2] XQVWYOYUZDUNRW-UHFFFAOYSA-N	7.0×10^1 9.7×10^1 4.6×10^1 1.2×10^1 2.8×10^2		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	287, 288 287, 289 287, 290 287, 291
yellow OB $C_{17}H_{15}N_3$ [131-79-3] BWLVSUUUKQICP-FMQUCBEESA-N	1.8×10^4		HSDB (2015)	Q	99
auramine $C_{17}H_{21}N_3$ [492-80-8] JPIYZTWMUGTEHX-UHFFFAOYSA-N	1.2×10^2		HSDB (2015)	V	
benzphetamine $C_{17}H_{21}N$ [156-08-1] YXKTVDFXDRQTKV-UHFFFAOYSA-N	2.3×10^1		HSDB (2015)	Q	99
4,4'-methylenebis(N,N-dimethylbenzenamine) $C_{17}H_{22}N_2$ (bis(p-dimethylamino)phenylmethane) [101-61-1] JNRLEMMIVRBKJE-UHFFFAOYSA-N	8.2×10^1		HSDB (2015)	Q	99
phencyclidine $C_{17}H_{25}N$ [77-10-1] JTMJGYZQZDUJJ-UHFFFAOYSA-N	1.8		HSDB (2015)	Q	99
N,N'-diphenyl-1,4-benzenediamine $C_{18}H_{16}N_2$ [74-31-7] UTGQNNCQYDRXCH-UHFFFAOYSA-N	4.7×10^4		HSDB (2015)	Q	99
N-(1,3-dimethylbutyl)-N'-phenyl-1,4-phenylenediamine $C_{18}H_{24}N_2$ [793-24-8] ZZMVLVVFYMGSMY-UHFFFAOYSA-N	2.9×10^3 3.9×10^2 3.9×10^1 2.3×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A4.1: Amines (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
amitraz $C_{19}H_{23}N_3$ [33089-61-1] QXAITBQSYVYNQDR-UHFFFAOYSA-N	1.0 1.3 1.4×10^2 2.1×10^1 1.0		MacBean (2012b) Keshavarz et al. (2022) Duchowicz et al. (2020) Modarresi et al. (2007) Duchowicz et al. (2020)	X Q Q Q ?	350 67 185, 21
N,N'-bis(1-ethyl-3-methylpentyl)- 1,4-benzenediamine $C_{22}H_{40}N_2$ [139-60-6] JUHXTONDLXIGGK-UHFFFAOYSA-N	5.8×10^1 5.8 1.8 1.9×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
<i>p,p'</i> -benzylidenebis(N,N- dimethylaniline) $C_{23}H_{26}N_2$ (leucomalachite green) [129-73-7] WZKXBGJNCGHIC-UHFFFAOYSA-N	1.0×10^3		HSDB (2015)	Q	99
N-phenyl-N-(2,4,4-trimethyl-2- pentanyl)-1-naphthalenamine $C_{24}H_{29}N$ [51772-35-1] SNWVRVDHQRBFG-UHFFFAOYSA-N	6.4×10^{-1} 9.7×10^{-1} 9.0×10^{-1} 1.1×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
tris(2-ethylhexyl)amine $C_{24}H_{51}N$ [1860-26-0] BZUDVELGTZDOIG-UHFFFAOYSA-N	7.0×10^{-4} 1.2×10^{-2} 6.1×10^{-6} 3.7×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4,4',4''-methyldiyl-tris(N,N- dimethylbenzenamine) $C_{25}H_{31}N_3$ (Leucocrystal violet) [603-48-5] OAZWDJGLIYNYMU-UHFFFAOYSA-N	6.4×10^4 3.1×10^4 3.5×10^2 1.1×10^6		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
N-phenylbenzenamide $C_{30}H_{47}N$ [68608-79-7] FSPSPMFMQHGQD-UHFFFAOYSA-N	8.2×10^{-2} 4.7×10^{-1} 1.5×10^{-1} 2.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4,4',4''-methanetriyltris(N,N- diethylaniline) $C_{31}H_{43}N_3$ [68814-02-8] HOGMPEULJBVHLZ-UHFFFAOYSA-N	9.0×10^4 7.0×10^5 1.7×10^3 1.5×10^6		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



A4.2 Heterocycles with nitrogen (C, H, N)

Table A4.2: Heterocycles with nitrogen (C, H, N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
amitrole $\text{C}_2\text{H}_4\text{N}_4$ [61-82-5] KLSJWNVNTNUYHDU-UHFFFAOYSA-N	4.5×10^7 4.5×10^7 6.1×10^9 1.5×10^3		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186
azetidine $\text{C}_3\text{H}_7\text{N}$ [503-29-7] HONIICLYMWZJFZ-UHFFFAOYSA-N	4.8		Ebert et al. (2023)	?	365
imidazole $\text{C}_3\text{H}_4\text{N}_2$ [288-32-4] RAXXELZNTBOGNW-UHFFFAOYSA-N	3.3×10^3 2.1×10^3 3.1×10^3		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549
1,3,5-triazine-2,4,6-triamine $\text{C}_3\text{H}_6\text{N}_6$ [108-78-1] JDSHMPZPIAZGSV-UHFFFAOYSA-N	5.5×10^8 5.2×10^7 6.7×10^8 5.8×10^9 8.4×10^8		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	287, 288 287, 289 287, 290 287, 291
pyrrolidine $\text{C}_4\text{H}_8\text{NH}$ [123-75-1] RWRDLPLDKPQOW-UHFFFAOYSA-N	4.2 4.2 1.8 1.3×10^1 6.0 5.3×10^{-1} 4.1 8.4×10^{-1} 2.0 4.1	7600	Amoore and Buttery (1978) Cabani et al. (1971a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998) Suzuki et al. (1992) Duchowicz et al. (2020)	V T Q Q Q Q Q Q Q ?	299 67 248, 249 232 185, 21
1-pyrroline $\text{C}_4\text{H}_7\text{N}$ [5724-81-2] ZVJHJDDKYXRJI-UHFFFAOYSA-N	1.6		Amoore and Buttery (1978)	M	
3-pyrroline $\text{C}_4\text{H}_7\text{N}$ [109-96-6] JVQIKJMSUIMUDI-UHFFFAOYSA-N	4.9		Amoore and Buttery (1978)	V	
1,4-diazacyclohexane (piperazine) [110-85-0] GLUUGHFHGXJENI-UHFFFAOYSA-N	4.5×10^3 1.0×10^2	7400 11000	Nguyen (2013) Cabani et al. (1975a)	M T	11



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Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pyrrole C_4H_5N (1H-pyrrole) [109-97-7] KAESVJOAVNADME-UHFFFAOYSA-N	5.5×10^{-1} 6.1×10^{-1} 6.1×10^{-1} 1.8 4.1		Hawthorne et al. (1985) Mackay et al. (2006d) Mackay et al. (1995) Keshavarz et al. (2022) Duchowicz et al. (2020)	M V V Q Q	
	7.2×10^{-1} 8.6×10^{-1} 5.4×10^{-1} 4.2 5.5×10^{-1}		Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998) Duchowicz et al. (2020)	Q Q Q Q ?	184 67 248, 249 185, 21
1-methyl-1H-imidazole $C_4H_6N_2$ [616-47-7] MCTWTZJPLVLRJOU-UHFFFAOYSA-N	6.9×10^1 3.4×10^2 8.9×10^1 1.1×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017) Hilal et al. (2008)	M Q Q Q	478 549
1,3-diazine $C_4H_4N_2$ [289-95-2] CZPWVGJYEJSRLH-UHFFFAOYSA-N	1.0×10^1		Hilal et al. (2008)	Q	
N-methylpyrrolidine $C_4H_8NCH_3$ [120-94-5] AVFZOVWCLRSYKC-UHFFFAOYSA-N	3.3×10^{-1} 1.7×10^{-1} 1.2 2.2×10^{-1} 5.6×10^{-2} 3.2×10^{-1} 3.3×10^{-1}	7600	Cabani et al. (1971a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Suzuki et al. (1992) Duchowicz et al. (2020)	T Q Q Q Q Q ?	184 67 232 185, 21
piperidine $C_5H_{10}NH$ [110-89-4] NQRYJNQNLNOLGT-UHFFFAOYSA-N	2.8 2.0 2.2 2.5 1.3×10^1 7.3 1.0 7.2×10^{-1} 6.7×10^{-1} 1.5 2.2	7900 7900	Bernauer and Dohnal (2009) Amoore and Buttery (1978) Cabani et al. (1971a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998) Russell et al. (1992) Suzuki et al. (1992) Duchowicz et al. (2020)	M V T Q Q Q Q Q Q Q ?	299 67 279 232 185, 21
2-ethylimidazole $C_5H_8N_2$ [1072-62-4] PQAMFDRRWURCFQ-UHFFFAOYSA-N	7.6×10^2 1.4×10^4 8.2×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549
1,2-dimethylimidazole $C_5H_8N_2$ [1739-84-0] GIWQSPITLQVMSG-UHFFFAOYSA-N	4.3×10^1 2.9×10^2 3.3×10^1		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549



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Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-aminopyridine $C_5H_6N_2$ [504-24-5] NUKYPJAOHBNCPPY-UHFFFAOYSA-N	4.3×10^4		HSDB (2015)	V	
2-aminopyridine $C_5H_6N_2$ [504-29-0] ICSNLGPSPRYBMBD-UHFFFAOYSA-N	3.9×10^3		HSDB (2015)	Q	99
2-methylpyrazine $C_4N_2H_3CH_3$ [109-08-0] CAWHJQAVHZVTJ-UHFFFAOYSA-N	4.5 4.9 6.8×10^{-1} 4.8 4.9 1.6×10^2 3.1 1.2 4.5		Buttery et al. (1971) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Russell et al. (1992) Duchowicz et al. (2020)	M Q Q Q Q Q Q Q ?	184 67 279 185, 21
adenine $C_5H_5N_5$ [73-24-5] GFFGJBXGBJISGV-UHFFFAOYSA-N	1.3×10^9 5.3×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
9-methyladenine $C_6H_7N_5$ [700-00-5] WRXCLOUDSPTXNX-UHFFFAOYSA-N	3.9×10^6		Ebert et al. (2023)	?	365
N-methylpiperidine $C_5H_{10}NCH_3$ [626-67-5] PAMIQIKDUOTOBW-UHFFFAOYSA-N	2.4×10^{-1} 2.9×10^{-1} 2.3×10^{-1} 1.2 4.8×10^{-1} 1.3×10^{-1} 3.0×10^{-1} 2.9×10^{-1} 2.2×10^{-1} 9.9×10^{-2} 2.5×10^{-1} 2.9×10^{-1}	7900 6300 6600	Abraham et al. (1994a) Cabani et al. (1971a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Russell et al. (1992) Suzuki et al. (1992) Duchowicz et al. (2020) Kühne et al. (2005)	R T Q Q Q Q Q Q Q Q Q ?	67 230, 231 279 232 185, 21
triethylenediamine $C_6H_{12}N_2$ [280-57-9] IMNIMPAHZVJRPE-UHFFFAOYSA-N	3.1×10^3 8.9×10^2 2.2×10^3		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549



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Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.4×10^{-1}		Yaws and Yang (1992)	?	21
	9.9×10^{-1}		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	560
3-methylpyridine $C_5H_4NCH_3$ (3-picoline; β -picoline) [108-99-6] ITQTTZVARXURQS-UHFFFAOYSA-N	1.2	6400	Brockbank (2013)	L	1
	4.2×10^{-1}		Chaintreau et al. (1995)	M	
	1.3	6300	Andon et al. (1954)	M	336
	1.1		Keshavarz et al. (2022)	Q	
	8.0×10^{-2}		Duchowicz et al. (2020)	Q	299
	8.8×10^{-1}		Hilal et al. (2008)	Q	
	8.5×10^{-1}		Modarresi et al. (2007)	Q	67
		6400	Kühne et al. (2005)	Q	
	1.0		Yaffe et al. (2003)	Q	248, 272
	1.3		Yao et al. (2002)	Q	229, 267
	9.5×10^{-1}		English and Carroll (2001)	Q	230, 231
	2.3		Katritzky et al. (1998)	Q	
	1.3		Nirmalakhandan et al. (1997)	Q	
	8.8×10^{-1}		Suzuki et al. (1992)	Q	232
	1.3		Duchowicz et al. (2020)	?	185, 21
	1.3		Mackay et al. (2006d)	?	
		6300	Kühne et al. (2005)	?	
	1.4		Yaws (1999)	?	21
	5.4×10^{-1}		Yaws and Yang (1992)	?	21
	1.3		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	560
4-methylpyridine $C_5H_4NCH_3$ [108-89-4] FKNQCJSGGFJEIZ-UHFFFAOYSA-N	1.6	6500	Brockbank (2013)	L	1
	1.7	6500	Andon et al. (1954)	M	336
	1.1		Keshavarz et al. (2022)	Q	
	8.0×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.6		Li et al. (2014)	Q	241
	9.0×10^{-1}		Hilal et al. (2008)	Q	
	8.6×10^{-1}		Modarresi et al. (2007)	Q	67
		6400	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	248, 272
	1.2		Yao et al. (2002)	Q	229
	1.1		English and Carroll (2001)	Q	230, 231
	2.4		Katritzky et al. (1998)	Q	
	1.3		Nirmalakhandan et al. (1997)	Q	
	2.1		Russell et al. (1992)	Q	279
	8.8×10^{-1}		Suzuki et al. (1992)	Q	232
	1.6		Duchowicz et al. (2020)	?	185, 21
	1.7		Mackay et al. (2006d)	?	
		6500	Kühne et al. (2005)	?	
	1.7		Yaws (1999)	?	21, 12
	1.6		Abraham et al. (1990)	?	
	1.4		Arnett and Chawla (1979)	?	559
			Staudinger and Roberts (2001)	W	560



Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-cyanopyridine $C_6H_4N_2$ [100-54-9] GZPHSAQLYPIAIN-UHFFFAOYSA-N	3.6×10^1 1.9×10^1 5.4 3.6×10^1		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015)	R Q Q Q	 99
	1.6×10^1 1.1×10^1 6.9×10^1 1.2×10^2 3.6×10^1		Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	Q Q Q Q ?	 67 230, 231 185, 21
4-cyanopyridine $C_6H_4N_2$ [100-48-1] GPHOHTOMRSGBNZ-UHFFFAOYSA-N	1.1×10^1 1.9×10^1 5.4 1.7×10^1		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008)	R Q Q Q	 67
	1.0×10^1 1.2×10^2 1.1×10^1		Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	Q Q ?	 185, 21
2-ethylpyrazine $C_4N_2H_3(C_2H_5)$ [13925-00-3] KVFIJIWMDBAGDP-UHFFFAOYSA-N	4.0 6.5 7.3×10^{-1} 2.7		Buttery et al. (1971) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008)	M Q Q Q	 184 67
	3.4 2.7 4.0		Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	Q Q ?	 185, 21
2,5-dimethylpyrazine $C_6H_8N_2$ [123-32-0] LCZUOKDVTBMCXM-UHFFFAOYSA-N	7.1 5.5 5.5 6.4		Marin et al. (1999) Druaux et al. (1998) Marin et al. (1999) Marin et al. (1999)	M M V Q	
2,6-dimethylpyrazine $C_6H_8N_2$ (3,5-dimethylpyrazine) [108-50-9] HJFZAYHYIWGLNL-UHFFFAOYSA-N	9.8×10^{-1}		Chaintreau et al. (1995)	M	
N-ethylpiperidine $C_7H_{15}N$ (1-ethylpiperidine) [766-09-6] HTLVHNRZJPSMI-UHFFFAOYSA-N	3.9×10^{-1}		Hilal et al. (2008)	Q	
		6600 6600	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
1H-benzimidazole $C_7H_6N_2$ [51-17-2] HYZJCKYKOHVLJF-UHFFFAOYSA-N	2.7×10^1		HSDB (2015)	Q	99



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Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-ethenylpyridine C_7H_7N (2-vinylpyridine) [100-69-6] KGIGUEBEKRSTEW-UHFFFAOYSA-N	7.0×10^{-1} 2.8×10^{-1} 2.7		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	186 99
4-ethenylpyridine C_7H_7N (4-vinylpyridine) [100-43-6] KFDVPUJYSDEJTH-UHFFFAOYSA-N	1.2 2.8×10^{-1} 3.1		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	186 99
2-ethylpyridine $C_5H_4NC_2H_5$ [100-71-0] NRGGMCIBEHAIL-UHFFFAOYSA-N	6.0×10^{-1} 1.5 8.2×10^{-2} 2.9×10^{-1} 6.5×10^{-1}	6700	Andon et al. (1954) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q Q Q	336 299 67
	6.1×10^{-1} 2.4 1.1 1.4 6.0×10^{-1} 6.0×10^{-1}	6700 7900	Kühne et al. (2005) Yaffe et al. (2003) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Duchowicz et al. (2020) Kühne et al. (2005) Abraham et al. (1990) Staudinger and Roberts (2001)	Q Q Q Q ? ? W	248, 249 232 185, 21 560
3-ethylpyridine $C_5H_4NC_2H_5$ [536-78-7] MFEIKQPHQINPRI-UHFFFAOYSA-N	9.5×10^{-1} 1.5 8.2×10^{-2} 6.7×10^{-1} 6.0×10^{-1}	6400	Andon et al. (1954) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q Q Q	336 67
	1.0 2.9 1.1 1.4 9.5×10^{-1} 9.5×10^{-1}	6700 6200	Kühne et al. (2005) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Duchowicz et al. (2020) Kühne et al. (2005) Abraham et al. (1990) Staudinger and Roberts (2001)	Q Q Q Q ? ? ? W	230, 231 232 185, 21 560
4-ethylpyridine $C_5H_4NC_2H_5$ [536-75-4] VJXRKZJMGVSXPX-UHFFFAOYSA-N	1.2 1.5 8.2×10^{-2} 1.2 7.0×10^{-1} 5.7×10^{-1}	6300	Andon et al. (1954) Keshavarz et al. (2022) Duchowicz et al. (2020) Li et al. (2014) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005)	M Q Q Q Q Q Q	336 299 241 67



Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2		Yaffe et al. (2003)	Q	248, 249
	1.0		English and Carroll (2001)	Q	230, 260
	2.9		Katritzky et al. (1998)	Q	
	1.1		Nirmalakhandan et al. (1997)	Q	
	1.4		Suzuki et al. (1992)	Q	232
	1.2		Duchowicz et al. (2020)	?	185, 21
		6300	Kühne et al. (2005)	?	
	1.2		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	560
2,3-dimethylpyridine $C_5H_3N(CH_3)_2$ (2,3-lutidine) [583-61-9] HPYNZHMRTTWQTB-UHFFFAOYSA-N	1.4	6900	Andon et al. (1954)	M	336
	1.5		Keshavarz et al. (2022)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	184
	6.2×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	67
		6200	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	248, 272
	1.6		English and Carroll (2001)	Q	230, 274
	3.0		Katritzky et al. (1998)	Q	
	9.5×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.3		Suzuki et al. (1992)	Q	232
	1.4		Duchowicz et al. (2020)	?	185, 21
	1.4		Mackay et al. (2006d)	?	
		5800	Kühne et al. (2005)	?	
	1.4		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	560
2,4-dimethylpyridine $C_5H_3N(CH_3)_2$ (2,4-lutidine) [108-47-4] JYYNAJVZFGKDEQ-UHFFFAOYSA-N	9.9×10^{-1}		Hawthorne et al. (1985)	M	
	1.5	7100	Andon et al. (1954)	M	336
	1.5		Keshavarz et al. (2022)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	
	1.5		Li et al. (2014)	Q	241
	5.1×10^{-1}		Hilal et al. (2008)	Q	
	2.9×10^{-1}		Modarresi et al. (2007)	Q	67
		6700	Kühne et al. (2005)	Q	
	1.5		Yaffe et al. (2003)	Q	248, 272
	1.8		English and Carroll (2001)	Q	230, 231
	3.1		Katritzky et al. (1998)	Q	
	9.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.7		Russell et al. (1992)	Q	279
	1.3		Suzuki et al. (1992)	Q	232
	1.5		Duchowicz et al. (2020)	?	185, 21
	1.5		Mackay et al. (2006d)	?	
		6400	Kühne et al. (2005)	?	
	1.5		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	560



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Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,5-dimethylpyridine $C_5H_3N(CH_3)_2$ (2,5-lutidine) [589-93-5] XWKFPIDWVPLX-UHFFFAOYSA-N	1.1	7000	Andon et al. (1954)	M	336
	1.5		Keshavarz et al. (2022)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	299
	5.7×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	67
		6700	Kühne et al. (2005)	Q	
	1.2		Yaffe et al. (2003)	Q	248, 249
	1.6		English and Carroll (2001)	Q	230, 231
	2.9		Katritzky et al. (1998)	Q	
	9.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
2,6-dimethylpyridine $C_5H_3N(CH_3)_2$ (2,6-lutidine) [108-48-5] OISVCGZHLKNMSJ-UHFFFAOYSA-N	1.3		Suzuki et al. (1992)	Q	232
	1.2		Meylan and Howard (1991)	Q	
	1.1		Duchowicz et al. (2020)	?	185, 21
		6900	Kühne et al. (2005)	?	
	1.1		Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	560
	9.2×10^{-1}	7300	Brockbank (2013)	L	1
	6.6×10^{-1}		Hawthorne et al. (1985)	M	
	9.5×10^{-1}	7300	Andon et al. (1954)	M	336
	1.5		Keshavarz et al. (2022)	Q	
3,4-dimethylpyridine $C_5H_3N(CH_3)_2$ (3,4-lutidine) [583-58-4] NURQLCJSMXZBPC-UHFFFAOYSA-N	2.7×10^{-2}		Duchowicz et al. (2020)	Q	299
	4.5×10^{-1}		Hilal et al. (2008)	Q	
	6.8×10^{-1}		Modarresi et al. (2007)	Q	67
		6700	Kühne et al. (2005)	Q	
	1.6		English and Carroll (2001)	Q	230, 231
	2.4		Katritzky et al. (1998)	Q	
	9.5×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.3		Suzuki et al. (1992)	Q	232
	9.5×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	9.4×10^{-1}		Mackay et al. (2006d)	?	
3,4-dimethylpyridine $C_5H_3N(CH_3)_2$ (3,4-lutidine) [583-58-4] NURQLCJSMXZBPC-UHFFFAOYSA-N	9.5×10^{-1}	6600	Kühne et al. (2005)	?	
			Abraham et al. (1990)	?	
			Staudinger and Roberts (2001)	W	560
	2.7	6800	Andon et al. (1954)	M	336
	1.5		Keshavarz et al. (2022)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	299
	1.3		Hilal et al. (2008)	Q	
	3.8×10^{-1}		Modarresi et al. (2007)	Q	67
		6200	Kühne et al. (2005)	Q	
	2.7		Yaffe et al. (2003)	Q	248, 249
3,4-dimethylpyridine $C_5H_3N(CH_3)_2$ (3,4-lutidine) [583-58-4] NURQLCJSMXZBPC-UHFFFAOYSA-N	1.4		English and Carroll (2001)	Q	230, 260
	2.8		Katritzky et al. (1998)	Q	
	9.2×10^{-1}		Nirmalakhandan et al. (1997)	Q	
	1.3		Suzuki et al. (1992)	Q	232
	2.7		Duchowicz et al. (2020)	?	185, 21
		6400	Kühne et al. (2005)	?	



Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.7		Abraham et al. (1990) Staudinger and Roberts (2001)	? W	560
3,5-dimethylpyridine $C_5H_3N(CH_3)_2$ (3,5-lutidine) [591-22-0] HWWYDZCSSYKIAD-UHFFFAOYSA-N	1.4 1.5 2.7×10^{-2} 9.7×10^{-1} 5.9×10^{-1}	6800	Andon et al. (1954) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q Q	336 184 67
		6700	Kühne et al. (2005) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Duchowicz et al. (2020)	Q Q Q Q Q Q	248, 249 230, 231
	1.5 1.2 3.3 9.2×10^{-1} 1.3 1.4	6500	Kühne et al. (2005) Abraham et al. (1990) Staudinger and Roberts (2001)	? ? W	560
5-ethyl-2-methylpyridine $C_8H_{11}N$ [104-90-5] NTSLROIKFLNUIJ-UHFFFAOYSA-N	5.2×10^{-1} 5.2×10^{-1} 2.7×10^{-2} 8.6×10^{-1} 3.8×10^{-1} 7.0×10^{-1} 6.2×10^{-2} 4.4×10^{-1} 1.4×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q Q Q Q	186 287, 288 287, 289 287, 290 287, 291 67
2,4,6-trimethylpyridine $C_5H_2N(CH_3)_3$ (2,4,6-collidine) [108-75-8] BWZCCNYKMEVEX-UHFFFAOYSA-N	1.1 1.1 5.7×10^{-2} 5.7×10^{-2} 1.1 8.9×10^{-3} 5.4×10^{-1} 1.1	7100	Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Hilal et al. (2008) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005)	V V V V C Q Q Q	67
	1.1 2.5	8600	Kühne et al. (2005) Katritzky et al. (1998) Kühne et al. (2005)	Q Q ?	
indole C_8H_7N [120-72-9] SIKJAJRHWYJAI-UHFFFAOYSA-N	1.9×10^1 1.9×10^1 7.1 7.1 1.6×10^1 1.6×10^1 1.5×10^1 5.3		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Yaws (2003) Yaws (2003) Howard and Meylan (1997) Dupeux et al. (2022)	V V V V X X X Q	186 258 237, 12 446 259



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Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^1		Duchowicz et al. (2020)	Q	
	7.0×10^1		Gharagheizi et al. (2012)	Q	
	1.7×10^1		Gharagheizi et al. (2010)	Q	246
	9.0		Hilal et al. (2008)	Q	
	9.9		Yaws (1999)	?	21, 12
2-ethyl-3,5-dimethylpyrazine $C_8H_{12}N_2$ [13925-07-0] JZBCTZLGKSYRSF-UHFFFAOYSA-N	2.9	8500	Wieland et al. (2015)	M	561
2-isobutylpyrazine $C_4N_2H_3C_4H_9$ [29460-92-2] YAIMUJJMEBJXAA-UHFFFAOYSA-N	2.0 1.2×10^1 1.4		Buttery et al. (1971) Keshavarz et al. (2022) Nirmalakhandan et al. (1997)	M Q Q	
2-(1-methylpropyl)-pyrazine $C_8H_{12}N_2$ [29460-93-3] NFFQZEXYZVZKNN-UHFFFAOYSA-N	1.6 2.2		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	67
5-ethenyl-2-methylpyridine C_8H_9N [140-76-1] VJOWMORERYNYON-UHFFFAOYSA-N	2.2		HSDB (2015)	Q	99
4-(1,1-dimethylethyl)-pyridine $C_9H_{13}N$ (4- <i>tert</i> -butylpyridine) [3978-81-2] YSHMQTRICHYLGU-UHFFFAOYSA-N	3.9×10^{-1} 7.5×10^{-1} 7.5×10^{-1}	7000	Hilal et al. (2008) Abraham et al. (1990) Arnett and Chawla (1979)	Q ? ?	559
normicotine $C_9H_{12}N_2$ [494-97-3] MYKUKUCHPMASKF-UHFFFAOYSA-N	7.2×10^3		HSDB (2015)	Q	447
2,4-diamino-6-phenyl-1,3,5-triazine $C_9H_9N_5$ [91-76-9] GZVHEAJQGPDLQ-UHFFFAOYSA-N	2.4×10^5		HSDB (2015)	Q	99
N-methylindole C_9H_9N [603-76-9] BLRHMMGNCXNJL-UHFFFAOYSA-N	8.7		Ebert et al. (2023)	?	365



Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methylindole C_9H_9N (skatole) [83-34-1] ZFRKQXVRDFCRJG-UHFFFAOYSA-N	2.9×10^{-5}	-2500	Wetlauber et al. (1964)	M	
	4.7		HSDB (2015)	V	
2,3-diethyl-5-methylpyrazine $C_9H_{14}N_2$ [18138-04-0] PSINWXIDJYEXLO-UHFFFAOYSA-N	8.1×10^{-1}		Roberts and Pollien (1997)	M	
benzo[<i>b</i>]pyridine C_9H_7N (quinoline) [91-22-5] SMWDFEZZVXVSRB-UHFFFAOYSA-N	5.9		Duchowicz et al. (2020)	V	186
	5.8		HSDB (2015)	V	
	3.8×10^1		Mackay et al. (2006d)	V	
	3.8×10^1		Mackay et al. (1995)	V	
	6.0		Meylan and Howard (1991)	V	
	3.9×10^1		Smith and Bomberger (1980)	V	24
	6.4		Abraham et al. (1994a)	R	
	3.7×10^1	5400	Goldstein (1982)	X	298
	9.3×10^{-1}		Duchowicz et al. (2020)	Q	
	5.7×10^1		Gharagheizi et al. (2012)	Q	
	6.4		Hilal et al. (2008)	Q	
	5.8		Modarresi et al. (2007)	Q	67
		7300	Kühne et al. (2005)	Q	
	6.1		Yaffe et al. (2003)	Q	248, 249
9.0		English and Carroll (2001)	Q	230, 231	
benzo[<i>c</i>]pyridine C_9H_7N (isoquinoline) [119-65-3] AWJUIBRHMBSBTKR-UHFFFAOYSA-N	3.2×10^{-1}		Katritzky et al. (1998)	Q	
	3.4×10^1		Nirmalakhandan et al. (1997)	Q	
	1.4×10^1		Meylan and Howard (1991)	Q	
		7300	Kühne et al. (2005)	?	
	6.5		Yaws (1999)	?	21, 12
benzo[<i>c</i>]pyridine C_9H_7N (isoquinoline) [119-65-3] AWJUIBRHMBSBTKR-UHFFFAOYSA-N	5.2×10^{-2}		Mackay et al. (2006d)	V	
	5.2×10^{-2}		Mackay et al. (1995)	V	
	5.7		Yaws (2003)	X	237, 12
	5.6		Gharagheizi et al. (2010)	Q	246
	9.2		Hilal et al. (2008)	Q	
nicotine $C_{10}H_{14}N_2$ [54-11-5] SNICXCGAKADSCV-SNVBAGLBSA-N	3.8		Yaws (1999)	?	21, 12
nicotine $C_{10}H_{14}N_2$ [54-11-5] SNICXCGAKADSCV-SNVBAGLBSA-N	3.3×10^3		HSDB (2015)	Q	99
2,2'-bipyridine $C_{10}H_8N_2$ [366-18-7] ROFVEXUMMXZLPA-UHFFFAOYSA-N	1.8×10^4		HSDB (2015)	Q	545



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Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4'-bipyridine $C_{10}H_8N_2$ [553-26-4] MWVTWFVJZLCBMC-UHFFFAOYSA-N	3.9×10^3 1.7×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
2-methylquinoline $C_{10}H_9N$ [91-63-4] SMUQFGGVLNIOZ-UHFFFAOYSA-N	1.4×10^1		Ebert et al. (2023)	?	316
4-methylquinoline $C_{10}H_9N$ [491-35-0] MUDSDYNRBDKLGK-UHFFFAOYSA-N	1.3×10^1		HSDB (2015)	Q	99
MEIQX $C_{11}H_{11}N_5$ (2-amino-3,8-dimethylimidazo[4,5-f]quinoxaline) [77500-04-0] DVCCQNKIYNKAB-UHFFFAOYSA-N	6.2×10^7		HSDB (2015)	Q	99
3-(phenylazo)-2,6-pyridinediamine $C_{11}H_{11}N_5$ (phenazopyridine) [94-78-0] QPFYXYFORQJZEC-UHFFFAOYSA-N	3.0×10^9		HSDB (2015)	Q	99
2-amino-9H-pyrido[2,3-b]indole $C_{11}H_9N_3$ [26148-68-5] FJTNLJLPLJDTRM-UHFFFAOYSA-N	2.5×10^8		HSDB (2015)	Q	99
carbazole $C_{12}H_9N$ [86-74-8] UJOBWOGCFQCDNV-UHFFFAOYSA-N	9.4×10^1 9.3×10^1 6.6×10^{-2} 6.6×10^{-2} 6.3×10^{-2} 2.0×10^1 6.3×10^1 1.1×10^2 8.5×10^1	4300 4300	Brockbank (2013) Odabasi et al. (2006) Mackay et al. (2006d) Mackay et al. (1995) Smith and Bomberger (1980) Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	L M V V V Q Q Q Q ?	1 24 99 185, 21
<i>o</i> -phenanthroline $C_{12}H_8N_2$ [66-71-7] DGEZNRVSGBDHLK-UHFFFAOYSA-N	1.1×10^5 9.9×10^3 1.2×10^5 4.4×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzyladenine $C_{12}H_{11}N_5$ [1214-39-7] NWBJYWHLCVSVIJ-UHFFFAOYSA-N	1.1×10^8 1.1×10^{-1}		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
diquat $C_{12}H_{12}N_2$ [2764-72-9] SYJFEGQWDCRVNX-UHFFFAOYSA-N	2.8×10^5		Ebert et al. (2023)	?	318
MEIQ $C_{12}H_{12}N_4$ (2-amino-3,4- dimethylimidazo[4,5- f]quinoxaline) [77094-11-2] GMGWMIJIGUYNAY-UHFFFAOYSA-N	2.5×10^7		HSDB (2015)	Q	99
pyrimethanil $C_{12}H_{13}N_3$ [53112-28-0] ZLIBICFPKPWGIZ-UHFFFAOYSA-N	3.4×10^2 2.8×10^2 2.8×10^2 9.2×10^2 3.9 2.8×10^2	15000	Feigenbrugel and Le Calvé (2021) Duchowicz et al. (2020) Matthews (1998) Duchowicz et al. (2020) HSDB (2015) Maniere et al. (2011)	M V X Q Q ?	186 562, 12 99 241, 165
paraquat $C_{12}H_{14}N_2$ [4685-14-7] INFDPQAKFNJBF-UHFFFAOYSA-N	$>2.4 \times 10^8$		HSDB (2015)	V	
N,N-dimethyltryptamine $C_{12}H_{16}N_2$ [61-50-7] DMULVCHRPCFFGV-UHFFFAOYSA-N	1.5×10^4		HSDB (2015)	Q	99
benzo[<i>f</i>]quinoline $C_{13}H_9N$ [85-02-9] HCAUQPZEWLULFJ-UHFFFAOYSA-N	5.7×10^1 1.0×10^2 1.0×10^2 3.6		Duchowicz et al. (2020) Mackay et al. (2006d) Mackay et al. (1995) Smith and Bomberger (1980) Duchowicz et al. (2020)	V V V V Q	186 558 24
2,6-bis-(1,1-dimethylethyl)- pyridine $C_{13}H_{21}N$ (2,6-di- <i>tert</i> -butylpyridine) [585-48-8] UWKQJZCTQGMHKD-UHFFFAOYSA-N	8.0×10^{-4} 2.8×10^{-1}	6900	Arnett and Chawla (1979) Arnett and Chawla (1979)	M V	559 563



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Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
PHIP $C_{13}H_{12}N_4$ (2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine) [105650-23-5] UQVKZNNCIHJZLS-UHFFFAOYSA-N	3.5×10^7		HSDB (2015)	Q	99
N,N'-diphenylguanidine $C_{13}H_{13}N_3$ [102-06-7] OWRCNXZUPFZXOS-UHFFFAOYSA-N	1.4×10^6		HSDB (2015)	Q	99
acridine $C_{13}H_9N$ [260-94-6] DZBUGLKDJFMEHC-UHFFFAOYSA-N	3.3×10^1 3.3×10^1 2.5×10^1		Mackay et al. (2006d) Mackay et al. (1995) HSDB (2015)	V V Q	99
phenanthridine $C_{13}H_9N$ [229-87-8] RDOWQLZANAYVLL-UHFFFAOYSA-N	6.0×10^2 3.6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
mepanipyrim $C_{14}H_{13}N_3$ [110235-47-7] CIFWZNRJIBNXRE-UHFFFAOYSA-N	6.0×10^2		Maniere et al. (2011)	?	241, 165
cyprodinil $C_{14}H_{15}N_3$ [121552-61-2] HAORKNGNJCEJBX-UHFFFAOYSA-N	1.2×10^2 1.2×10^2 2.9×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
imiquimod $C_{14}H_{16}N_4$ [99011-02-6] DOUYETYNHWWLEO-UHFFFAOYSA-N	1.2×10^7		HSDB (2015)	Q	99
ametoctradin $C_{15}H_{25}N_5$ [865318-97-4] GGKQIOFASHYUJZ-UHFFFAOYSA-N	2.4×10^6		Maniere et al. (2011)	?	12, 165
ferimzone $C_{15}H_{18}N_4$ [89269-64-7] GOWLARCWZRESHU-UHFFFAOYSA-N	1.6×10^5 2.4×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
benz[c]jacridine $C_{17}H_{11}N$ [225-51-4] OAPPEBNXKAKQGS-UHFFFAOYSA-N	3.7×10^2		HSDB (2015)	Q	447



Table A4.2: Heterocycles with nitrogen (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
6-pentyl-1,2,3,4,7,8,9,10-octahydrophenanthridine $C_{18}H_{27}N$ [10594-03-3] FNUATPIDZQSFPD-UHFFFAOYSA-N	4.5×10^{-1} 2.0×10^1 6.2 2.2×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-diphenylmethylpiperidine $C_{18}H_{21}N$ (desoxyypipradrol) [519-74-4] RWTNXJXZVGHMGI-UHFFFAOYSA-N	6.6×10^1		HSDB (2015)	Q	99
fenpropidin $C_{19}H_{31}N$ [67306-00-7] MGNFYQILYYUBS-UHFFFAOYSA-N	7.1×10^2 1.1×10^2 9.9×10^{-2} 9.5×10^{-2} 9.3×10^{-2}	6200	Feigenbrugel and Le Calvé (2021) Duchowicz et al. (2020) Matthews (1998) Duchowicz et al. (2020) Maniere et al. (2011)	M V X Q ?	33 186 562, 12 165
N,N-bis(2-ethylhexyl)-1H-1,2,4-triazole-1-methanamine $C_{19}H_{38}N_4$ [91273-04-0] AVBBHCMDRGQBNW-UHFFFAOYSA-N	2.9×10^1		Ebert et al. (2023)	?	365
7H-dibenzo[<i>c,g</i>]carbazole $C_{20}H_{13}N$ [194-59-2] STJXCDGCVXZHDU-UHFFFAOYSA-N	2.1×10^3 4.0×10^3		Smith and Bomberger (1980) HSDB (2015)	V Q	24 99
porphyrin $C_{20}H_{14}N_4$ (porphin) [101-60-0] RKCAIXNGYQCCAL-YYOYBPFYSA-N	3.9×10^5		Abraham et al. (2019)	Q	
dibenz[<i>a,j</i>]acridine $C_{21}H_{13}N$ [224-42-0] ANUCHZVCBDPOX-UHFFFAOYSA-N	5.2×10^3		HSDB (2015)	Q	99
dibenz[<i>a,h</i>]acridine $C_{21}H_{13}N$ [226-36-8] JNCSIWAONQTVCF-UHFFFAOYSA-N	5.2×10^3		HSDB (2015)	Q	99
1,3,5-tricyclohexylhexahydro-1,3,5-triazine $C_{21}H_{39}N_3$ [6281-14-7] ZLLRUEJANKJPQE-UHFFFAOYSA-N	1.7×10^{-2} 4.0×10^5 1.2×10^5 1.5×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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A4.3 Nitriles (C, H, N)

Table A4.3: Nitriles (C, H, N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyano radical CN [2074-87-5] JEVCWSUVFOYBFI-UHFFFAOYSA-N	7.8×10^{-4}	1400	Berdnikov and Bazhin (1970)	T	47
hydrogen cyanide HCN (hydrocyanic acid) [74-90-8] LELOWRISYMNNSU-UHFFFAOYSA-N	8.9×10^{-2} 8.9×10^{-2} 1.7×10^{-1} 1.1×10^{-1} 8.9×10^{-2} 7.5×10^{-2} 1.2×10^{-1} 9.2×10^{-2} 9.9×10^{-2} 7.6×10^{-2} 7.4×10^{-2} 5.0×10^{-2} 4.2×10^{-2} 3.9×10^{-2} 1.6×10^{-1} 4.7 7.4×10^{-2} 1.1×10^{-1}	8200 8200 4400 5000 8200 8200 4200 2900	Burkholder et al. (2019) Burkholder et al. (2015) Yoo et al. (1986) Edwards et al. (1978) Ma et al. (2010a) Riveros et al. (1998) Fredenhagen and Wellmann (1932b) Hine and Weimar (1965) Edwards et al. (1975) Kotlik and Lebedeva (1974) Gaffney and Senum (1984) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998) Duchowicz et al. (2020) Yaws (1999)	L L L L M M M R T X X Q Q Q Q Q Q ? ?	1 1 12 564 389, 491 184 67 185, 21 21
ethanenitrile CH ₃ CN (acetonitrile) [75-05-8] WEVYAHXRMPXWCK-UHFFFAOYSA-N	5.2×10^{-1} 5.2×10^{-1} 4.9×10^{-1} 5.2×10^{-1} 5.2×10^{-1} 3.8×10^{-1} 5.0×10^{-1} 5.1×10^{-1} 4.7×10^{-1} 6.0×10^{-1} 5.2×10^{-1} 4.9×10^{-1} 3.2×10^{-1} 3.4×10^{-1} 5.3×10^{-1} 4.6×10^{-1} 8.2×10^{-2} 4.8×10^{-1} 5.3×10^{-1} 3.7×10^{-2} 5.0×10^{-1} 2.9×10^{-1}	4000 4000 4300 4000 4000 4200 4100 4000 3500 6300 4000 3300 4100 M M M M 3900 4100 V V R	Burkholder et al. (2019) Burkholder et al. (2015) Brockbank (2013) Sander et al. (2011) Sander et al. (2006) Plyasunov et al. (2006) Fogg and Sangster (2003) Staudinger and Roberts (2001) Arijs and Brasseur (1986) Hiatt (2013) Ji and Evans (2007) Bebahani et al. (2002) Hovorka et al. (2002) Welke et al. (1998) Benkelberg et al. (1995) Li and Carr (1993) Yu (1992) Snider and Dawson (1985) Hamm et al. (1984) Abraham and Acree (2007) Hwang et al. (1992) Hine and Weimar (1965)	L L L L L L L L L M M M M M M M M M M V V R	1 11 12



Table A4.3: Nitriles (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.9×10^{-1}		Gaffney and Senum (1984)	X	389
	4.7×10^{-1}		Hayer et al. (2022)	Q	20
	3.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	
	2.9×10^{-1}		Li et al. (2014)	Q	241
	7.7×10^{-1}		Hilal et al. (2008)	Q	
	3.7×10^{-1}		Modarresi et al. (2007)	Q	67
		4200	Kühne et al. (2005)	Q	
	2.9×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.9×10^{-1}		English and Carroll (2001)	Q	230, 231
	4.4		Katritzky et al. (1998)	Q	
	2.9×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.1×10^{-1}		Suzuki et al. (1992)	Q	232
	2.9×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	3.6×10^{-1}		Mackay et al. (2006d)	?	
		4300	Kühne et al. (2005)	?	
	4.9×10^{-1}		Yaws (1999)	?	21
	4.9×10^{-1}		Yaws and Yang (1992)	?	21
	2.9×10^{-1}		Abraham et al. (1990)	?	
propanenitrile $\text{C}_2\text{H}_5\text{CN}$ (propionitrile) [107-12-0] FVSKHRXBFJPNKK-UHFFFAOYSA-N	3.4×10^{-1}	4500	Brockbank (2013)	L	1
	2.4×10^{-1}	4800	Plyasunov et al. (2006)	L	
	4.3×10^{-1}	6200	Hiatt (2013)	M	
	3.3×10^{-1}	4600	Ji and Evans (2007)	M	
	1.8×10^{-1}		Hovorka et al. (2002)	M	38
	2.5×10^{-1}		Li and Carr (1993)	M	
	1.9×10^{-1}		Hawthorne et al. (1985)	M	
	2.6×10^{-1}		Butler and Ramchandani (1935)	M	
	3.1×10^{-1}		Mackay et al. (2006d)	V	
	3.1×10^{-1}		Mackay et al. (1995)	V	
	1.7×10^{-1}		Howard (1990)	X	412
	3.5×10^{-1}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	
	5.0×10^{-1}		Hilal et al. (2008)	Q	
	2.6×10^{-1}		Modarresi et al. (2007)	Q	67
	2.9×10^{-1}		English and Carroll (2001)	Q	230, 231
	5.6×10^{-1}		Russell et al. (1992)	Q	279
	2.4×10^{-1}		Suzuki et al. (1992)	Q	232
	2.7×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	2.6×10^{-1}		Mackay et al. (2006d)	?	
	2.9×10^{-1}		Yaws (1999)	?	21
	2.7×10^{-1}		Abraham et al. (1990)	?	



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Table A4.3: Nitriles (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) [mol / m ³ Pa]	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
butanenitrile C ₃ H ₇ CN	1.8 × 10 ⁻¹	5100	Brockbank (2013)	L	1
(butyronitrile) [109-74-0] KVNRLNFWIYMESJ-UHFFFAOYSA-N	1.8 × 10 ⁻¹	5100	Plyasunov et al. (2006)	L	
	2.7 × 10 ⁻¹	5100	Ji and Evans (2007)	M	
	1.3 × 10 ⁻¹		Ramachandran et al. (1996)	M	
	1.9 × 10 ⁻¹		Li and Carr (1993)	M	
	1.4 × 10 ⁻¹		Hawthorne et al. (1985)	M	
	1.9 × 10 ⁻¹		Butler and Ramchandani (1935)	M	
	1.8 × 10 ⁻¹		Yaws (2003)	X	258
	1.8 × 10 ⁻¹		Yaws (2003)	X	237
	3.7 × 10 ⁻¹		Dupeux et al. (2022)	Q	259
	1.2 × 10 ⁻¹		Keshavarz et al. (2022)	Q	
	1.0 × 10 ⁻¹		Duchowicz et al. (2020)	Q	184
	1.8 × 10 ⁻¹		Gharagheizi et al. (2010)	Q	246
	3.5 × 10 ⁻¹		Hilal et al. (2008)	Q	
	1.5 × 10 ⁻¹		Modarresi et al. (2007)	Q	67
		4900	Kühne et al. (2005)	Q	
	1.5 × 10 ⁻¹		Yaffe et al. (2003)	Q	248, 249
	5.7 × 10 ⁻²		English and Carroll (2001)	Q	230, 274
	1.9 × 10 ⁻²		Nirmalakhandan et al. (1997)	Q	
	5.4 × 10 ⁻¹		Russell et al. (1992)	Q	279
	1.9 × 10 ⁻¹		Suzuki et al. (1992)	Q	232
	1.9 × 10 ⁻¹		Duchowicz et al. (2020)	?	185, 21
	1.9 × 10 ⁻¹		Mackay et al. (2006d)	?	
		4700	Kühne et al. (2005)	?	
	1.8 × 10 ⁻¹		Yaws (1999)	?	21
	1.9 × 10 ⁻¹		Abraham et al. (1990)	?	
2-methylpropanenitrile C ₄ H ₇ N	1.1 × 10 ⁻¹	5200	Brockbank (2013)	L	1
(isobutyronitrile) [78-82-0] LRDFRRGEGBBSRN-UHFFFAOYSA-N	1.0 × 10 ⁻¹	4800	Plyasunov et al. (2006)	L	
	9.4 × 10 ⁻²		Li and Carr (1993)	M	
	1.8 × 10 ⁻¹		HSDB (2015)	Q	99
	1.9 × 10 ⁻¹		Hilal et al. (2008)	Q	
		4900	Kühne et al. (2005)	Q	
		5100	Kühne et al. (2005)	?	
pentanenitrile C ₄ H ₉ CN	1.6 × 10 ⁻¹	6100	Brockbank (2013)	L	1
(butyl cyanide; valeronitrile) [110-59-8] RFFFKMOABOFIDF-UHFFFAOYSA-N	1.4 × 10 ⁻¹	5500	Plyasunov et al. (2006)	L	
	1.4 × 10 ⁻¹		Li and Carr (1993)	M	
	1.6 × 10 ⁻¹		Amoore and Buttery (1978)	V	
	2.7 × 10 ⁻¹		Hilal et al. (2008)	Q	
	1.3 × 10 ⁻¹		Modarresi et al. (2007)	Q	67
	1.5 × 10 ⁻¹		Yaffe et al. (2003)	Q	248, 272
	4.1 × 10 ⁻²		English and Carroll (2001)	Q	230, 231
	1.5 × 10 ⁻²		Nirmalakhandan et al. (1997)	Q	
	1.5 × 10 ⁻¹		Abraham et al. (1990)	?	



Table A4.3: Nitriles (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexanenitrile $C_6H_{11}N$ [628-73-9] AILKHAQXUAOOFU-UHFFFAOYSA-N	1.2×10^{-1} 2.3×10^{-1}		Plyasunov et al. (2006) Hilal et al. (2008)	L Q	
heptanenitrile $C_7H_{13}N$ [629-08-3] SDAXRHHPNYTELL-UHFFFAOYSA-N	1.6×10^{-1}		Hilal et al. (2008)	Q	
octanenitrile $C_8H_{15}N$ [124-12-9] YSIMAPNUZAVQER-UHFFFAOYSA-N	5.7×10^{-2} 1.3×10^{-1}		Plyasunov et al. (2006) Hilal et al. (2008)	L Q	
nonanenitrile $C_9H_{17}N$ [2243-27-8] PLZZPPHAMDJOSR-UHFFFAOYSA-N	1.0×10^{-1}		Hilal et al. (2008)	Q	
decanenitrile $C_{10}H_{19}N$ [1975-78-6] HBZDPWBWBJMYRY-UHFFFAOYSA-N	8.0×10^{-2}		Hilal et al. (2008)	Q	
undecanenitrile $C_{11}H_{21}N$ [2244-07-7] SZKKNEOUHLFYNA-UHFFFAOYSA-N	6.1×10^{-2}		Hilal et al. (2008)	Q	
cyclohexanecarbonitrile $C_7H_{11}N$ [766-05-2] VBWIZSYFQSOUFQ-UHFFFAOYSA-N	7.3×10^{-1}		Hilal et al. (2008)	Q	
ethanedinitrile C_2N_2 (cyanogen) [460-19-5] JMANVNVJQNLATNU-UHFFFAOYSA-N	1.8×10^{-3} 1.8×10^{-3} 1.9×10^{-3} 1.9×10^{-1} 1.8×10^{-3} 2.6×10^{-3} 2.9×10^{-2} 1.9×10^{-3} 1.8×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaws (1999) Yaws and Yang (1992)	V V X Q Q Q Q ? ?	186 237, 12 246 67 21, 12 21, 12
pentanedinitrile $C_5H_6N_2$ [544-13-8] ZTOMUSMDRMJOTH-UHFFFAOYSA-N	7.8×10^2	7600	Plyasunov et al. (2006)	L	



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Table A4.3: Nitriles (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexanedinitrile $C_6H_8N_2$ (adiponitrile) [111-69-3] BTGRAWJCKBQKAO-UHFFFAOYSA-N	1.5×10^3	8000	Plyasunov et al. (2006)	L	
	8.2×10^3		Duchowicz et al. (2020)	V	186
	8.2×10^3		HSDB (2015)	V	
	2.4×10^2		Mackay et al. (2006d)	V	
	2.4×10^2		Mackay et al. (1995)	V	
	2.3×10^1		Duchowicz et al. (2020)	Q	
	2.2×10^3		Hilal et al. (2008)	Q	
2-methylpentanedinitrile $C_6H_8N_2$ [4553-62-2] FPPLREPCQJZDAQ-UHFFFAOYSA-N	3.3×10^2		HSDB (2015)	Q	99
tetramethylbutanedinitrile $C_8H_{12}N_2$ [3333-52-6] ZVQXQPNJHRNGID-UHFFFAOYSA-N	1.9×10^2		HSDB (2015)	Q	99
2-propenenitrile C_3H_3N (acrylonitrile) [107-13-1] NLHHRLWOUZZQLW-UHFFFAOYSA-N	1.0×10^{-1}	3900	Brockbank (2013)	L	1
	1.2×10^{-1}	6800	Hiatt (2013)	M	
	7.6×10^{-2}		Hovorka et al. (2002)	M	38
	3.1×10^{-2}		Welke et al. (1998)	M	
	1.3×10^{-1}		Mackay et al. (2006d)	V	
	8.2×10^{-2}	3400	Fogg and Sangster (2003)	V	
	9.1×10^{-2}		Lide and Frederikse (1995)	V	
	1.3×10^{-1}		Mackay et al. (1995)	V	
	9.8×10^{-2}		Hwang et al. (1992)	V	
	1.1×10^{-1}	2800	Goldstein (1982)	X	298
	1.1×10^{-1}		Mackay et al. (1995)	C	
	1.1×10^{-1}		Ryan et al. (1988)	C	
	9.2×10^{-2}		Keshavarz et al. (2022)	Q	
	4.3×10^{-1}		Duchowicz et al. (2020)	Q	184
	2.2×10^{-2}		Hilal et al. (2008)	Q	
	4.6×10^{-1}		Modarresi et al. (2007)	Q	67
	3600	Kühne et al. (2005)	Q		
	7.2×10^{-2}	Duchowicz et al. (2020)	?	185, 21	
	9.0×10^{-2}	Mackay et al. (2006d)	?		
	3600	Kühne et al. (2005)	?		
	1.0×10^{-1}	Yaws (1999)	?	21, 12	
2-butenenitrile C_4H_5N (crotonitrile) [4786-20-3] NKKMVIVFRUYPLQ-NSCUHMNNSA-N	8.8×10^{-2}		Duchowicz et al. (2020)	V	186
	1.5×10^{-1}		Duchowicz et al. (2020)	Q	
	2.7×10^{-1}		Modarresi et al. (2007)	Q	67



Table A4.3: Nitriles (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-butenenitrile $\text{C}_4\text{H}_5\text{N}$ (vinylacetonitrile) [109-75-1] S JNALLRHIVGIBI-UHFFFAOYSA-N	2.0×10^{-1}	4900	Brockbank (2013)	L	1
2-methyl-2-propene nitrile $\text{C}_4\text{H}_5\text{N}$ (methacrylonitrile) [126-98-7] G YCMBHHDWRMZGG-UHFFFAOYSA-N	3.6×10^{-2} 5.4×10^{-2} 4.0×10^{-2} 4.0×10^{-2} 1.2×10^{-1} 1.7×10^{-2} 1.6×10^{-1}	4200 6700	Brockbank (2013) Hiatt (2013) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	L M V V Q Q Q Q ?	1 186 67
benzenenitrile $\text{C}_6\text{H}_5\text{CN}$ (benzonitrile) [100-47-0] J F D Z B H W F F U W G J E - U H F F F A O Y S A - N	3.5×10^{-1} 2.9×10^{-1} 1.9×10^{-1} 1.9×10^{-1} 1.9×10^{-1} 3.9×10^{-1} 1.9×10^{-1} 1.9×10^{-1} 5.0×10^{-1} 2.3×10^{-1} 1.3×10^{-1} 2.4×10^{-1} 6.7×10^{-1} 5.2×10^{-1} 2.3 1.5×10^{-1} 9.6×10^{-1} 1.8×10^{-2} 4.1×10^{-1}	5600 5100	Brockbank (2013) Lee et al. (2013) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Schüttürmann (2000) Mackay et al. (1995) Mackay et al. (1995) Abraham et al. (1994a) Duchowicz et al. (2020) Li et al. (2014) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Kühne et al. (2005) Yaws (1999) Yaws and Yang (1992) Abraham et al. (1990)	L M V V V V V V R Q Q Q Q Q Q Q Q Q Q Q ?	1 186 241 67 248, 249 21, 415 21, 415
2-pyridinecarbonitrile $\text{C}_6\text{H}_4\text{N}_2$ [100-70-9] F F N V Q N R Y T P F D D P - U H F F F A O Y S A - N	1.4×10^2		HSDB (2015)	Q	99
3,3’-iminobispropanenitrile $\text{C}_6\text{H}_9\text{N}_3$ [111-94-4] S B A J R G R U G U Q K A F - U H F F F A O Y S A - N	2.0×10^6		HSDB (2015)	Q	99



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Table A4.3: Nitriles (C, H, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methylbenzonitrile C_8H_7N (<i>o</i> -tolunitrile) [529-19-1] NWPXNBQSRGKSJB-UHFFFAOYSA-N	7.6×10^{-1}		Schüürmann (2000)	V	
3-methylbenzonitrile C_8H_7N (<i>m</i> -tolunitrile) [620-22-4] BOHCMQZJWOGWTA-UHFFFAOYSA-N	1.7×10^{-1} 3.4×10^{-1} 8.8×10^{-1} 1.8×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
benzeneacetonitrile C_8H_7N (phenylacetonitrile) [140-29-4] SUSQOBLVYHIEX-UHFFFAOYSA-N	1.1 7.0×10^{-2} 1.0×10^1	6800 5100	Brockbank (2013) HSDB (2015) Hilal et al. (2008) Kühne et al. (2005) Kühne et al. (2005)	L V Q Q ?	1
1,2-benzenedicarbonitrile $C_8H_4N_2$ [91-15-6] XQZYPMVTSDWCE-UHFFFAOYSA-N	2.0×10^1		HSDB (2015)	Q	99
3,7-dimethyl-2,6-octadienenitrile $C_{10}H_{15}N$ (geranyl nitrile) [5146-66-7] HLCSDJLATUNSSI-JXMROGBWSA-N	2.9×10^{-2}		Helburn et al. (2008)	M	
2,2'-azobis(2-methylbutyronitrile) $C_{10}H_{16}N_4$ [13472-08-7] AVTLBBWTUPQRAY-UHFFFAOYSA-N	4.5×10^4 9.2×10^1 1.5×10^1 4.4×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



A4.4 Amines, amides, amino acids (C, H, O, N)

Table A4.4: Amines, amides, amino acids (C, H, O, N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
formamide CH ₃ NO [75-12-7] ZHNUHDYFZUAESO-UHFFFAOYSA-N	7.1 × 10 ³ 7.0 × 10 ³ 2.3 × 10 ²		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
methyl nitrite CH ₃ ONO [624-91-9] BLLFVUPNHCTMSV-UHFFFAOYSA-N	1.5 × 10 ⁻¹		HSDB (2015)	Q	99
urea CH ₄ N ₂ O [57-13-6] XSQUKJJFZCRTK-UHFFFAOYSA-N	5.7 × 10 ⁶ 5.7 × 10 ⁶ 1.0 × 10 ⁷ 1.0 × 10 ⁷ 1.1 × 10 ⁵		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Duchowicz et al. (2020)	V V V V Q	186
ethanolamine HOC ₂ H ₄ NH ₂ [141-43-5] HZAXFHJVJLSVMW-UHFFFAOYSA-N	4.2 × 10 ³ 6.0 × 10 ⁴ 1.1 × 10 ⁴ 9.7 × 10 ²	8300 5800	Kim et al. (2008) Bone et al. (1983) Modarresi et al. (2007) Nguyen (2013)	M M Q ?	550 12 67 565, 11
1,1'-azodiformamide C ₂ H ₄ N ₄ O ₂ [123-77-3] XOZUGNYVDXMRKW-UHFFFAOYSA-N	1.2 × 10 ⁷		HSDB (2015)	V	
ethyl nitrite C ₂ H ₅ ONO [109-95-5] QQZWEECEMNQSTG-UHFFFAOYSA-N	1.1 × 10 ⁻¹		HSDB (2015)	Q	99
carbamic acid, methyl ester C ₂ H ₅ NO ₂ [598-55-0] GTCAXTIRRLKXRU-UHFFFAOYSA-N	2.5 × 10 ²		HSDB (2015)	Q	99
acetaldoxime C ₂ H ₅ NO (acetaldehyde oxime) [107-29-9] FZENGILVLUJGX-UHFFFAOYSA-N	1.7		HSDB (2015)	Q	447



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethanamide $\text{C}_2\text{H}_5\text{NO}$ (acetamide) [60-35-5] DLFVBJFMPXGRIB-UHFFFAOYSA-N	5.3×10^3 2.8×10^3 2.8×10^3 3.8×10^3 9.0×10^2 2.8×10^3 3.7×10^3 4.2×10^3 5.1×10^3 2.2×10^3 2.2×10^2		Wolfenden (1976) Mackay et al. (2006d) Mackay et al. (1995) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	M V V X Q Q Q Q Q Q Q	
N-methylmethanamide $\text{C}_2\text{H}_5\text{NO}$ (N-methylformamide) [123-39-7] ATHHXGZTWNVVOU-UHFFFAOYSA-N	1.4×10^3 1.4×10^3 1.4×10^3 1.5×10^3 5.0×10^2 4.9×10^2 9.7×10^1 5.6×10^2 1.6×10^2	7200 7200 7200 7600	Burkholder et al. (2019) Burkholder et al. (2015) Brockbank (2013) Bernauer and Dohnal (2008) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	L L L M V V Q Q Q	
N-nitrosodimethylamine $\text{C}_2\text{H}_6\text{N}_2\text{O}$ [62-75-9] UMFJAHHVKNCGLG-UHFFFAOYSA-N	3.9 3.9 2.9×10^{-1} 4.1 6.1 5.2 3.0×10^{-1} 9.5 3.6 3.0×10^{-1}	13000 6400	Burkholder et al. (2019) Burkholder et al. (2015) Thompson et al. (2018) Haruta et al. (2011) Klein (1982) Mirvish et al. (1976) Mackay et al. (1995) Hilal et al. (2008) Modarresi et al. (2007) Mackay et al. (2006d)	L L M M M M C Q Q ?	
methylnitrosourea $\text{C}_2\text{H}_5\text{N}_3\text{O}_2$ [684-93-5] ZRKWMRDKSOPRRS-UHFFFAOYSA-N	$> 1.9 \times 10^2$		Mirvish et al. (1976)	M	14
ethanediamide $\text{C}_2\text{H}_4\text{N}_2\text{O}_2$ [471-46-5] YIKSCQDJHCMVMK-UHFFFAOYSA-N	5.0×10^5 2.2×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
nitrosoazetidine $\text{C}_3\text{H}_6\text{N}_2\text{O}$ [15216-10-1] SNKTBNDUVWOAZ-UHFFFAOYSA-N	$> 1.9 \times 10^2$		Mirvish et al. (1976)	M	14



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methylnitrosoacetamide $\text{C}_3\text{H}_6\text{N}_2\text{O}_2$ [7417-67-6] FFLFWNRFMZRFKU-UHFFFAOYSA-N	8.6×10^{-2}		Mirvish et al. (1976)	M	14
ethylnitrosocyanamide $\text{C}_3\text{H}_5\text{N}_3\text{O}$ [38434-77-4] LMIMSGCBKHFTDY-UHFFFAOYSA-N	2.6×10^{-1}		Mirvish et al. (1976)	M	14
2-propenamide $\text{C}_3\text{H}_5\text{NO}$ (acrylamide) [79-06-1] HRPVXLWLXLDGHG-UHFFFAOYSA-N	5.8×10^3 5.5×10^3 6.9×10^3 3.1×10^4 6.9×10^3 2.9×10^4 4.1×10^2 7.3×10^2 2.9×10^4 4.1×10^3 7.3×10^3		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Lide and Frederikse (1995) Mackay et al. (1995) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	V V V V V X Q Q Q Q Q Q Q	186 237, 38 246 67
methylvinyl nitrosamine $\text{C}_3\text{H}_6\text{N}_2\text{O}$ (N-nitrosomethylvinylamine) [4549-40-0] AWZVYNHOGTZJIH-UHFFFAOYSA-N	2.7		HSDB (2015)	Q	99
urethane $\text{C}_3\text{H}_7\text{NO}_2$ [51-79-6] JOYRKODLDBILNP-UHFFFAOYSA-N	1.5×10^2 1.5×10^2 2.5×10^1 1.1×10^1 6.4×10^1 7.3×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998)	V V Q Q Q Q	186 67
propanamide $\text{C}_3\text{H}_7\text{NO}$ (propionamide) [79-05-0] QLNJFJADRCOGBJ-UHFFFAOYSA-N	3.3×10^3	8800	Plyasunov et al. (2001)	T	
N,N-dimethylmethanamide $\text{C}_3\text{H}_7\text{NO}$ (N,N-dimethylformamide) [68-12-2] ZMXDDKWLCZADIW-UHFFFAOYSA-N	1.3×10^2 1.3×10^2 1.4×10^2 1.6×10^2 2.2×10^2 4.5×10^1 5.8	6600 6600 7700 7500	Burkholder et al. (2019) Burkholder et al. (2015) Brockbank (2013) Bernauer and Dohnal (2008) Abraham et al. (1994a) Hilal et al. (2008) Modarresi et al. (2007)	L L L M R Q Q	 1, 566 1 67



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.6×10^1		Katritzky et al. (1998)	Q	
	2.2×10^2		Nirmalakhandan et al. (1997)	Q	
	1.6×10^2		Taft et al. (1985)	Q	
N-methylacetamide C_3H_7NO [79-16-3] OHLUUHNLEMFGTQ-UHFFFAOYSA-N	2.1×10^3	7600	Burkholder et al. (2019)	L	
	2.1×10^3	7600	Burkholder et al. (2015)	L	
	3.2×10^3	8900	Bernauer and Dohnal (2008)	M	1
	2.3×10^2		Duchowicz et al. (2020)	V	186
	2.3×10^2		HSDB (2015)	V	
	3.8×10^1		Duchowicz et al. (2020)	Q	
	1.4×10^2		Modarresi et al. (2007)	Q	67
N-methyl-N-nitrosoethanamine $C_3H_8N_2O$ (N-nitrosomethylethylamine) [10595-95-6] RTDCJKARQCRONF-UHFFFAOYSA-N	6.9		HSDB (2015)	Q	447
2-methoxyethanamine C_3H_9NO (2-methoxyethylamine) [109-85-3] ASUDFOJKTJLAIK-UHFFFAOYSA-N	2.5×10^1	7600	Cabani et al. (1978)	T	
2-(methylamino)ethanol C_3H_9NO [109-83-1] OPKOKAMJFNKNAS-UHFFFAOYSA-N	9.0×10^1		HSDB (2015)	V	
1-amino-2-propanol C_3H_9NO [78-96-6] HXKKHQJGJAFBHI-UHFFFAOYSA-N	4.2×10^4		HSDB (2015)	Q	545
2-amino-1-propanol C_3H_9NO (alaninol) [6168-72-5] BKMMTJMCTUHRP-UHFFFAOYSA-N	1.3×10^3	7700	Nguyen (2013)	M	11
N-nitroso-N-methylurethane $C_4H_8N_2O_3$ (N-nitroso-N-methylurethane) [615-53-2] CAUBWLYZCDDYEF-UHFFFAOYSA-N	3.9×10^{-1}		Mirvish et al. (1976)	M	14
	1.8		Duchowicz et al. (2020)	V	186
	1.8		HSDB (2015)	V	
	1.6×10^1		Duchowicz et al. (2020)	Q	
	3.2×10^1		Modarresi et al. (2007)	Q	67
dinitrosopiperazine $C_4H_8N_4O_2$ [140-79-4] WNSYEWGYAFFSSQ-UHFFFAOYSA-N	$>1.9 \times 10^2$		Mirvish et al. (1976)	M	14



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-amino-3-(methylamino)propionic acid $C_4H_{10}N_2O_2$ (3-(methylamino)-(DL)-alanine) [16676-91-8] UJVHVMNGOZXSOZ-UHFFFAOYSA-N	2.9×10^7		HSDB (2015)	Q	99
N-nitrosodiethanolamine $C_4H_{10}N_2O_3$ [1116-54-7] YFCDLVPYFMHRQZ-UHFFFAOYSA-N	2.0×10^6		HSDB (2015)	Q	447
N-nitrosodiethylamine $C_4H_{10}N_2O$ [55-18-5] WBNQDOYEUIMPFS-UHFFFAOYSA-N	1.2×10^{-2} 5.6 1.4 7.1×10^{-1} 7.5 3.9 2.6 2.7	3800 6300	Thompson et al. (2018) Klein (1982) Mirvish et al. (1976) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M M M Q Q Q Q ?	14 184 67 185, 21
diethanolamine $C_4H_{11}NO_2$ [111-42-2] ZBCBWP MOD OFKDW-UHFFFAOYSA-N	3.3×10^3 2.6×10^5 2.5×10^5 1.0×10^4	1300	Nguyen (2013) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	M V V Q	11 186
diglycolamine $C_4H_{11}NO_2$ [929-06-6] GIAFURWZWWWBQT-UHFFFAOYSA-N	6.1×10^3	3700	Nguyen (2013)	M	33, 11
3-methoxy-1-propanamine $C_4H_{11}NO$ (3-methoxypropylamine) [5332-73-0] FAXDZQIWIWSWJH-UHFFFAOYSA-N	2.1×10^1 4.8×10^1 4.9×10^1 1.4×10^1	8700	Du et al. (2017) Cabani et al. (1978) Du et al. (2017) Du et al. (2017)	M T Q Q	478 549
2-amino-2-methyl-1-propanol $C_4H_{11}NO$ [124-68-5] CBTVGIZVANVGBH-UHFFFAOYSA-N	2.1×10^2 7.0×10^2 1.8×10^2 9.3×10^1	8500	Du et al. (2017) Nguyen (2013) Du et al. (2017) Du et al. (2017)	M M Q Q	478 11 549
N,N-dimethylaminoethanol $C_4H_{11}NO$ (dimethylethanolamine) [108-01-0] UEEJHVSXFDXPFK-UHFFFAOYSA-N	9.3×10^1 2.6×10^1 4.4×10^2	7900	Nguyen (2013) Duchowicz et al. (2020) Duchowicz et al. (2020)	M V Q	11 186



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-[(2-aminoethyl)amino]ethanol $\text{C}_4\text{H}_{12}\text{N}_2\text{O}$ [111-41-1] LHIJANUQQMGNT-UHFFFAOYSA-N	9.0×10^7		HSDB (2015)	Q	99
tetramethylammonium hydroxide $\text{C}_4\text{H}_{13}\text{NO}$ [75-59-2] WGTYBPLFGIVFAS-UHFFFAOYSA-M	2.3×10^{10}		HSDB (2015)	Q	99
methacrylamide $\text{C}_4\text{H}_7\text{NO}$ [79-39-0] FQPSGWSUVKBHSU-UHFFFAOYSA-N	8.8×10^3		Ebert et al. (2023)	?	316
acetone cyanohydrin $\text{C}_4\text{H}_7\text{NO}$ [75-86-5] MWFMBPGAXYFAR-UHFFFAOYSA-N	8.0×10^1		HSDB (2015)	V	
carbamic acid, 1-methylethyl ester $\text{C}_4\text{H}_9\text{NO}_2$ [1746-77-6] OVPLZYJGTGDFNB-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	99
propylcarbamate $\text{C}_4\text{H}_9\text{NO}_2$ [627-12-3] YNTOKMNHPRPSGFU-UHFFFAOYSA-N	1.0×10^2		HSDB (2015)	V	
butanamide $\text{C}_4\text{H}_9\text{NO}$ [541-35-5] DNSISZSEVVHGLH-UHFFFAOYSA-N	3.6×10^3		Ebert et al. (2023)	?	316
N,N-dimethylacetamide $\text{C}_4\text{H}_9\text{NO}$ [127-19-5] FXHOOIRPVKKKFG-UHFFFAOYSA-N	6.1×10^1	7800	Burkholder et al. (2019)	L	
	6.1×10^1	7800	Burkholder et al. (2015)	L	
	4.4×10^2	8000	Brockbank (2013)	L	1
	4.4×10^2	8600	Bernauer and Dohnal (2008)	M	1
	1.7×10^2		Hilal et al. (2008)	Q	
	1.3×10^1		Modarresi et al. (2007)	Q	67
3.6×10^2		Taft et al. (1985)	Q		
2-butanone, oxime $\text{C}_4\text{H}_9\text{NO}$ [96-29-7] WHIVNJATOVLBW-UHFFFAOYSA-N	8.1		HSDB (2015)	V	



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nitrosoethylurethane $C_5H_{10}N_2O_3$ (N-ethyl-N-nitrosourethane) [614-95-9] RAUQLNDTFONODT-UHFFFAOYSA-N	5.2×10^2		HSDB (2015)	Q	99
N,N-diethylmethanamide $C_5H_{11}NO$ (N,N-diethylformamide) [617-84-5] SUAKHGWARZSWIH-UHFFFAOYSA-N	1.3×10^2		Yaffe et al. (2003)	Q	248, 249
N-nitroso-N-butylurea $C_5H_{11}N_3O_2$ [869-01-2] LSWOCDLIYSKTRX-UHFFFAOYSA-N	4.3×10^4		HSDB (2015)	Q	99
N-methyldiethanolamine $C_5H_{13}NO_2$ [105-59-9] CRVGTESFCCXCTH-UHFFFAOYSA-N	3.3×10^3 3.9×10^3 4.0×10^5 3.1×10^5 3.2×10^5 1.3×10^5 2.4×10^3 1.9×10^3	3800 12000	Du et al. (2017) Nguyen (2013) Kim et al. (2008) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Du et al. (2017) Du et al. (2017)	M M M V V Q Q Q	478 11 550 186 549
methylbutylnitrosamine $C_5H_{12}N_2O$ [7068-83-9] PKTSCJXWLVREKX-UHFFFAOYSA-N	1.7		Mirvish et al. (1976)	M	14
2-(isopropylamino)ethanol $C_5H_{13}NO$ [109-56-8] RILLZYSZSDGYGV-UHFFFAOYSA-N	1.1×10^2 1.4×10^1 5.4×10^1		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549
3-(dimethylamino)-1,2-propanediol $C_5H_{13}NO_2$ [623-57-4] QCMHUGYTOGXZIW-UHFFFAOYSA-N	6.7×10^2 6.1×10^3 6.4×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549
2-amino-2-ethyl-1,3-propanediol $C_5H_{13}NO_2$ [115-70-8] IOAOAKDONABGPZ-UHFFFAOYSA-N	7.1×10^2 4.0×10^4 2.7×10^3		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549
daminozide $C_6H_{11}NO_3$ [1596-84-5] NOQGZXFMIHARMLW-UHFFFAOYSA-N	2.3×10^4 4.1×10^3 7.0×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 165



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methylpentyl nitrosamine $C_6H_{14}N_2O$ [13256-07-0] KSFCDINBDBFFSI-UHFFFAOYSA-N	2.0		Mirvish et al. (1976)	M	14
ethylbutyl nitrosamine $C_6H_{14}N_2O$ [4549-44-4] ZGMCMNGHHUQZNIH-UHFFFAOYSA-N	9.9×10^{-1}		Mirvish et al. (1976)	M	14
nitrosohexamethyleneimine $C_6H_{12}N_2O$ [932-83-2] UZMVSVHUTOAPTD-UHFFFAOYSA-N	4.3×10^1		Mirvish et al. (1976)	M	14
2,6-dimethylnitrosomorpholine $C_6H_{12}N_2O_2$ [1456-28-6] DPYMAXOKJUBANR-UHFFFAOYSA-N	3.5×10^1		Mirvish et al. (1976)	M	14
2,6-dimethyldinitrosopiperazine $C_6H_{12}N_4O_2$ [55380-34-2] JIWAGFGPBKDFQN-UHFFFAOYSA-N	$> 1.9 \times 10^2$		Mirvish et al. (1976)	M	14
N-(1-methylethyl)-2-propenamide $C_6H_{11}NO$ (N-isopropylacrylamide) [2210-25-5] QNILTEGFHQSKFF-UHFFFAOYSA-N	4.3×10^2		HSDB (2015)	Q	99
hexanamide $C_6H_{13}NO$ [628-02-4] ALBYIUDWACNRRB-UHFFFAOYSA-N	1.8×10^3		Ebert et al. (2023)	?	316
N-butylacetamide $C_6H_{13}NO$ [1119-49-9] GYLDXXLJMRTVSS-UHFFFAOYSA-N	2.7×10^3 5.2×10^2		Gibbs et al. (1991) Hilal et al. (2008)	M Q	
N-(1-methylethyl)-N-nitroso-2-propanamine $C_6H_{14}N_2O$ (nitrosodiisopropylamine) [601-77-4] AUIKJTGFPFLMFP-UHFFFAOYSA-N	1.2 3.4×10^{-1} 1.1		Mirvish et al. (1976) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q	14 67



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-nitrosodipropylamine $C_6H_{14}N_2O$ (N,N-dipropylnitrosamine) [621-64-7] YLKFDHTUUAUWZPQ-UHFFFAOYSA-N	1.8 2.8 2.8 1.6 5.8		Mirvish et al. (1976) Mackay et al. (2006d) Mackay et al. (1995) Mackay et al. (1995) Hilal et al. (2008)	M V V C Q	14
	1.3		Modarresi et al. (2007)	Q	67
N-(2-hydroxyethyl)piperazine $C_6H_{14}N_2O$ [103-76-4] WFCSWCVEJLETKA-UHFFFAOYSA-N	2.9×10^3	6400	Nguyen (2013)	M	33, 11
N-ethyl diethanolamine $C_6H_{15}NO_2$ [139-87-7] AKNUHUCEWALCOI-UHFFFAOYSA-N	9.0×10^4		HSDB (2015)	Q	99
triethanolamine $C_6H_{15}NO_3$ [102-71-6] GSEJCLTVZPLZKY-UHFFFAOYSA-N	1.4×10^7 1.4×10^7 3.3×10^7		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
<i>o</i> -aminophenol C_6H_7NO (2-aminophenol) [95-55-6] CDAWCLOXVUBKRW-UHFFFAOYSA-N	4.9×10^4		HSDB (2015)	Q	99
4-aminophenol C_6H_7NO [123-30-8] PLIKAWJENQZMHA-UHFFFAOYSA-N	2.7×10^4 2.7×10^4 1.8×10^4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
3-aminophenol C_6H_7NO [591-27-5] CWLKGDVACFYWJK-UHFFFAOYSA-N	3.7×10^4		HSDB (2015)	Q	99
4-(2-hydroxyethyl)morpholine $C_6H_{13}NO_2$ [622-40-2] KKFDCBRMNSAAW-UHFFFAOYSA-N	1.4×10^3 6.0×10^1 1.7×10^3		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549
4-hydroxy-N-methylpiperidine $C_6H_{13}NO$ [106-52-5] BAUWRHPMUVYFOD-UHFFFAOYSA-N	1.3×10^3 4.6×10^3 1.1×10^3		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethylaminoethoxyethanol $C_6H_{15}NO_2$ [1704-62-7] YSAANLSYLSUVHB-UHFFFAOYSA-N	8.3×10^2 4.3×10^3 5.6×10^2 6.2×10^2	8500	Du et al. (2017) Nguyen (2013) Du et al. (2017) Du et al. (2017)	M M Q Q	478 11 549
2-(diethylamino)ethanol $C_6H_{15}NO$ [100-37-8] BFSVOASYOCHEOV-UHFFFAOYSA-N	5.9 3.2 1.8×10^1		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549
bis(2-methoxyethyl)amine $C_6H_{15}NO_2$ [111-95-5] IBZKBSXREAQDQTO-UHFFFAOYSA-N	1.1×10^2 2.3×10^2 1.5×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549
cyclohexanone oxime $C_6H_{11}NO$ [100-64-1] VEZUQRBDNRNBJY-UHFFFAOYSA-N	4.3×10^1 1.4×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
<i>p</i> -diaminoanisole $C_7H_{10}N_2O$ (2-methoxy-1,4-benzenediamine) [5307-02-8] HGUYBLVGLMAUFF-UHFFFAOYSA-N	2.5×10^5		HSDB (2015)	Q	99
4-methoxy-1,3-benzenediamine $C_7H_{10}N_2O$ [615-05-4] BAHPQISAXRFLCL-UHFFFAOYSA-N	1.4×10^4		HSDB (2015)	Q	99
2-cyano-N- [(ethylamino)carbonyl]-2- (methoxyimino)acetamide $C_7H_{10}N_4O_3$ (cymoxanil) [57966-95-7] XERJKGMBORTKEO-UHFFFAOYSA-N	3.0×10^4 3.0×10^4 6.2×10^2 9.9×10^8 3.2×10^1 2.6×10^4 3.0×10^4		Duchowicz et al. (2020) HSDB (2015) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V V X Q Q ? ?	186 567 568, 569 241, 493, 165 241, 570, 165
isocyanatocyclohexane $C_7H_{11}NO$ [3173-53-3] KQWGXHWJMSMDJJ-UHFFFAOYSA-N	5.8×10^{-3}		HSDB (2015)	Q	99



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>L</i> -theanine $C_7H_{14}N_2O_3$ [3081-61-6] DATAGRPVKZEWHA-YFKPBYRVSA-N	1.1×10^{10}		HSDB (2015)	Q	447
tetryl $C_7H_5N_5O_8$ [479-45-8] AGUIVNYEYSCPNI-UHFFFAOYSA-N	3.7×10^3		HSDB (2015)	Q	99
anthranilic acid $C_7H_7NO_2$ [118-92-3] RWZYAGGXGHYGM-B-UHFFFAOYSA-N	2.6×10^5		HSDB (2015)	Q	99
3-aminobenzoic acid $C_7H_7NO_2$ [99-05-8] XFDUHJPVQKIXHO-UHFFFAOYSA-N	3.7×10^6		Ebert et al. (2023)	?	316
4-aminobenzoic acid $C_7H_7NO_2$ [150-13-0] ALYNCZNDIQEVRV-UHFFFAOYSA-N	6.6×10^4		HSDB (2015)	V	
salicylamide $C_7H_7NO_2$ [65-45-2] SKZKZFZAGNVIMN-UHFFFAOYSA-N	2.0×10^4 3.4×10^4		Abraham et al. (2019) HSDB (2015)	Q Q	99
mesalamine $C_7H_7NO_3$ [89-57-6] KBOPZPXVLCULAV-UHFFFAOYSA-N	2.0×10^6		HSDB (2015)	Q	99
N-phenylformamide C_7H_7NO [103-70-8] DYDNPEBYVVLBO-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	Q	99
benzamide C_7H_7NO [55-21-0] KXDAEFPNCGMNJSK-UHFFFAOYSA-N	2.2×10^4 4.7×10^4 5.2×10^3 9.0×10^2 3.8×10^3 2.7×10^4 8.2×10^3 4.0×10^4 4.0×10^4		Mackay et al. (2006d) Mackay et al. (1995) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020) HSDB (2015)	V V R Q Q Q Q Q ? ?	558 299 67 185, 21 419



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
anthranilamide $C_7H_8N_2O$ (2-aminobenzamide) [88-68-6] PXBFMLJZNCDSMP-UHFFFAOYSA-N	1.3×10^7		HSDB (2015)	Q	99
N-methyl-N-nitrosobenzeneamine $C_7H_8N_2O$ [614-00-6] MAXCWSIJKVASQC-UHFFFAOYSA-N	2.0		HSDB (2015)	Q	99
2-methoxy-benzenamine C_7H_9NO (2-methoxyaniline) [90-04-0] VMPITZXILSNTON-UHFFFAOYSA-N	1.1×10^1 1.2×10^1 6.7×10^1 1.1×10^1 2.8×10^1		Duchowicz et al. (2020) Abraham et al. (1994a) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008)	V R Q Q Q	186 99 67
3-methoxy-benzenamine C_7H_9NO (3-methoxyaniline) [536-90-3] NCBZRJODKRCREW-UHFFFAOYSA-N	9.0×10^1 9.0×10^1 1.8×10^2 2.8×10^1 6.4×10^1 1.5×10^1		Abraham et al. (1994a) HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997)	R Q Q Q Q Q	 99 67 230, 231
4-methoxy-benzenamine C_7H_9NO (4-methoxyaniline) [104-94-9] BHAAPTBBJKJZER-UHFFFAOYSA-N	1.5×10^2 1.2×10^2 1.8×10^2 5.8×10^1 1.4×10^2 2.8×10^1 9.9×10^1 1.5×10^1 1.5×10^2		Altschuh et al. (1999) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	M R Q Q Q Q Q Q Q	 67 230, 231 185, 21
4-(methylamino)phenol C_7H_9NO (N-methyl-4-aminophenol) [150-75-4] ZFIQGRISGKSVAG-UHFFFAOYSA-N	2.2×10^4		HSDB (2015)	Q	99
3-(diethylamino)-1,2-propanediol $C_7H_{17}NO_2$ [621-56-7] LTACQVCHVAUOKN-UHFFFAOYSA-N	5.4×10^2 7.0×10^2 2.6×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-(2-hydroxyethyl)piperidine $C_7H_{15}NO$ (2-piperidinoethanol) [3040-44-6] KZTWONRVIPDPKH-UHFFFAOYSA-N	5.1×10^1 6.1×10^{-1} 4.9×10^1		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549
2-piperidineethanol $C_7H_{15}NO$ [1484-84-0] PTHDBHDZSMGHKF-UHFFFAOYSA-N	3.9×10^2 1.2×10^2 2.3×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549
emylcamate $C_7H_{15}NO_2$ [78-28-4] SLWGJZPKHAXZQL-UHFFFAOYSA-N	3.0×10^{-1} 8.7		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
defenuron $C_8H_{10}N_2O$ [1007-36-9] SQBHGSDVWCPHN-UHFFFAOYSA-N	8.5×10^5		MacBean (2012a)	?	12
N-methyl-N-nitrosobenzenemethanamine $C_8H_{10}N_2O$ [937-40-6] NGXUJKBJBFLCAR-UHFFFAOYSA-N	7.9×10^{-1} 1.2×10^2 3.8×10^1		Mirvish et al. (1976) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q	14 67
norepinephrine $C_8H_{11}NO_3$ [51-41-2] SFLSHLFXELFNJZ-QMMMGOBSA-N	3.1×10^{13}		HSDB (2015)	Q	99
2,4-dimethoxyaniline $C_8H_{11}NO_2$ [2735-04-8] GEQNZVKIDIPGCO-UHFFFAOYSA-N	1.6×10^1		Ebert et al. (2023)	?	318
4-methoxy-2-methylbenzenamine $C_8H_{11}NO$ (<i>m</i> -cresidine) [102-50-1] CDGNLUSBENXDGG-UHFFFAOYSA-N	8.2×10^1		HSDB (2015)	Q	99
<i>p</i> -cresidine $C_8H_{11}NO$ [120-71-8] WXWCDTXEKCVRRRO-UHFFFAOYSA-N	8.0×10^1		HSDB (2015)	Q	99



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-nitrosodi-N-butylamine $C_8H_{18}N_2O$ [924-16-3] YGJHZCLPZAZIHH-UHFFFAOYSA-N	7.2×10^{-1} 7.5×10^{-1} 1.1		Mirvish et al. (1976) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q	14 67
(diisopropylamino)-ethanol $C_8H_{19}NO$ [96-80-0] ZYWUVGFIXPNBDL-UHFFFAOYSA-N	2.2 2.3 2.4 1.9×10^2 8.2×10^1		Du et al. (2017) Du et al. (2017) Du et al. (2017) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q Q Q	478 549 67
phthalamide $C_8H_8N_2O_2$ [88-96-0] NAYYNDKKHOIIOU-UHFFFAOYSA-N	7.0×10^6		HSDB (2015)	Q	99
acetaminophen $C_8H_9NO_2$ [103-90-2] RZVAJINKPMORJF-UHFFFAOYSA-N	1.5×10^7		HSDB (2015)	Q	99
methyl anthranilate $C_8H_9NO_2$ [134-20-3] VAMXMNIEUEQDV-UHFFFAOYSA-N	5.2 5.2 3.6 2.6×10^2		Duchowicz et al. (2020) HSDB (2015) Dupeux et al. (2022) Duchowicz et al. (2020)	V V Q Q	186 259
4'-aminoacetophenone C_8H_9NO (4-acetylaniline) [99-92-3] GPRYKVSEZCQIHD-UHFFFAOYSA-N	2.2×10^3		HSDB (2015)	Q	99
N-phenylacetamide C_8H_9NO (acetanilide) [103-84-4] FZERHIULMFGESH-UHFFFAOYSA-N	4.7×10^2 1.5×10^3 1.6×10^3		Yaws (2003) Dupeux et al. (2022) HSDB (2015)	X Q Q	258 259 99
tropine $C_8H_{15}NO$ [120-29-6] CYHOMWAPJJPNMW-UHFFFAOYSA-N	1.3×10^3 2.6×10^3 5.6×10^2		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549
bis[2-(N,N-dimethylamino)ethyl] ether $C_8H_{20}N_2O$ [3033-62-3] GTExIOINCJRbio-UHFFFAOYSA-N	7.9×10^1 2.4×10^2 7.9×10^1		Du et al. (2017) Du et al. (2017) Du et al. (2017)	M Q Q	478 549



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methylcarbamic acid, 3-methylphenyl ester $\text{C}_9\text{H}_{11}\text{NO}_2$ (metolcarb) [1129-41-5] VOEYXMAFNDNED-UHFFFAOYSA-N	1.2×10^4		HSDB (2015)	V	
phenylcarbamic acid, ethyl ester $\text{C}_9\text{H}_{11}\text{NO}_2$ [101-99-5] LBKPGNUOUPQKA-UHFFFAOYSA-N	3.4×10^2		HSDB (2015)	Q	99
ethyl anthranilate $\text{C}_9\text{H}_{11}\text{NO}_2$ [87-25-2] TWLLPUMZVVGILS-UHFFFAOYSA-N	6.2×10^2		HSDB (2015)	Q	99
benzocaine $\text{C}_9\text{H}_{11}\text{NO}_2$ [94-09-7] BLFLLBZGZJTVJG-UHFFFAOYSA-N	6.2×10^2		HSDB (2015)	Q	99
1-(4-aminophenyl)-1-propanone $\text{C}_9\text{H}_{11}\text{NO}$ (4-aminopropiophenone) [70-69-9] FSWXOANXOQPCFF-UHFFFAOYSA-N	2.1×10^3		HSDB (2015)	Q	99
(4-ethoxyphenyl)urea $\text{C}_9\text{H}_{12}\text{N}_2\text{O}_2$ (dulcin) [150-69-6] GGLIEWRLXDLBBF-UHFFFAOYSA-N	6.2×10^5		HSDB (2015)	Q	447
fenuron $\text{C}_9\text{H}_{12}\text{N}_2\text{O}$ [101-42-8] XXOYNJXVWVNOOJ-UHFFFAOYSA-N	4.9×10^3 8.7×10^2 3.7×10^3 3.6×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997)	V V V X	186 12 567
	9.6 1.0×10^4 4.4		Duchowicz et al. (2020) HSDB (2015) Goodarzi et al. (2010)	Q Q Q	567 99 568, 571
epinephrine $\text{C}_9\text{H}_{13}\text{NO}_3$ [51-43-4] UCTWMZQNUQWVSLP-UHFFFAOYSA-N	1.4×10^{13}		HSDB (2015)	Q	99
meprobamate $\text{C}_9\text{H}_{18}\text{N}_2\text{O}_4$ [57-53-4] NPPQSCRMBWNHMHU-UHFFFAOYSA-N	5.5×10^4		HSDB (2015)	Q	99



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propamocarb $C_9H_{20}N_2O_2$ [24579-73-5] WZZLDXDUQPOXNW-UHFFFAOYSA-N	2.1×10^3 1.6×10^3 1.6×10^3 3.3×10^2 6.7×10^3 1.2×10^8		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020) Maniere et al. (2011)	Q Q Q Q ? ?	 67 185, 21 241, 165
proximpham $C_{10}H_{12}N_2O_2$ [2828-42-4] LATYTXGNKNTDS-UHFFFAOYSA-N	3.9×10^3		MacBean (2012a)	?	12
dioxacarb $C_{10}H_{13}NO_4$ [6988-21-2] SDKQRNRDQYRQKY-UHFFFAOYSA-N	6.7×10^5 2.2×10^4 6.7×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	186
phenol, 3,5-dimethyl-, methylcarbamate $C_{10}H_{13}NO_2$ (3,5-xylyl methylcarbamate) [2655-14-3] CVQODEWAPZVVB-UHFFFAOYSA-N	5.5×10^1 9.1 2.5×10^2 4.3×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) MacBean (2012a)	V Q Q ?	186 99
phenylcarbamic acid, 1-methylethyl ester $C_{10}H_{13}NO_2$ [122-42-9] VXPLXMJHHKHSOA-UHFFFAOYSA-N	5.4×10^1 5.5×10^1 3.2×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
xylylcarb $C_{10}H_{13}NO_2$ [2425-10-7] WCJYTPVNMWIZCG-UHFFFAOYSA-N	9.1×10^1 9.4×10^1 9.1		Watanabe (1993) Duchowicz et al. (2020) Duchowicz et al. (2020)	M V Q	 186
phenacetin $C_{10}H_{13}NO_2$ [62-44-2] CPJSUEIXXCENMM-UHFFFAOYSA-N	4.6×10^4 4.7×10^4 2.7		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
ephedrine $C_{10}H_{15}NO$ [299-42-3] KWGRBVOPPLSCSI-PSASIEDQSA-N	1.1×10^5		HSDB (2015)	Q	447



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>m</i> -cumenyl methylcarbamate $C_{11}H_{15}NO_2$ (3-isopropylphenyl methyl carbamate) [64-00-6] GYXXQTKSWLAUIT-UHFFFAOYSA-N	1.6×10^2		HSDB (2015)	Q	99
propoxur $C_{11}H_{15}NO_3$ [114-26-1] ISRUGXGCCGIOQO-UHFFFAOYSA-N	2.9×10^3 5.1×10^5 7.1×10^3 7.7 7.6×10^{-2} 1.4		HSDB (2015) Mackay et al. (2006d) Siebers et al. (1994) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V V X Q	12 567 568
methocarbamol $C_{11}H_{15}NO_5$ [532-03-6] GNXFOGHNGIVQEH-UHFFFAOYSA-N	1.5×10^{10}		HSDB (2015)	Q	99
aminocarb $C_{11}H_{16}N_2O_2$ [2032-59-9] IMIDOCRMDIQJ-UHFFFAOYSA-N	1.9×10^3 1.8×10^4		Mackay et al. (2006d) HSDB (2015)	V Q	99
monodesmethylisoproturon $C_{11}H_{16}N_2O$ [34123-57-4] DOULWWSSZVEPIN-UHFFFAOYSA-N	2.8×10^5		Otto et al. (1997)	V	
cycluron $C_{11}H_{22}N_2O$ [2163-69-1] DQZCVNGCTZLGAQ-UHFFFAOYSA-N	8.2×10^2		HSDB (2015)	Q	99
methylneodecanamide $C_{11}H_{23}NO$ [105726-67-8] GELCOLZWXWHMIB-UHFFFAOYSA-N	4.1×10^1		HSDB (2015)	Q	99
isoprocarb $C_{11}H_{15}NO_2$ [2631-40-5] QBSJMKIUCUGGNG-UHFFFAOYSA-N	7.4×10^2 7.6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
4-(phenylazo)phenol $C_{12}H_{10}N_2O$ (4-hydroxyazobenzene) [1689-82-3] BEYOBVMPDRKTNR-UHFFFAOYSA-N	1.5×10^4 1.5×10^4 1.0×10^4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-naphthaleneacetamide $C_{12}H_{11}NO$ [86-86-2] XFNJVKMNNVCYEK-UHFFFAOYSA-N	9.8×10^7		Maniere et al. (2011)	?	12, 165
carbetamide $C_{12}H_{16}N_2O_3$ [16118-49-3] AMRQXHFZNZFDCH-UHFFFAOYSA-N	1.1 3.7 5.2×10^7		Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	X Q ?	567 568 12, 165
N-nitrosodiphenylamine $C_{12}H_{10}N_2O$ (N,N-Diphenylnitrosamine) [86-30-6] UBUCNCOMADRQHX-UHFFFAOYSA-N	8.7×10^{-3} 8.7×10^{-3} 1.5×10^{-2} 8.2		Mackay et al. (2006d) Mackay et al. (1995) Mackay et al. (1995) HSDB (2015)	V V C Q	99
carbaryl $C_{12}H_{11}NO_2$ [63-25-2] CVXBEMKQHEXEN-UHFFFAOYSA-N	$>9.9 \times 10^1$ 3.6×10^3 3.0×10^3 2.2×10^4 2.3×10^3 7.7×10^2 7.6×10^1 2.3×10^3 3.5×10^3 1.2×10^2 8.1 1.4×10^3 3.1×10^3		Mabury and Crosby (1996) Watanabe (1993) Duchowicz et al. (2020) Mackay et al. (2006d) Meylan and Howard (1991) Suntio et al. (1988) Barcelo and Hennion (1997) Howard and Meylan (1997) Armbrust (2000) Duchowicz et al. (2020) Goodarzi et al. (2010) Hilal et al. (2008) Meylan and Howard (1991)	M M V V V V X X C Q Q Q Q	186 12 567 446 568, 571
4,4'-oxybisbenzenamine $C_{12}H_{12}N_2O$ (bis(4-aminophenyl) ether) [101-80-4] HLBLWEWZXPIGSM-UHFFFAOYSA-N	6.6×10^5		HSDB (2015)	Q	99
carbofuran $C_{12}H_{15}NO_3$ [1563-66-2] DUEPRVBVGDRKAG-UHFFFAOYSA-N	2.4×10^1 $>9.9 \times 10^1$ 2.2×10^4 2.0×10^4 2.0×10^3 1.9×10^1 4.6×10^1		Chao et al. (2017) Mabury and Crosby (1996) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	M M V V V X Q	12 567 568



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phenol, 3-methyl-5-(1-methylethyl)-, methylcarbamate $C_{12}H_{16}NO_2$ (promecarb) [2631-37-0] DTAPQAJKAFRNJB-UHFFFAOYSA-N	1.1×10^2 1.1×10^2 4.1 3.1×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) MacBean (2012a)	V V Q ?	186
fenobucarb $C_{12}H_{17}NO_2$ [3766-81-2] DIRFUJHNVNOBMY-UHFFFAOYSA-N	1.5×10^2 1.7×10^2 8.2		Watanabe (1993) Duchowicz et al. (2020) Duchowicz et al. (2020)	M V Q	186
diethyltoluamide $C_{12}H_{17}NO$ (DEET) [134-62-3] MMOXZBCLCQITDF-UHFFFAOYSA-N	4.7×10^2		HSDB (2015)	Q	99
N,N-dimethyl-N'-[4-(1- methylethyl)phenyl]-urea $C_{12}H_{18}N_2O$ (isoproturon) [34123-59-6] PUIYMUZLKQOUOZ-UHFFFAOYSA-N	8.8×10^4 8.1×10^4 9.5×10^4 1.1×10^5 2.3		Duchowicz et al. (2020) Mackay et al. (2006d) Otto et al. (1997) Siebers et al. (1994) Duchowicz et al. (2020)	V V V V Q	186
dimorpholinodiethyl ether $C_{12}H_{24}N_2O_3$ [6425-39-4] ZMSQJMSLXVTKN-UHFFFAOYSA-N	1.8×10^3	2600	Nguyen (2013)	M	11
carisoprodol $C_{12}H_{24}N_2O_4$ [78-44-4] OFZCIYFFPZCNJE-UHFFFAOYSA-N	1.4×10^4		HSDB (2015)	Q	99
4-hydroxy-4'-nitroazobenzene $C_{12}H_9N_3O_3$ [1435-60-5] NRJPIVOTANUINF-YPKPFQOOSA-N	4.0×10^5 1.4×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
2,4-dinitro-N-phenyl-benzenamine $C_{12}H_9N_3O_4$ [961-68-2] RHTVQEPJVKUMPI-UHFFFAOYSA-N	1.3×10^4 6.6×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
N-(2,4-dinitrophenyl)-N-(4- hydroxyphenyl)amine $C_{12}H_9N_3O_5$ [119-15-3] BCPQALWAROJVLLE-UHFFFAOYSA-N	6.8×10^6 1.4×10^9		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
disperse orange 3 $C_{12}H_{10}N_4O_2$ [730-40-5] UNBOSJFEZZJZLR-UHFFFAOYSA-N	3.5×10^4 1.9×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
diethylpropion $C_{13}H_{19}NO$ [90-84-6] XXEPPPIWZFCOJ-UHFFFAOYSA-N	4.3×10^1		HSDB (2015)	Q	99
salbutamol $C_{13}H_{21}NO_3$ (albuterol) [18559-94-9] NDAUXUAQIAJITI-UHFFFAOYSA-N	1.5×10^{10}		HSDB (2015)	Q	99
disperse blue 1 $C_{14}H_{12}N_4O_2$ [2475-45-8] JSFUMBWFPQSADC-UHFFFAOYSA-N	4.7×10^1		HSDB (2015)	V	
3,3'-dimethoxybenzidine $C_{14}H_{16}N_2O_2$ [119-90-4] JRBJSXPQWSCCF-UHFFFAOYSA-N	2.1×10^5		HSDB (2015)	Q	99
aspartame $C_{14}H_{18}N_2O_5$ [22839-47-0] IAOZJIPTCAWIRG-QWRGUYRKSAN	3.9×10^{12}		HSDB (2015)	Q	99
dinobuton $C_{14}H_{18}N_2O_7$ (dessin) [973-21-7] HDWLUGYOLUHEMN-UHFFFAOYSA-N	6.2×10^2		HSDB (2015)	Q	99
N-(2-methylcyclohexyl)-N'-phenylurea $C_{14}H_{20}N_2O$ (siduron) [1982-49-6] JXVIIQLNUPXOII-UHFFFAOYSA-N	1.5×10^5		HSDB (2015)	V	
butralin $C_{14}H_{21}N_3O_4$ [33629-47-9] SPNQRCTZKIBOAX-UHFFFAOYSA-N	2.0 2.0		HSDB (2015) Mackay et al. (2006d)	V V	



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
lauramine oxide $C_{14}H_{31}NO$ [1643-20-5] SYELZBGXAIXKHU-UHFFFAOYSA-N	1.5×10^5		HSDB (2015)	Q	99
2-aminoanthraquinone $C_{14}H_9NO_2$ [117-79-3] XOGPDSATLSAZEK-UHFFFAOYSA-N	1.1×10^5 1.1×10^5 3.1×10^5		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
1-amino-9,10-anthracenedione $C_{14}H_9NO_2$ [82-45-1] KHUFHLFHQVFGU-UHFFFAOYSA-N	2.0×10^3 9.8×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
1-amino-4-hydroxy-9,10-anthracenedione $C_{14}H_9NO_3$ [116-85-8] AQXYVFBSSOBBQV-UHFFFAOYSA-N	3.8×10^5 4.2×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
1,4-diamino-9,10-anthracenedione $C_{14}H_{10}N_2O_2$ [128-95-0] FBMQNRKSAWNXBT-UHFFFAOYSA-N	2.1×10^4 1.3×10^7		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
N,N-dimethyl-4-[(4-nitrophenyl)azo]-benzenamine $C_{14}H_{14}N_4O_2$ [2491-74-9] LSFRFLVWCKLQTO-UHFFFAOYSA-N	1.5×10^2 1.0×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
karbutilate $C_{14}H_{21}N_3O_3$ [4849-32-5] OWNAXTAAQTBSU-UHFFFAOYSA-N	1.8×10^8		Ebert et al. (2023)	?	318
diethofencarb $C_{14}H_{21}NO_4$ [87130-20-9] LNJNFVJKDJYTEU-UHFFFAOYSA-N	1.2×10^1 1.3×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
1-amino-2-methyl-9,10-anthracenedione $C_{15}H_{11}NO_2$ (1-amino-2-methylanthraquinone) [82-28-0] ZLCUIOWQYBYEBG-UHFFFAOYSA-N	8.2×10^6		HSDB (2015)	Q	99



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-2-fluorenylacetamide $C_{15}H_{13}NO$ (2-acetylaminofluorene) [53-96-3] CZIHNRWJTSTCEX-UHFFFAOYSA-N	5.2×10^4		HSDB (2015)	Q	99
tebutam $C_{15}H_{23}NO$ [35256-85-0] RJKCKKSSRYCB-UHFFFAOYSA-N	3.8×10^1 1.5×10^{-1} 6.7×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	186
isopropalin $C_{15}H_{23}N_3O_4$ [33820-53-0] NEKOXWSIMFDGMA-UHFFFAOYSA-N	1.9×10^{-1}		Mackay et al. (2006d)	V	
dodine $C_{15}H_{33}N_3O_2$ (doguadine) [2439-10-3] YIKWKLYQRFRGPM-UHFFFAOYSA-N	1.1×10^5 9.9×10^5 1.1×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 241, 165
metalaxyl $C_{15}H_{21}NO_4$ [57837-19-1] ZQEIXNIJLIKNTD-UHFFFAOYSA-N	3.3×10^3 4.0×10^4 8.5×10^4		HSDB (2015) Mackay et al. (2006d) Burkhard and Guth (1981)	V V V	
metalaxyl-m $C_{15}H_{21}NO_4$ [70630-17-0] ZQEIXNIJLIKNTD-GFCCVEGCSA-N	2.8×10^4 2.1×10^2 2.9×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 165
metoprolol $C_{15}H_{25}NO_3$ [37350-58-6] IUBSYMUCVWXPE-UHFFFAOYSA-N	4.7×10^5		HSDB (2015)	Q	99
1-(methylamino)anthraquinone $C_{15}H_{11}NO_2$ [82-38-2] SVTDYSXXLJYUTM-UHFFFAOYSA-N	3.3×10^2 7.1×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
4'-(2-hydroxy-5-methylphenyl)azo]acetanilide $C_{15}H_{15}N_3O_2$ [2832-40-8] PXOZAFXVEWKXED-UHFFFAOYSA-N	6.6×10^5 3.2×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
desmedipham $C_{16}H_{16}N_2O_4$ [13684-56-5] WZJZMBKJWKTQ-UHFFFAOYSA-N	2.3×10^6		Ebert et al. (2023)	?	365
phenmedipham $C_{16}H_{16}N_2O_4$ (betanal) [13684-63-4] IDOWTHOLJBTAFI-UHFFFAOYSA-N	1.2×10^7 1.2×10^7 1.2×10^5 4.5 5.3×10^2 2.0×10^7		Duchowicz et al. (2020) HSDB (2015) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V V X Q Q ?	186 567 568, 569 12, 165
fenam $C_{16}H_{17}NO$ [957-51-7] QAHFOPILNICLA-UHFFFAOYSA-N	2.7×10^5 4.1×10^5 2.7×10^5 4.9×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186
difenoxuron $C_{16}H_{18}N_2O_3$ [14214-32-5] AMVYOYVGIJXTQB-UHFFFAOYSA-N	5.6×10^7		MacBean (2012a)	?	
butacarb $C_{16}H_{25}NO_2$ [2655-19-8] SLZWBCGZQRRUNG-UHFFFAOYSA-N	2.2×10^2		HSDB (2015)	V	
oseltamivir $C_{16}H_{28}N_2O_4$ [196618-13-0] VSZGPKBBMSAYNT-RRFJBIMHSA-N	3.4×10^{10}		HSDB (2015)	Q	99
N,N-bis(2-hydroxyethyl)dodecanamide $C_{16}H_{33}NO_3$ [120-40-1] AOMUHOFOVNGZAN-UHFFFAOYSA-N	4.6×10^6		HSDB (2015)	Q	99
1,4-bis(methylamino)-9,10-anthracenedione $C_{16}H_{14}N_2O_2$ [2475-44-7] QOSTVEDABRQTSU-UHFFFAOYSA-N	5.2×10^4 7.5×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
metominostrobin $C_{16}H_{16}N_2O_3$ [133408-50-1] HIIRDDUVRXDBN-SDXDJHTJSA-N	2.5×10^4 8.6×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-[(2-methoxyphenyl)azo]-2-naphthol $C_{17}H_{14}N_2O_2$ [1229-55-6] ALLOLPOYFRLCCX-VHEBQXMUSA-N	9.0×10^4		HSDB (2015)	Q	99
furalaxyl $C_{17}H_{19}NO_4$ [57646-30-7] CIEXPTRYOLIQQD-UHFFFAOYSA-N	1.1×10^4		MacBean (2012a)	?	
fenoxycarb $C_{17}H_{19}NO_4$ [72490-01-8] HJUFTIJOISQSKQ-UHFFFAOYSA-N	2.3×10^4		Duchowicz et al. (2020)	V	186
	2.5×10^4		Duchowicz et al. (2020)	V	186
	2.3×10^7		HSDB (2015)	V	
	1.2×10^4		Mackay et al. (2006d)	V	
	8.4×10^2		Duchowicz et al. (2020)	Q	
bifenazate $C_{17}H_{20}N_2O_3$ [149877-41-8] VHLKTXFWRXILV-UHFFFAOYSA-N	8.4×10^2		Duchowicz et al. (2020)	Q	
	3.0×10^4		Maniere et al. (2011)	?	241, 165
	1.0×10^3		MacBean (2012b)	X	350
napropamide $C_{17}H_{21}NO_2$ [15299-99-7] WXZVAROIGSFCEJ-UHFFFAOYSA-N	$>9.9 \times 10^2$		Maniere et al. (2011)	?	12, 165
	1.2×10^4		HSDB (2015)	V	
napropamide-M $C_{17}H_{21}NO_2$ [41643-35-0] WXZVAROIGSFCEJ-CYBMUJFWSA-N	1.2×10^4		Maniere et al. (2011)	?	241, 165
	3.8×10^4		Ebert et al. (2023)	?	318
padimate O $C_{17}H_{27}NO_2$ [21245-02-3] WYWZRNHINYAEF-UHFFFAOYSA-N	2.5		HSDB (2015)	Q	447
nadolol $C_{17}H_{27}NO_4$ [42200-33-9] VWPOSFSPZNDTMJ-UHFFFAOYSA-N	7.0×10^8		HSDB (2015)	Q	99
2,6-di- <i>tert</i> -butyl-4-(dimethylaminomethyl)phenol $C_{17}H_{29}NO$ [88-27-7] VMZVBRIIHDRYGK-UHFFFAOYSA-N	4.8×10^3		Zhang et al. (2010)	Q	287, 288
	2.4×10^2		Zhang et al. (2010)	Q	287, 289
	1.3		Zhang et al. (2010)	Q	287, 290
	4.8×10^1		Zhang et al. (2010)	Q	287, 291



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
mepromil $C_{17}H_{19}NO_2$ [55814-41-0] BCTQJXQXJVLISIG-UHFFFAOYSA-N	8.4×10^2 4.7		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
daimuron $C_{17}H_{20}N_2O$ [42609-52-9] NNYRZQHKCHEXSD-UHFFFAOYSA-N	9.9×10^3 2.6×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
naptalam $C_{18}H_{13}NO_3$ [132-66-1] JXTHEWSKYLZVJC-UHFFFAOYSA-N	$>2.3 \times 10^{10}$		MacBean (2012a)	?	
citrus red 2 $C_{18}H_{16}N_2O_3$ [6358-53-8] ULLJIFAIUSUJBP-ZZEZOPTASA-N	1.9×10^7		HSDB (2015)	Q	99
kresoxim-methyl $C_{18}H_{19}NO_4$ [143390-89-0] ZOTBXTZVPHCKPN-UHFFFAOYSA-N	2.7×10^3 2.8×10^3		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
dinocap $C_{18}H_{24}N_2O_6$ [39300-45-3] RNDNTTUTQAXII-GORDUTHDSA-N	2.1×10^3		HSDB (2015)	V	
orysastrobin $C_{18}H_{25}N_5O_5$ [248593-16-0] JHIPUJPTQJYEQK-ZLHHXESBSA-N	2.9×10^5		Ebert et al. (2023)	?	318
spiroxamine $C_{18}H_{35}NO_2$ [118134-30-8] PUYXTUJWRLUCW-UHFFFAOYSA-N	4.0×10^2 2.0×10^2		Maniere et al. (2011) Maniere et al. (2011)	? ?	12, 165 12, 165
capsaicin $C_{18}H_{27}NO_3$ [404-86-4] YKPUWZUDDOIDPM-SOFGYWHQSA-N	9.9×10^7		HSDB (2015)	Q	99
mandestrobin $C_{19}H_{23}NO_3$ [173662-97-0] PDPWCKVIFAIQI-UHFFFAOYSA-N	1.5×10^6		Maniere et al. (2011)	?	12, 165



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimoxystrobin $C_{19}H_{22}N_2O_3$ [149961-52-4] WXUZAHCNPWONDH-DYTRJAOYSA-N	2.2×10^7		Maniere et al. (2011)	?	241, 165
(<i>R,S</i>)- α -2-naphthoxypropionanilide $C_{19}H_{17}NO_2$ (naproanilide) [52570-16-8] LVKTWOXHRYGDMU-UHFFFAOYSA-N	1.6×10^5 7.5×10^4		Hilal et al. (2008) Modarresi et al. (2007)	Q	67
phenylbutazone $C_{19}H_{20}N_2O_2$ [50-33-9] VYMDGNCVAMGZFE-UHFFFAOYSA-N	1.5×10^3		HSDB (2015)	Q	99
phenisopham $C_{19}H_{22}N_2O_4$ [57375-63-0] PWEOEHNGYFXZLI-UHFFFAOYSA-N	1.3×10^4		MacBean (2012a)	?	
formoterol $C_{19}H_{24}N_2O_4$ [73573-87-2] BPZSYCZIITTYBL-ORAYPTAES-N	1.1×10^{17}		HSDB (2015)	Q	99
benalaxyl-m $C_{20}H_{23}NO_3$ [98243-83-5] CJJPQIRJHIZUAQP-MRXNPFEDSA-N	4.3×10^3		Maniere et al. (2011)	?	12, 165
benalaxyl $C_{20}H_{23}NO_3$ [71626-11-4] CJJPQIRJHIZUAQP-UHFFFAOYSA-N	8.5×10^1 8.3×10^1 5.1×10^1 1.5×10^2		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 12, 165
tralkoxydim $C_{20}H_{27}NO_3$ [87820-88-0] SOTLWPHEAQOHHU-UHFFFAOYSA-N	4.1×10^4		HSDB (2015)	V	
neotame $C_{20}H_{30}N_2O_5$ [165450-17-9] HLIAVLHNDJUHFG-HOTGVXAUSA-N	4.3×10^3		HSDB (2015)	Q	99
colchicine $C_{22}H_{25}NO_6$ [64-86-8] IAKHMKGGTNLKSH-MRXNPFEDSA-N	5.5×10^{11}		HSDB (2015)	Q	99



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tebufenozide $C_{22}H_{28}N_2O_2$ [112410-23-8] QYPNKSZPJQQLRK-UHFFFAOYSA-N	7.6×10^2 $> 1.5 \times 10^4$		HSDB (2015) Maniere et al. (2011)	V ?	165
methoxyfenozide $C_{22}H_{28}N_2O_3$ [161050-58-4] QCAWEFNUXQPAN-UHFFFAOYSA-N	2.6×10^6 $> 6.1 \times 10^3$		HSDB (2015) Maniere et al. (2011)	Q ?	99 12, 165
propoxyphene $C_{22}H_{29}NO_2$ [469-62-5] XLMALTXPSGGQBX-PGRDOPGSA-N	4.3×10^3		HSDB (2015)	Q	99
(Z)-13-docosenamide $C_{22}H_{43}NO$ (erucamide) [112-84-5] UAUDZVJPLUQNMU-KTKRTIGZSA-N	3.5		HSDB (2015)	Q	545
butoxydim $C_{24}H_{33}NO_4$ [138164-12-2] ZOGDSYNXUXQGHF-XIEYBQDHSA-N	1.7×10^4		MacBean (2012a)	?	
2,2-bis[4-(4-aminophenoxy)phenyl]propane $C_{27}H_{26}N_2O_2$ [13080-86-9] KMKWGXGSGPYISJ-UHFFFAOYSA-N	2.0×10^8 2.8×10^8 1.0×10^8 3.1×10^{10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,4-bis[(4-methylphenyl)amino]-9,10-anthracenedione $C_{28}H_{22}N_2O_2$ (D&C Green No. 6) [128-80-3] TVRGPOFMYCMNRB-UHFFFAOYSA-N	6.6×10^{10}		HSDB (2015)	Q	99
mifepristone $C_{29}H_{35}NO_2$ [84371-65-3] VKHAHZOOUSRJNA-GCNJZUOMSA-N	2.0×10^{-1}		HSDB (2015)	Q	99
2'-anilino-6'-[ethyl(3-methylbutyl)amino]-3'-methylspiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one $C_{34}H_{34}N_2O_3$ [70516-41-5] HUSIBQLZEMMTCQ-UHFFFAOYSA-N	8.4×10^7 2.0×10^8 3.5×10^8 8.0×10^8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
spinetoram	1.0×10^2		Maniere et al. (2011)	?	241, 570, 165
$C_{42}H_{69}NO_{10}$	1.1×10^4		Maniere et al. (2011)	?	241, 570, 165
[935545-74-7]	1.6×10^2		Maniere et al. (2011)	?	241, 572, 165
GOENIMGKWNZVDA-OAMCMWQQA-N	2.0×10^3		Maniere et al. (2011)	?	241, 165
	2.9×10^2		Maniere et al. (2011)	?	241, 493, 165
	2.9×10^3		Maniere et al. (2011)	?	241, 493, 165
	4.3×10^1		Maniere et al. (2011)	?	241, 572, 165
	2.5×10^2		Maniere et al. (2011)	?	241, 165
spinosad	5.3×10^6		Maniere et al. (2011)	?	241, 165
$C_{42}H_{71}NO_9$	4.3×10^4		Maniere et al. (2011)	?	241, 165
[168316-95-8] RQOIAWYOVOXMST-UHFFFAOYSA-N					
emamectin benzoate	5.8×10^3		HSDB (2015)	V	
$C_{56}H_{81}NO_{15}$	2.5×10^1		Maniere et al. (2011)	?	241, 573, 165
[155569-91-8]	5.9×10^3		Maniere et al. (2011)	?	241, 493, 165
GCKZANITAMOIAR-UHFFFAOYSA-N	7.7×10^4		Maniere et al. (2011)	?	241, 570, 165
glutamic acid	9.0×10^7		Yaws (2003)	X	237
$C_5H_9NO_4$	1.8×10^{10}		Gharagheizi et al. (2012)	Q	
[617-65-2]	9.6×10^7		Gharagheizi et al. (2010)	Q	246
WHUUTDBJXRKMK-UHFFFAOYSA-N	9.9×10^{10}		Saxena and Hildemann (1996)	E	401
asparagine	9.9×10^{10}		Saxena and Hildemann (1996)	E	401
$C_4H_8N_2O_3$					
[70-47-3] DCXYFEDJOCNFAF-UWTATZPHSA-N					
serine	3.9×10^{10}		Saxena and Hildemann (1996)	E	401
$C_3H_7NO_3$					
[302-84-1] MTCFGRXMJLQNBG-UHFFFAOYSA-N					
glutamine	3.3×10^{10}		HSDB (2015)	Q	447
$C_5H_{10}N_2O_3$	9.9×10^{10}		Saxena and Hildemann (1996)	E	401
[56-85-9] ZDXPYRJPNDTMRX-GSVOUGTGSA-N					



Table A4.4: Amines, amides, amino acids (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
glycine $\text{C}_2\text{H}_5\text{NO}_2$ [56-40-6] DHMQDGOQFOQNFH-UHFFFAOYSA-N	1.2×10^{11} 8.9×10^5	16000	Brimblecombe et al. (1992) Saxena and Hildemann (1996)	V E	401
arginine $\text{C}_6\text{H}_{14}\text{N}_4\text{O}_2$ [74-79-3] ODKSFYDXXFIFQN-SCSAIBSYSA-N	9.9×10^{14}		Saxena and Hildemann (1996)	E	401
alanine $\text{C}_3\text{H}_7\text{NO}_2$ [302-72-7] QNAYBMKLOCPYGGJ-UHFFFAOYSA-N	3.5×10^{10} 5.9×10^5	16000	Brimblecombe et al. (1992) Saxena and Hildemann (1996)	V E	401
leucine $\text{C}_6\text{H}_{13}\text{NO}_2$ [328-39-2] ROHFNLRQFUQHCH-UHFFFAOYSA-N	2.0×10^5		Saxena and Hildemann (1996)	E	401



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A4.5 Heterocycles with oxygen and nitrogen (C, H, O, N)

Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyanuric acid $\text{C}_3\text{H}_3\text{N}_3\text{O}_3$ [108-80-5] ZFSLODLOARCGH-UHFFFAOYSA-N	1.1×10^9 1.1×10^9 3.4×10^5 4.2×10^{10} 4.0×10^7		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
isoxazole $\text{C}_3\text{H}_3\text{NO}$ [288-14-2] CTAPFRYPJLPDF-UHFFFAOYSA-N	4.0×10^{-1} 5.4×10^{-1} 2.4×10^{-1} 2.1×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q	186 67
glycidamide $\text{C}_3\text{H}_5\text{NO}_2$ [5694-00-8] FMAZQSYXRGRESX-UHFFFAOYSA-N	7.7×10^4		HSDB (2015)	Q	99
cyclonite $\text{C}_3\text{H}_6\text{N}_6\text{O}_6$ [121-82-4] XTFIVUDBNACUBN-UHFFFAOYSA-N	4.9×10^5		HSDB (2015)	V	
5-methyl-3-(2H)-isoxazolone $\text{C}_4\text{H}_5\text{NO}_2$ (hymexazol) [10004-44-1] KGVPNLBXJKTABS-UHFFFAOYSA-N	4.7×10^3 4.7×10^2 5.0×10^3 1.6×10^2 7.1×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Maniere et al. (2011)	V Q Q Q ?	186 67 241, 165
3-amino-1H-pyridazin-6-one $\text{C}_4\text{H}_5\text{N}_3\text{O}$ (maleic hydrazide) [10071-13-3] MMZLICVOTDAZOX-UHFFFAOYSA-N	1.2×10^7		Ebert et al. (2023)	?	318
maleic hydrazide $\text{C}_4\text{H}_4\text{N}_2\text{O}_2$ [123-33-1] BGRDGMRNKXEQD-UHFFFAOYSA-N	2.5×10^7		Maniere et al. (2011)	?	12, 165
allantoin $\text{C}_4\text{H}_6\text{N}_4\text{O}_3$ [97-59-6] POJWUDADGALRAB-UHFFFAOYSA-N	2.9×10^{12}		HSDB (2015)	Q	99
2-pyrrolidinone $\text{C}_4\text{H}_7\text{NO}$ [616-45-5] HNJBVLQSNELDL-UHFFFAOYSA-N	9.3×10^3 9.3×10^3 1.2×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186



Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-nitrosomorpholine $C_4H_8N_2O_2$ [59-89-2] ZKXDGKXYMTYWTB-UHFFFAOYSA-N	3.9×10^2 9.0×10^2 1.5×10^2		Mirvish et al. (1976) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q	14 67
N-nitrosopyrrolidine $C_4H_8N_2O$ [930-55-2] WNYADZVDBIBLJJ-UHFFFAOYSA-N	1.5×10^2 1.9×10^2 3.4×10^1	8500	Klein (1982) Mirvish et al. (1976) Hilal et al. (2008)	M M Q	14
cyclotetramethylenetetranitramine $C_4H_8N_8O_8$ [2691-41-0] UZGLIJVICEWHF-UHFFFAOYSA-N	1.1×10^4		HSDB (2015)	Q	99
1-oxa-4-azacyclohexane C_4H_9NO (morpholine) [110-91-8] YNAVUWVOSKDBBP-UHFFFAOYSA-N	1.9×10^2 8.5 8.2 7.3×10^1 2.2×10^1 1.6×10^2 8.1×10^1 9.5×10^1 1.0×10^1 4.2×10^1	7800 8400	Nguyen (2013) Duchowicz et al. (2020) HSDB (2015) Cabani et al. (1975a) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Yaws (1999)	M V V T Q Q Q Q Q ?	11 186 67 230, 274 21, 12
1-aziridineethanol C_4H_9NO [1072-52-2] VYONOOYDEFODAJ-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	Q	99
2-ethyl-3-methoxypyrazine $C_4N_2H_3(C_2H_5)OCH_3$ [25680-58-4] DPCILMHENXHQX-UHFFFAOYSA-N	6.7×10^{-1} 2.5×10^1 2.6		Buttery et al. (1971) Hilal et al. (2008) Modarresi et al. (2007)	M Q Q	 67
2-isobutyl-3-methoxypyrazine $C_4N_2H_3(C_4H_9)OCH_3$ [24683-00-9] UXFSPRAGHGMRSQ-UHFFFAOYSA-N	1.7×10^{-1} 2.0×10^{-1} 1.3		Karl et al. (2003) Buttery et al. (1971) Modarresi et al. (2007)	M M Q	 67
N-nitrosopiperidine $C_5H_{10}N_2O$ [100-75-4] UWSDONTXWQOZFN-UHFFFAOYSA-N	1.1×10^1 2.9×10^1 9.6 3.4		Mirvish et al. (1976) Hilal et al. (2008) Modarresi et al. (2007) Katritzky et al. (1998)	M Q Q Q	14 67
butyl carbamate $C_5H_{11}NO_2$ [592-35-8] SKKTUOZKZKCGTB-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	99



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Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methyl-1-oxa-4-azacyclohexane $C_5H_{11}NO$ (N-methylmorpholine; 4-methylmorpholine) [109-02-4] SJRJJKPEHAURKC-UHFFFAOYSA-N	5.0 1.2×10^1 1.8×10^1 9.6 3.6 5.7 6.4 1.4×10^1 1.7×10^1	 10000 8300	Du et al. (2017) Leng et al. (2015a) Cabani et al. (1975a) Du et al. (2017) Du et al. (2017) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997)	M M T Q Q Q Q Q Q	478 549 67 230, 231
allopurinol $C_5H_4N_4O$ [315-30-0] OFCNXP DARWKPPY-UHFFFAOYSA-N	4.9×10^8		HSDB (2015)	Q	99
4-methoxypyridine $C_5H_4NOCH_3$ [620-08-6] XQABVLBGNWBWIV-UHFFFAOYSA-N		7100	Arnett and Chawla (1979)	?	559
N-methyl-2-pyrrolidone C_5H_9NO [872-50-4] SECXISVLQFMRJM-UHFFFAOYSA-N	3.1×10^3 2.1×10^3 3.1×10^3 2.8×10^3 1.0×10^1 3.7×10^1 3.1×10^3	11000 9100	Brockbank (2013) Bernauer and Dohnal (2009) Kim et al. (2000) Keshavarz et al. (2022) Duchowicz et al. (2020) Modarresi et al. (2007) Duchowicz et al. (2020)	L M M Q Q Q ?	1 184 67 185, 21
5,5-dimethyl-2,4-imidazolidinedione $C_5H_8N_2O_2$ [77-71-4] YIROYDNZEPTFOL-UHFFFAOYSA-N	3.5×10^3 3.6×10^3 1.6×10^5 5.1×10^6 1.6×10^5		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
1-methyluracil $C_5H_6N_2O_2$ [615-77-0] XBCXJKGHPABGSD-UHFFFAOYSA-N	2.3×10^3 2.1×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
2-azacycloheptanone $C_6H_{11}NO$ (caprolactam) [105-60-2] JBKVHLHDHXXQEQ-UHFFFAOYSA-N	1.8×10^5 2.0×10^3 3.9×10^4		HSDB (2015) Hwang et al. (1992) Abraham et al. (2019)	V V Q	



Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
N-acetylpyrrolidine $C_6H_{11}NO$ [4030-18-6] LNWWQYYLZVZXKS-UHFFFAOYSA-N	6.2×10^3		Gibbs et al. (1991)	M		
glucosamine $C_6H_{13}NO_5$ [3416-24-8] MSWZFWKMSRAUBD-IVMDWMLBSA-N	1.3×10^{10}		HSDB (2015)	Q	99	
N-ethylmorpholine $C_6H_{13}NO$ [100-74-3] HVCNXQOWACZAFN-UHFFFAOYSA-N	4.0×10^2		HSDB (2015)	Q	99	
3-formylpyridine C_6H_5NO [500-22-1] QJZUKDFHGGYHMC-UHFFFAOYSA-N	6.5×10^1		Abraham et al. (1994a)	R		
	6.5×10^1		Keshavarz et al. (2022)	Q		
	1.5×10^1		Duchowicz et al. (2020)	Q		
	1.0×10^2		Hilal et al. (2008)	Q		
	2.7×10^1		Modarresi et al. (2007)	Q	67	
	6.5×10^1		Yaffe et al. (2003)	Q	248, 249	
	1.2×10^2		English and Carroll (2001)	Q	230, 274	
4-formylpyridine C_6H_5NO [872-85-5] BGUWUFUQJCDRPTL-UHFFFAOYSA-N	3.8×10^1		Nirmalakhandan et al. (1997)	Q		
	6.6×10^1		Duchowicz et al. (2020)	?	185, 21	
	5.6×10^1		Abraham et al. (1994a)	R		
	6.5×10^1		Keshavarz et al. (2022)	Q		
	1.5×10^1		Duchowicz et al. (2020)	Q	299	
	1.0×10^2		Hilal et al. (2008)	Q		
	2.2×10^1		Modarresi et al. (2007)	Q	67	
6.5×10^1		Yaffe et al. (2003)	Q	248, 272		
niacinamide $C_6H_6N_2O$ [98-92-0] DFPAKSUCGFBDDF-UHFFFAOYSA-N	6.4×10^1		English and Carroll (2001)	Q	230, 231	
	3.8×10^1		Nirmalakhandan et al. (1997)	Q		
	5.6×10^1		Duchowicz et al. (2020)	?	185, 21	
	3.4×10^6		HSDB (2015)	Q	99	
	metronidazole $C_6H_9N_3O_3$ [443-48-1] VAOCPAMSLUNLGC-UHFFFAOYSA-N	5.8×10^5		HSDB (2015)	Q	99
		2.5×10^4		Abraham et al. (2019)	Q	
nicotinic acid $C_6H_5NO_2$ [59-67-6] PVNIIMVLHYAWGP-UHFFFAOYSA-N						



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Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
isonicotinic acid $C_6H_5NO_2$ [55-22-1] TWBYWOBDOCUKOW-UHFFFAOYSA-N	1.6×10^4		Abraham et al. (2019)	Q	
1-methylthymine $C_6H_8N_2O_2$ [4160-72-9] GKMIDMKPBOUSBQ-UHFFFAOYSA-N	1.7×10^4		Ebert et al. (2023)	?	365
glydant $C_7H_{12}N_2O_4$ (1,3-dimethylol-5,5-dimethylhydantoin) [6440-58-0] WSDISUOETYTPRL-UHFFFAOYSA-N	1.4×10^6		HSDB (2015)	Q	99
3-quinuclidinol $C_7H_{13}NO$ [1619-34-7] IVLICVPXWEGCA-UHFFFAOYSA-N	1.7×10^3 1.8×10^4 5.1×10^3 1.2×10^4		Du et al. (2017) Du et al. (2017) Du et al. (2017) HSDB (2015)	M Q Q Q	478 549 99
dinotefuran $C_7H_{14}N_4O_3$ [165252-70-0] YKBZOVFACRVRJN-UHFFFAOYSA-N	1.5×10^8		HSDB (2015)	V	
1,2,3-benzotriazin-4(1H)-one $C_7H_5N_3O$ [90-16-4] DMSSTLDFWKBSX-UHFFFAOYSA-N	3.1×10^4		HSDB (2015)	Q	99
4-acetylpyridine C_7H_7NO [1122-54-9] WMQUKDQWMMOHS-A-UHFFFAOYSA-N	1.6×10^2 8.8×10^1 5.0 1.9×10^2 4.1×10^1 8.0×10^1 2.7×10^1 1.6×10^2		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	R Q Q Q Q Q Q ?	299 67 230, 231 185, 21
3-acetylpyridine C_7H_7NO [350-03-8] WEGYGNROSJDEIW-UHFFFAOYSA-N	4.6×10^2 8.8×10^1 5.0 1.9×10^2 5.2×10^1 2.7×10^1 4.6×10^2		Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	R Q Q Q Q Q ?	299 67 185, 21



Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
theophylline $\text{C}_7\text{H}_8\text{N}_4\text{O}_2$ [58-55-9] ZFXFYFBGIUFBOJW-UHFFFAOYSA-N	5.5×10^8		HSDB (2015)	Q	99
theobromine $\text{C}_7\text{H}_8\text{N}_4\text{O}_2$ [83-67-0] YAPOBXQYLJRXSA-UHFFFAOYSA-N	6.2×10^5		HSDB (2015)	Q	99
2-pyridineethanol $\text{C}_7\text{H}_9\text{NO}$ [103-74-2] BXGYBSJAZFGIPX-UHFFFAOYSA-N	6.6×10^4		HSDB (2015)	Q	99
caffeine $\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2$ [58-08-2] RYYVLZVUVIJVGH-UHFFFAOYSA-N	9.0×10^5		HSDB (2015)	V	
acyclovir $\text{C}_8\text{H}_{11}\text{N}_5\text{O}_3$ [59277-89-3] MKUXAQIIIEYXACX-UHFFFAOYSA-N	3.1×10^{16}		HSDB (2015)	Q	99
2-methoxy-3-(1-methylethyl)- pyrazine $\text{C}_8\text{H}_{12}\text{N}_2\text{O}$ [25773-40-4] NTOPKICPEQUPPH-UHFFFAOYSA-N	2.1×10^1 1.5×10^1		Wu et al. (2022a) Hilal et al. (2008)	Q Q	413
simeton $\text{C}_8\text{H}_{15}\text{N}_5\text{O}$ [673-04-1] HKAMKLBXTLTVCN-UHFFFAOYSA-N	1.5×10^4 2.5×10^4		Hilal et al. (2008) Abraham et al. (2007)	Q Q	
N-isobutylmorpholine $\text{C}_8\text{H}_{17}\text{NO}$ [10315-98-7] QKVSMSABRNCNRS-UHFFFAOYSA-N		8100 6000	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
phthalimide $\text{C}_8\text{H}_5\text{NO}_2$ [85-41-6] XKJCHHZQLQNZHY-UHFFFAOYSA-N	9.9×10^2		HSDB (2015)	Q	99
furazolidone $\text{C}_8\text{H}_7\text{N}_3\text{O}_5$ [67-45-8] PLHJDBGFXBMTGZ-UHFFFAOYSA-N	3.0×10^5		HSDB (2015)	Q	99



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Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,6-tetrahydrophthalimide $\text{C}_8\text{H}_9\text{NO}_2$ [85-40-5] CIFFBTOJCKSRJY-UHFFFAOYSA-N	3.3×10^2		HSDB (2015)	Q	99
N-nitrosonornicotine $\text{C}_9\text{H}_{11}\text{N}_3\text{O}$ [16543-55-8] XKABJYQDMJTNQG-UHFFFAOYSA-N	5.8×10^4		HSDB (2015)	Q	447
9-[(1,3-dihydroxy-2-propoxy)methyl]guanine $\text{C}_9\text{H}_{13}\text{N}_5\text{O}_4$ (ganciclovir) [82410-32-0] IRSCQMHWYFCW-UHFFFAOYSA-N	6.6×10^{17}		HSDB (2015)	Q	99
2-sec-butyl-3-methoxypyrazine $\text{C}_9\text{H}_{14}\text{N}_2\text{O}$ [24168-70-5] QMDDJVIJVPQHE-UHFFFAOYSA-N	2.0×10^{-1}		Ebert et al. (2023)	?	365
atraton $\text{C}_9\text{H}_{17}\text{N}_5\text{O}$ [1610-17-9] PXWUKZGIHQRDHL-UHFFFAOYSA-N	6.4×10^3 1.1×10^4 2.2×10^3		Hilal et al. (2008) Abraham et al. (2007) MacBean (2012a)	Q Q ?	
4-hydroxy-2,2,6,6-tetramethyl-1-piperidinyloxy $\text{C}_9\text{H}_{18}\text{NO}_2$ [2226-96-2] UZFMOKQJFYMBGY-UHFFFAOYSA-N	3.3×10^9		HSDB (2015)	Q	99
8-hydroxyquinoline $\text{C}_9\text{H}_7\text{NO}$ [148-24-3] MCJGNVYPOGVAJF-UHFFFAOYSA-N	1.7×10^1 1.7×10^1 8.9×10^1 5.5×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 241, 165
carbendazim $\text{C}_9\text{H}_9\text{N}_3\text{O}_2$ [10605-21-7] TWFZGCMQGLPBSX-UHFFFAOYSA-N	4.7×10^5 6.5×10^5		HSDB (2015) Mackay et al. (2006d)	V V	
metamitron $\text{C}_{10}\text{H}_{10}\text{N}_4\text{O}$ [41394-05-2] VHCNQEUIWZYOAIEV-UHFFFAOYSA-N	1.0×10^6 2.2×10^6 4.5×10^3 2.8×10^7 1.6×10^7 1.1×10^7		Barcelo and Hennion (1997) Delgado and Alderete (2003) Goodarzi et al. (2010) Delgado and Alderete (2003) Delgado and Alderete (2003) Maniere et al. (2011)	X C Q Q Q ?	567 568 241, 165



Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pymetrozin $C_{10}H_{11}N_5O$ [123312-89-0] QHMTXANCGGJZR-X-UHFFFAOYSA-N	3.3×10^5		HSDB (2015)	V	
3-oxo-N-phenylbutanamide $C_{10}H_{11}NO_2$ (acetoacetanilide) [102-01-2] DYRDKSSFIWVSNM-UHFFFAOYSA-N	2.3×10^6		HSDB (2015)	Q	99
2,3'-didehydro-3'-deoxythymidine (stavudine) $C_{10}H_{12}N_2O_4$ (stavudine) [3056-17-5] XNKLLVCARDGLGL-JGVFFNPUSA-N	4.3×10^9		HSDB (2015)	Q	99
cotinine $C_{10}H_{12}N_2O$ [486-56-6] UIKROCXWUNQSPJ-UHFFFAOYSA-N	3.0×10^6		HSDB (2015)	Q	99
4-(N-nitroso-N-methylamino)-1-(3-pyridyl)-1-butanone $C_{10}H_{13}N_3O_2$ [64091-91-4] FLAQSSHRLBFIEZ-UHFFFAOYSA-N	1.2×10^8		HSDB (2015)	Q	99
9-(4-hydroxy-3-hydroxymethylbut-1-yl)guanine $C_{10}H_{15}N_5O_3$ (penciclovir) [39809-25-1] JNTOCHDNEULJHD-UHFFFAOYSA-N	1.0×10^{26}		HSDB (2015)	Q	99
anatoxin A $C_{10}H_{15}NO$ [64285-06-9] SGNXVBOIDPPRJ-UHFFFAOYSA-N	1.5×10^3		HSDB (2015)	Q	99
dimetilan $C_{10}H_{16}N_4O_3$ [644-64-4] RDBIYWSVMRVKSG-UHFFFAOYSA-N	2.4×10^5		HSDB (2015)	Q	99
isolan $C_{10}H_{17}N_3O_2$ [119-38-0] RNNBHZYEKNHLKT-UHFFFAOYSA-N	4.9×10^3		HSDB (2015)	Q	99



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Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
amicarbazone $C_{10}H_{19}N_5O_2$ [129909-90-6] ORFPWVRKFLOQHK-UHFFFAOYSA-N	1.5×10^7		MacBean (2012b)	X	350
prometone $C_{10}H_{19}N_5O$ (prometon) [1610-18-0] ISEUFVQQFVBOBCY-UHFFFAOYSA-N	1.1×10^4 1.1×10^4 1.1×10^4 1.1×10^2 6.9×10^1		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 12 567 568
secbumeton $C_{10}H_{19}N_5O$ [26259-45-0] ZJMZZNVGNSWOOM-UHFFFAOYSA-N	2.8×10^3 2.9×10^3 5.0×10^3 7.2×10^3 2.7×10^3		Mackay et al. (2006d) Suntio et al. (1988) Hilal et al. (2008) Abraham et al. (2007) MacBean (2012a)	V V Q Q ?	 12
terbumeton $C_{10}H_{19}N_5O$ [33693-04-8] BCQMBFHBDZVHKU-UHFFFAOYSA-N	2.1×10^3 2.4×10^3 1.6×10^3		Mackay et al. (2006d) Hilal et al. (2008) Abraham et al. (2007)	V Q Q	
kinetin $C_{10}H_9N_5O$ [525-79-1] QANMHLXAZMSUEX-UHFFFAOYSA-N	8.2×10^8		HSDB (2015)	Q	99
isouron $C_{10}H_{17}N_3O_2$ [55861-78-4] JLLJHQLUZAKJFH-UHFFFAOYSA-N	7.3×10^4 3.3×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
fuberidazole $C_{11}H_8N_2O$ [3878-19-1] UYJUZNLFIJAWNEZ-UHFFFAOYSA-N	1.9×10^5		Ebert et al. (2023)	?	318
carbadox $C_{11}H_{10}N_4O_4$ [6804-07-5] OVGLBAWFMIPPY-WUXMJOGZSA-N	2.2×10^{17}		HSDB (2015)	Q	99
bendiocarb $C_{11}H_{13}NO_4$ [22781-23-3] XEGGRYVFLWGFHI-UHFFFAOYSA-N	2.5×10^2 2.5×10^2 2.7×10^2 2.0×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186



Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,5-trimethylphenol, methylcarbamate $C_{11}H_{15}NO_2$ (2,3,5-trimethacarb) [2655-15-4] NYOKZHDTNBDPOB-UHFFFAOYSA-N	4.5×10^1		HSDB (2015)	V	
butalbital $C_{11}H_{16}N_2O_3$ [77-26-9] UZVHFVZFNXBMQJ-UHFFFAOYSA-N	1.6×10^7		HSDB (2015)	Q	99
dexrazoxane $C_{11}H_{16}N_4O_4$ [24584-09-6] BMKDZUISNHGIBY-ZETCQYMHSA-N	4.7×10^{13}		HSDB (2015)	Q	99
pentobarbital $C_{11}H_{18}N_2O_3$ [76-74-4] WEXRUCMBJFQVBZ-UHFFFAOYSA-N	1.2×10^7		HSDB (2015)	Q	99
pirimor $C_{11}H_{18}N_4O_2$ (pirimicarb) [23103-98-2] YFGYUFNIOHWBOB-UHFFFAOYSA-N	1.2×10^4		HSDB (2015)	V	
	3.1×10^3		Mackay et al. (2006d)	V	
	5.0×10^3		Siebers and Mattusch (1996)	V	12
	5.9×10^3		Siebers et al. (1994)	V	
	3.1×10^3		Suntio et al. (1988)	V	12
	3.4×10^4		Maniere et al. (2011)	?	12, 574, 165
	3.0×10^4		Maniere et al. (2011)	?	12, 575, 165
3.0×10^4		Maniere et al. (2011)	?	12, 576, 165	
2.8×10^4		Maniere et al. (2011)	?	12, 165	
ethirimol $C_{11}H_{19}N_3O$ [23947-60-6] BBXXLROWFHWFOY-UHFFFAOYSA-N	3.6×10^3		Mackay et al. (2006d)	V	
pyroquilon $C_{11}H_{11}NO$ [57369-32-1] XRJLAOUDSILFTT-UHFFFAOYSA-N	5.1×10^3		Ebert et al. (2023)	?	318
fenfuram $C_{12}H_{11}NO_2$ [24691-80-3] JFSPBWWPKOEZCB-UHFFFAOYSA-N	2.5×10^4		Mackay et al. (2006d)	V	



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Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
oxabetrinil $C_{12}H_{12}N_2O_3$ [74782-23-3] WFFVUIONFJOAYPK-UHFFFAOYSA-N	8.6×10^1		Ebert et al. (2023)	?	318
phenobarbital $C_{12}H_{12}N_2O_3$ [50-06-6] DDBREPKUVSBGFI-UHFFFAOYSA-N	5.8×10^8		HSDB (2015)	Q	99
triaziquone $C_{12}H_{13}N_3O_2$ [68-76-8] PXSORRWMIIRDKMP-UHFFFAOYSA-N	1.1×10^{10}		HSDB (2015)	Q	99
triallyl cyanurate $C_{12}H_{15}N_3O_3$ [101-37-1] BJELTSYBAHKXRW-UHFFFAOYSA-N	2.3×10^1 1.8×10^3 1.9×10^2 4.1×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
entecavir $C_{12}H_{15}N_5O_3$ [142217-69-4] QDGDZCVAUDNJFG-FXQIFTODSA-N	6.2×10^{15}		HSDB (2015)	Q	99
metaxalone $C_{12}H_{15}NO_3$ [1665-48-1] IMWZHHHPURKASS-UHFFFAOYSA-N	3.7×10^4		HSDB (2015)	Q	99
phendimetrazine $C_{12}H_{17}NO$ [634-03-7] MFOCDFTXLCYLKU-UHFFFAOYSA-N	3.7×10^2		HSDB (2015)	Q	99
hexazinone $C_{12}H_{20}N_4O_2$ [51235-04-2] CAWXEEYDBZRFPE-UHFFFAOYSA-N	$>9.9 \times 10^1$ 4.4×10^6		Mabury and Crosby (1996) HSDB (2015)	M V	
picaridin $C_{12}H_{23}NO_3$ [119515-38-7] QLHULAHOXSSASE-UHFFFAOYSA-N	3.3×10^5		HSDB (2015)	Q	99
lenacil $C_{13}H_{18}N_2O_2$ [2164-08-1] ZTMKADLOSYPKWCA-UHFFFAOYSA-N	1.3×10^5 3.8×10^4 7.7×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 241, 165



Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pyrinuron $C_{13}H_{12}N_4O_3$ (pyriminil) [53558-25-1] CLKZWXHKFXZIMA-UHFFFAOYSA-N	5.4×10^{10}		HSDB (2015)	Q	99
melatonin $C_{13}H_{16}N_2O_2$ [73-31-4] DRLFMBDRBRZALE-UHFFFAOYSA-N	3.8×10^8		HSDB (2015)	Q	447
dibenz[<i>b, f</i>][1,4]oxazepine $C_{13}H_9NO$ [257-07-8] NPUACKRELIJTFM-UHFFFAOYSA-N	2.4×10^{-3}		HSDB (2015)	Q	99
oxadixyl $C_{14}H_{18}N_2O_4$ [77732-09-3] UWWQIROCRJWDKL-UHFFFAOYSA-N	2.0×10^6		Ebert et al. (2023)	?	318
benomyl $C_{14}H_{18}N_4O_3$ [17804-35-2] RIOXQFHNCKOKP-UHFFFAOYSA-N	5.2×10^5 3.1×10^5 1.8×10^5 2.0×10^6		Mackay et al. (2006d) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q Q ?	 185, 21
trimethoprim $C_{14}H_{18}N_4O_3$ [738-70-5] IEDVJHCEMCRBQM-UHFFFAOYSA-N	4.1×10^8		HSDB (2015)	Q	99
ethoxyquin $C_{14}H_{19}NO$ [91-53-2] DECIPOUIJURFOJ-UHFFFAOYSA-N	8.0		Ebert et al. (2023)	?	318
famciclovir $C_{14}H_{19}N_5O_4$ [104227-87-4] GGXKVVWZWMJJEH-UHFFFAOYSA-N	1.0×10^8		HSDB (2015)	Q	99
furmecycloz $C_{14}H_{21}NO_3$ [60568-05-0] QTDRLOKFLJJHTG-UHFFFAOYSA-N	1.4×10^2		MacBean (2012a)	?	
oxcarbazepine $C_{15}H_{12}N_2O_2$ [28721-07-5] CTRLABGOLIVAIY-UHFFFAOYSA-N	1.4×10^7		HSDB (2015)	Q	99



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Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phenytoin $C_{15}H_{12}N_2O_2$ [57-41-0] CXOFVDLJLONNDW-UHFFFAOYSA-N	9.7×10^5		HSDB (2015)	Q	99
carbamazepine $C_{15}H_{12}N_2O$ [298-46-4] FFGPTBGBSHEPO-UHFFFAOYSA-N	9.0×10^4		HSDB (2015)	Q	99
propylthiouracil $C_{15}H_{12}N_2O$ [51-52-5] KNAHARQHSZJURB-UHFFFAOYSA-N	9.0×10^3		HSDB (2015)	Q	99
ancymidol $C_{15}H_{16}N_2O_2$ [12771-68-5] HUTDUHSNJYTCAR-UHFFFAOYSA-N	9.1×10^5 1.5×10^6 4.7×10^6 6.3×10^5		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Duchowicz et al. (2020)	Q Q Q ?	 185, 21
imazethapyr $C_{15}H_{19}N_3O_3$ [81335-77-5] XVOKUMIPKHGGTN-UHFFFAOYSA-N	9.9×10^{10}		HSDB (2015)	Q	99
imazamox $C_{15}H_{19}N_3O_4$ [114311-32-9] NUPJIGQFXCQJBK-UHFFFAOYSA-N	1.1×10^{13} 2.0×10^{11}		HSDB (2015) Maniere et al. (2011)	Q ?	99 241, 165
cycloheximide $C_{15}H_{23}NO_4$ [66-81-9] YPHMISFOHDHNIV-FSZOTQKASA-N	2.8×10^9		HSDB (2015)	Q	99
oxymatrine $C_{15}H_{24}N_2O_2$ [16837-52-8] XVPBINOPNYFXID-LHDIFFHYSA-N	9.9×10^{12}		HSDB (2015)	Q	99
triapenthenol $C_{15}H_{25}N_3O$ [76608-88-3] CNFMJLVJDNGPHR-UKTHLTGXSA-N	4.0×10^4		Ebert et al. (2023)	?	318
mebendazole $C_{16}H_{13}N_3O_3$ [31431-39-7] OPXLLQJSORQAM-UHFFFAOYSA-N	1.8×10^{10}		HSDB (2015)	Q	99



Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
imazamethabenz-methyl $C_{16}H_{20}N_2O_3$ [81405-85-8] FFCCBBNQPIMUJI-UHFFFAOYSA-N	2.6×10^6		HSDB (2015)	V	
nifedipine $C_{17}H_{18}N_2O_6$ [21829-25-4] HYIMSNHJOBLJNT-UHFFFAOYSA-N	1.4×10^8		HSDB (2015)	Q	99
oxymorphone $C_{17}H_{19}NO_4$ [76-41-5] UQCCKQCJZOAFTQ-UHFFFAOYSA-N	2.4×10^{13}		HSDB (2015)	Q	99
desomorphine $C_{17}H_{21}NO_2$ [427-00-9] LNNWVNGFPYWNQE-UHFFFAOYSA-N	2.4×10^6		HSDB (2015)	Q	99
cocaine $C_{17}H_{21}NO_4$ [50-36-2] ZPUCINDJBIVPJ-PFSRBDOWSA-N	2.3×10^5 2.3×10^5 7.9×10^4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
N-(2-ethylhexyl)-5-norbornene- 2,3-dicarboximide $C_{17}H_{25}NO_2$ [113-48-4] WLLGXSLBOPFWQV-UHFFFAOYSA-N	3.5×10^1		HSDB (2015)	Q	99
imazaquin $C_{17}H_{17}N_3O_3$ [81335-37-7] CABMTIJINOIHOD-UHFFFAOYSA-N	2.7×10^{11}		Maniere et al. (2011)	?	12, 165
(E)-pyriminobac-methyl $C_{17}H_{19}N_3O_6$ [147411-69-6] USSIUIGPBLPCDF-KEBDBYFISA-N	7.3×10^2		Ebert et al. (2023)	?	318
(Z)-pyriminobac-methyl $C_{17}H_{19}N_3O_6$ [147411-70-9] USSIUIGPBLPCDF-JMIUGGZSA-N	1.9×10^4		Ebert et al. (2023)	?	318
imiprothrin $C_{17}H_{22}N_2O_4$ [72963-72-5] VPRAQYXPZIFIOH-UHFFFAOYSA-N	1.6×10^5 6.9×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186



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Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
iprovalicarb $C_{18}H_{28}N_2O_3$ [140923-17-7] NWUWYYSKZYQAE-LBAUFKAWSA-N	7.1×10^5		Maniere et al. (2011)	?	12, 165
quinophthalone $C_{18}H_{11}NO_2$ [8003-22-3] IZMJMCDWVKSTTK-UHFFFAOYSA-N	1.6×10^8		HSDB (2015)	Q	99
pefurazoate $C_{18}H_{23}N_3O_4$ [101903-30-4] WBTYBAGIHOISOQ-UHFFFAOYSA-N	1.8×10^3		Ebert et al. (2023)	?	318
tetramethrin $C_{19}H_{25}NO_4$ [7696-12-0] CXBMCYHAMVGWJQ-UHFFFAOYSA-N	5.8		HSDB (2015)	V	
isoxaben $C_{19}H_{25}NO_4$ [82558-50-7] PMHURSHKJKGBM-UHFFFAOYSA-N	7.8×10^3 7.8×10^3 5.3×10^3 5.1×10^3		Duchowicz et al. (2020) MacBean (2012b) Duchowicz et al. (2020) Maniere et al. (2011)	V X Q ?	186 350 12, 165
alfuzosin $C_{19}H_{27}N_5O_4$ [81403-80-7] WNMJYKCGWZFFKR-UHFFFAOYSA-N	1.0×10^{14}		HSDB (2015)	Q	99
2,6-dimethyl-4-tridecylmorpholine $C_{19}H_{39}NO$ (tridemorph) [24602-86-6] YTOPFCCWCISOHFV-UHFFFAOYSA-N	5.8×10^{-2}		Ebert et al. (2023)	?	318
pyriproxyfen $C_{20}H_{19}NO_3$ [95737-68-1] NHDHVHZZCFYRSB-UHFFFAOYSA-N	1.6×10^4 $>1.4 \times 10^1$		HSDB (2015) Maniere et al. (2011)	Q ?	99 72, 165
papaverine $C_{20}H_{21}NO_4$ [58-74-2] XQYZDYMELSDJRZ-UHFFFAOYSA-N	1.3×10^7		HSDB (2015)	Q	99
fenazaquin $C_{20}H_{22}N_2O$ [120928-09-8] DMYHGDXADUDKCQ-UHFFFAOYSA-N	2.1×10^2 9.9×10^1 4.7×10^1 1.8×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 241, 165



Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bitertanol $C_{20}H_{23}N_3O_2$ [55179-31-2] VGPIBGGRCVEHQZ-UHFFFAOYSA-N	1.2×10^4		Mackay et al. (2006d)	V	
bitertanol diastereoisomer a $C_{20}H_{23}N_3O_2$ [70585-36-3] VGPIBGGRCVEHQZ-OALUTQOASA-N	3.1×10^6		Mackay et al. (2006d)	V	
bitertanol diastereoisomer b $C_{20}H_{23}N_3O_2$ [70585-38-5] VGPIBGGRCVEHQZ-RBUKOAKNSA-N	1.5×10^6		Mackay et al. (2006d)	V	
naltrexone $C_{20}H_{23}NO_4$ [16590-41-3] DQCKKXVULJGBQN-UHFFFAOYSA-N	2.3×10^{13}		HSDB (2015)	Q	99
<i>D</i> -lysergic acid N,N-diethylamide $C_{20}H_{25}N_3O$ (LSD) [50-37-3] VAYOSLLFUXYJDT-UHFFFAOYSA-N	6.6×10^{10}		HSDB (2015)	Q	99
ibogaine $C_{20}H_{26}N_2O$ [83-74-9] HSIBGVUMFOSJPD-UHFFFAOYSA-N	8.2×10^5		HSDB (2015)	Q	99
fenpropimorph $C_{20}H_{33}NO$ [67564-91-4] RYAUSSKQMZRMAI-ALOPSCCKSA-N	6.2 6.2×10^{-2} 7.9×10^{-2} 3.6×10^{-1}		Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V X Q ?	567 568 241, 165
strychnine $C_{21}H_{22}N_2O_2$ [57-24-9] QMGVPVSNSZLJIA-UHFFFAOYSA-N	1.6×10^8		HSDB (2015)	Q	99
nalmefene $C_{21}H_{25}NO_3$ [55096-26-9] WJBLNOPPDWQMCH-UHFFFAOYSA-N	5.5×10^{10}		HSDB (2015)	Q	99
benztropine $C_{21}H_{25}NO$ [86-13-5] GIJXKZJWITVLHI-UHFFFAOYSA-N	4.5×10^3		HSDB (2015)	Q	99



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Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
stanozolol $C_{21}H_{32}N_2O$ [10418-03-8] LKAJKIOFIWVMDJ-KIWJEFSTSA-N	9.0×10^2		HSDB (2015)	Q	99
spirotetramat $C_{21}H_{27}NO_5$ [203313-25-1] CLSVJBIHYWPGQY-GGYDESQDSA-N	1.4×10^7 1.6×10^7 9.2×10^6		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ?	241, 493, 165 241, 577, 165 241, 573, 165
diacetylmorphine $C_{21}H_{23}NO_5$ (heroin) [561-27-3] GVGLGOZDCSQPN-PVHGPHFFSA-N	1.6×10^7 2.7×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
pyrametostrobin $C_{21}H_{23}N_3O_4$ [915410-70-7] DWTVBEZBWMXIIY-UHFFFAOYSA-N	2.2×10^4		Ebert et al. (2023)	?	318
azoxystrobin $C_{22}H_{17}N_3O_5$ [131860-33-8] WFDXOXNFRHQEC-GHRIWEEISA-N	1.4×10^8 1.4×10^8		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
famoxadone $C_{22}H_{18}N_2O_4$ [131807-57-3] PCCSBWNGDMYFCW-UHFFFAOYSA-N	2.1×10^2 2.2×10^2		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
tadalafil $C_{22}H_{19}N_3O_4$ [171596-29-5] WOXKDUGGYOFFRN-IIBYNOLFSA-N	2.0×10^{12}		HSDB (2015)	Q	99
bisacodyl $C_{22}H_{19}NO_4$ [603-50-9] KHOITXIGCFIULA-UHFFFAOYSA-N	1.4×10^6		HSDB (2015)	Q	99
fentanyl $C_{22}H_{28}N_2O$ [437-38-7] PJMPHNIQZUBGLI-UHFFFAOYSA-N	1.1×10^6		HSDB (2015)	Q	99



Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-(triphenylmethyl)morpholine $C_{23}H_{23}NO$ (trifenmorph) [1420-06-0] ZJMLMBICUVVJDX-UHFFFAOYSA-N	7.6×10^4 3.2		HSDB (2015) MacBean (2012a)	Q ?	99
brucine $C_{23}H_{26}N_2O_4$ [357-57-3] RRKTKIUPZVBMF-UHFFFAOYSA-N	4.7×10^{10}		HSDB (2015)	Q	99
mycophenolate mofetil $C_{23}H_{31}NO_7$ [128794-94-5] RTGDFNSFWBGLECSYZQJQIISA-N	1.8×10^9		HSDB (2015)	Q	99
pinoxaden $C_{23}H_{32}N_2O_4$ [243973-20-8] MGOHCFMYLBAPRN-UHFFFAOYSA-N	1.1×10^6 1.1×10^6		HSDB (2015) Maniere et al. (2011)	V ?	165
fenpyroximate $C_{24}H_{27}N_3O_4$ [134098-61-6] YYJNOYZRYGDPNH-MFKUBSTISA-N	4.6 7.6 5.8×10^4		Duchowicz et al. (2020) MacBean (2012b) Duchowicz et al. (2020)	V X Q	186 350
valsartan $C_{24}H_{29}N_5O_3$ [137862-53-4] ACWBQPMHZXGDFX-QFIPXVFZSA-N	3.2×10^{12}		HSDB (2015)	Q	99
donepezil $C_{24}H_{29}NO_3$ [120014-06-4] ADEBPBSSDYVVLDD-UHFFFAOYSA-N	8.2×10^6		HSDB (2015)	Q	99
chromafenozide $C_{24}H_{30}N_2O_3$ [143807-66-3] HPNSNYBUADCDFR-UHFFFAOYSA-N	5.1×10^5 6.2×10^5 5.6×10^5		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ?	12, 493, 165 12, 577, 165 12, 573, 165
cyenopyrafen $C_{24}H_{31}N_3O_2$ [560121-52-0] APJLTUBHYCOZJI-VZCXRCSSSA-N	1.6×10^3		Ebert et al. (2023)	?	318



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Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-[4-[4-(2-benzoxazolyl)styryl]phenyl]-5-methylbenzoxazole $C_{29}H_{20}N_2O_2$ [5242-49-9] SOTPOQKKAUOHRO-BQYQJAHWSA-N	7.5×10^8		Zhang et al. (2010)	Q	287, 288
2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol $C_{30}H_{29}N_3O$ [70321-86-7] OLFNXLXEGXRUI-UHFFFAOYSA-N	7.2×10^9		Zhang et al. (2010)	Q	287, 288
fenpicoxamid $C_{31}H_{38}N_2O_{11}$ [517875-34-2] QGTOTYJSCYHYFK-RBODFLQRSA-N	4.2×10^2		Maniere et al. (2011)	?	165
norbormide $C_{33}H_{25}N_3O_3$ [991-42-4] DNTHHIVFNQZZRD-UHFFFAOYSA-N	3.7×10^{17}		HSDB (2015)	Q	99
reserpine $C_{33}H_{40}N_2O_9$ [50-55-5] QEVHRUUCFGRFIF-UHFFFAOYSA-N	1.8×10^{17}		HSDB (2015)	Q	99
telmisartan $C_{33}H_{30}N_4O_2$ [144701-48-4] RMMXLENWKUUMAY-UHFFFAOYSA-N	1.9×10^{14}		Abraham et al. (2019)	Q	
telaprevir $C_{36}H_{53}N_7O_6$ [402957-28-2] BBAWEDCPNXPBQM-GDEBMMAJSA-N	1.3×10^{25}		HSDB (2015)	Q	99
lopinavir $C_{37}H_{48}N_4O_5$ [192725-17-0] KJHKTHWMRKYKJE-WRHCQWCJSA-N	2.3×10^{22}		HSDB (2015)	Q	99
atazanavir $C_{38}H_{52}N_6O_7$ [198904-31-3] AXRYRYVKAWYZBR-GASGPIRDSA-N	2.7×10^{26}		HSDB (2015)	Q	99



Table A4.5: Heterocycles with oxygen and nitrogen (C, H, O, N) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tylosin $C_{46}H_{77}NO_{17}$ [1401-69-0] WBPYTXDJUQLPQ-SNQVITFCSA-N	1.7×10^{32}		HSDB (2015)	Q	99
nystatin $C_{47}H_{75}NO_{17}$ [1400-61-9] VQOXZBDYSJBXMA-QFHUWGMOSA-N	4.9×10^4		HSDB (2015)	Q	99
1,3,5-tris(3,5-di- <i>tert</i> -butyl-4-hydroxybenzyl)-1,3,5-triazinane-2,4,6-trione $C_{48}H_{69}N_3O_6$ [27676-62-6] VNQNXQYZMPJLQX-UHFFFAOYSA-N	6.1×10^{20}		Zhang et al. (2010)	Q	287, 288
	1.3×10^{12}		Zhang et al. (2010)	Q	287, 289
	3.4×10^{10}		Zhang et al. (2010)	Q	287, 290
	8.2×10^{14}		Zhang et al. (2010)	Q	287, 291



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A4.6 Nitrates (RONO₂)

Table A4.6: Nitrates (RONO₂)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
urea nitrate CH ₅ N ₃ O ₄ [124-47-0] AYTGUZPQPXGYFS-UHFFFAOYSA-N	5.8×10^{11}		HSDB (2015)	Q	99
methyl nitrate CH ₃ ONO ₂ [598-58-3] LRMHVVPFGGOAJQ-UHFFFAOYSA-N	2.0×10^{-2}	4700	Burkholder et al. (2019)	L	
	2.0×10^{-2}	4700	Burkholder et al. (2015)	L	
	2.0×10^{-2}	4700	Sander et al. (2011)	L	
	2.0×10^{-2}	4700	Sander et al. (2006)	L	
	2.0×10^{-2}	4700	Kames and Schurath (1992)	M	
	2.6×10^{-2}		Schwartz (1986)	C	87
	1.6×10^{-2}		Wang et al. (2017)	Q	80, 238
	1.3×10^{-1}		Wang et al. (2017)	Q	80, 239
	1.0×10^{-3}		Wang et al. (2017)	Q	80, 240
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.2×10^{-2}		Hilal et al. (2008)	Q	
		4900	Kühne et al. (2005)	Q	
		4800	Kühne et al. (2005)	?	
ethyl nitrate C ₂ H ₅ ONO ₂ [625-58-1] IDNUEBSJWINEMI-UHFFFAOYSA-N	1.6×10^{-2}	5400	Burkholder et al. (2019)	L	
	1.6×10^{-2}	5400	Burkholder et al. (2015)	L	
	1.6×10^{-2}	5400	Sander et al. (2011)	L	
	1.6×10^{-2}	5400	Sander et al. (2006)	L	
	1.6×10^{-2}	5400	Kames and Schurath (1992)	M	
	1.2×10^{-2}		Wang et al. (2017)	Q	80, 238
	6.5×10^{-2}		Wang et al. (2017)	Q	80, 239
	9.1×10^{-4}		Wang et al. (2017)	Q	80, 240
	3.3×10^{-2}		HSDB (2015)	Q	99
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-2}		Hilal et al. (2008)	Q	
1-propyl nitrate C ₃ H ₇ ONO ₂ [627-13-4] JNTOKFNBDFTIV-UHFFFAOYSA-N	1.1×10^{-2}	5500	Burkholder et al. (2019)	L	
	1.1×10^{-2}	5500	Burkholder et al. (2015)	L	
	1.1×10^{-2}	5500	Sander et al. (2011)	L	
	1.1×10^{-2}	5500	Sander et al. (2006)	L	
	9.0×10^{-3}	5600	Staudinger and Roberts (2001)	L	
	7.4×10^{-3}	4600	Hauff et al. (1998)	M	
	1.1×10^{-2}	5500	Kames and Schurath (1992)	M	
	1.1×10^{-2}		Hauff et al. (1998)	V	
	3.6×10^{-3}		Keshavarz et al. (2022)	Q	
	6.9×10^{-3}		Duchowicz et al. (2020)	Q	184
	1.0×10^{-2}		Wang et al. (2017)	Q	80, 238



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1×10^{-2}		Wang et al. (2017)	Q	80, 239
	6.2×10^{-4}		Wang et al. (2017)	Q	80, 240
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-2}		Hilal et al. (2008)	Q	
	5.3×10^{-2}		Modarresi et al. (2007)	Q	67
		5600	Kühne et al. (2005)	Q	
	7.8×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4600	Kühne et al. (2005)	?	
2-propyl nitrate C ₃ H ₇ ONO ₂ (isopropyl nitrate) [1712-64-7] GAPFWGOSHOCNBM-UHFFFAOYSA-N	7.8×10^{-3}	5400	Burkholder et al. (2019)	L	
	7.8×10^{-3}	5400	Burkholder et al. (2015)	L	
	7.8×10^{-3}	5400	Sander et al. (2011)	L	
	7.8×10^{-3}	5400	Sander et al. (2006)	L	
	6.6×10^{-3}	5400	Staudinger and Roberts (2001)	L	
	5.5×10^{-3}	4300	Hauff et al. (1998)	M	
	7.8×10^{-3}	5400	Kames and Schurath (1992)	M	
	8.1×10^{-3}		Hauff et al. (1998)	V	
	3.6×10^{-3}		Keshavarz et al. (2022)	Q	
	2.7×10^{-3}		Duchowicz et al. (2020)	Q	184
	1.1×10^{-2}		Wang et al. (2017)	Q	80, 238
	2.4×10^{-2}		Wang et al. (2017)	Q	80, 239
	7.1×10^{-4}		Wang et al. (2017)	Q	80, 240
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	4.9		Raventos-Duran et al. (2010)	Q	245
	1.7×10^{-2}		Hilal et al. (2008)	Q	
	4.9×10^{-2}		Modarresi et al. (2007)	Q	67
		4600	Kühne et al. (2005)	Q	
	6.1×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4300	Kühne et al. (2005)	?	
1-butyl nitrate C ₄ H ₉ ONO ₂ [928-45-0] QQHZPQUHCAKSOL-UHFFFAOYSA-N	1.0×10^{-2}	5800	Burkholder et al. (2019)	L	
	1.0×10^{-2}	5800	Burkholder et al. (2015)	L	
	1.0×10^{-2}	5800	Sander et al. (2011)	L	
	1.0×10^{-2}	5800	Sander et al. (2006)	L	
	8.8×10^{-3}	6000	Staudinger and Roberts (2001)	L	
	6.3×10^{-3}	5200	Hauff et al. (1998)	M	
	1.0×10^{-2}	5800	Kames and Schurath (1992)	M	
	1.0×10^{-2}	6000	Luke et al. (1989)	M	
	8.5×10^{-3}		Hauff et al. (1998)	V	
	4.8×10^{-3}		Keshavarz et al. (2022)	Q	
	1.0×10^{-2}		Duchowicz et al. (2020)	Q	
	8.9×10^{-3}		Wang et al. (2017)	Q	80, 238
	2.0×10^{-2}		Wang et al. (2017)	Q	80, 239
	3.0×10^{-4}		Wang et al. (2017)	Q	80, 240
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.7×10^{-2}		Hilal et al. (2008)	Q	
	4.2×10^{-2}		Modarresi et al. (2007)	Q	67
		5900	Kühne et al. (2005)	Q	
	6.4×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		5800	Kühne et al. (2005)	?	
2-butyl nitrate C ₄ H ₉ ONO ₂ [924-52-7] DYONNFFVDNILGI-UHFFFAOYSA-N	6.4×10^{-3}	5400	Burkholder et al. (2019)	L	
	6.4×10^{-3}	5400	Burkholder et al. (2015)	L	
	6.4×10^{-3}	5400	Sander et al. (2011)	L	
	6.4×10^{-3}	5400	Sander et al. (2006)	L	
	6.4×10^{-3}	6100	Staudinger and Roberts (2001)	L	
	4.4×10^{-3}		Hauff et al. (1998)	M	
	6.4×10^{-3}	5400	Kames and Schurath (1992)	M	
	6.3×10^{-3}	5600	Luke et al. (1989)	M	
	6.4×10^{-3}		Hauff et al. (1998)	V	
	8.9×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.5×10^{-2}		Wang et al. (2017)	Q	80, 239
	5.5×10^{-4}		Wang et al. (2017)	Q	80, 240
		4900	Kühne et al. (2005)	Q	
		5400	Kühne et al. (2005)	?	
isobutyl nitrate C ₄ H ₉ ONO ₂ [543-29-3] LNNXFUZKZLXPOF-UHFFFAOYSA-N	7.0×10^{-3}	5200	Kames and Schurath (1992)	M	
	4.8×10^{-3}		Keshavarz et al. (2022)	Q	
	3.9×10^{-3}		Duchowicz et al. (2020)	Q	
	8.9×10^{-3}		Wang et al. (2017)	Q	80, 238
	2.0×10^{-2}		Wang et al. (2017)	Q	80, 239
	4.6×10^{-4}		Wang et al. (2017)	Q	80, 240
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-2}		Hilal et al. (2008)	Q	
	4.4×10^{-2}		Modarresi et al. (2007)	Q	67
	4.4×10^{-3}		Duchowicz et al. (2020)	?	185, 21
1-pentyl nitrate C ₅ H ₁₁ ONO ₂ (amyl nitrate) [1002-16-0] HSNWZBCBUUSSQD-UHFFFAOYSA-N	6.6×10^{-3}	6300	Hauff et al. (1998)	M	
	1.2×10^{-2}		Kames and Schurath (1992)	M	12
	4.0×10^{-3}		Hauff et al. (1998)	V	
	6.5×10^{-3}		Keshavarz et al. (2022)	Q	
	1.3×10^{-2}		Duchowicz et al. (2020)	Q	
	6.9×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.4×10^{-2}		Wang et al. (2017)	Q	80, 239
	4.8×10^{-4}		Wang et al. (2017)	Q	80, 240
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.3×10^{-2}		Hilal et al. (2008)	Q	
	3.8×10^{-2}		Modarresi et al. (2007)	Q	67



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.9×10^{-3}	6300	Kühne et al. (2005)	Q	
			Duchowicz et al. (2020)	?	185, 21
		6300	Kühne et al. (2005)	?	
2-pentyl nitrate $C_5H_{11}ONO_2$ (MCM:PEBNO3) [21981-48-6] RWRBSYOTDDOXKC-UHFFFAOYSA-N	3.7×10^{-3}	6400	Staudinger and Roberts (2001)	L	
	3.7×10^{-3}	5100	Hauff et al. (1998)	M	
	3.6×10^{-3}	6300	Kames and Schurath (1992)	M	
	4.8×10^{-3}		Hauff et al. (1998)	V	
	3.4×10^{-3}	6000	Wieser et al. (2023)	Q	437
	6.5×10^{-3}		Keshavarz et al. (2022)	Q	
	5.0×10^{-3}		Duchowicz et al. (2020)	Q	299
	8.3×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.0×10^{-2}		Wang et al. (2017)	Q	80, 239
	4.8×10^{-4}		Wang et al. (2017)	Q	80, 240
	9.5×10^{-3}		Hilal et al. (2008)	Q	
	3.6×10^{-2}		Modarresi et al. (2007)	Q	67
		5300	Kühne et al. (2005)	Q	
	3.3×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		5100	Kühne et al. (2005)	?	
3-pentyl nitrate $C_5H_{13}ONO_2$ [82944-59-0] WQZKKVJFBZPJSU-UHFFFAOYSA-N	3.8×10^{-3}	5300	Hauff et al. (1998)	M	
	4.9×10^{-3}		Hauff et al. (1998)	V	
	6.5×10^{-3}		Keshavarz et al. (2022)	Q	
	5.0×10^{-3}		Duchowicz et al. (2020)	Q	299
	8.3×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.0×10^{-2}		Wang et al. (2017)	Q	80, 239
	3.7×10^{-4}		Wang et al. (2017)	Q	80, 240
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	9.2×10^{-3}		Hilal et al. (2008)	Q	
	4.0×10^{-2}		Modarresi et al. (2007)	Q	67
		5300	Kühne et al. (2005)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		5300	Kühne et al. (2005)	?	
3-methyl-1-butanol nitrate $C_5H_{11}ONO_2$ (isoamyl nitrate) [543-87-3] NTHGIYFSMNNHSC-UHFFFAOYSA-N	5.0×10^{-3}	5900	Hauff et al. (1998)	M	
	6.5×10^{-3}		Keshavarz et al. (2022)	Q	
	5.0×10^{-3}		Duchowicz et al. (2020)	Q	184
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	3.8×10^{-2}		Modarresi et al. (2007)	Q	67
		6300	Kühne et al. (2005)	Q	
	4.5×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		5900	Kühne et al. (2005)	?	



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pentaerythritol tetranitrate $C_5H_8N_4O_{12}$ [78-11-5] TZRXHJWUDPFEY-UHFFFAOYSA-N	7.6×10^3		HSDB (2015)	V	
	1.2		Yaws (2003)	X	237
	8.2×10^5		Zhang et al. (2010)	Q	287, 288
	1.1×10^4		Zhang et al. (2010)	Q	287, 289
	7.9×10^4		Zhang et al. (2010)	Q	287, 290
	3.6×10^3		Zhang et al. (2010)	Q	287, 291
	1.2		Gharagheizi et al. (2010)	Q	246
1-hexyl nitrate $C_6H_{13}ONO_2$ [20633-11-8] AGDYNDJUZRMRYG-UHFFFAOYSA-N	7.6×10^{-3}	6700	Hauff et al. (1998)	M	
	3.6×10^{-3}		Hauff et al. (1998)	V	
	8.8×10^{-3}		Keshavarz et al. (2022)	Q	
	1.5×10^{-2}		Duchowicz et al. (2020)	Q	184
	5.8×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.0×10^{-2}		Wang et al. (2017)	Q	80, 239
	2.4×10^{-4}		Wang et al. (2017)	Q	80, 240
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	9.5×10^{-3}		Hilal et al. (2008)	Q	
	3.1×10^{-2}		Modarresi et al. (2007)	Q	67
		6600	Kühne et al. (2005)	Q	
	6.6×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		6700	Kühne et al. (2005)	?	
2-nitrooxyethanol $HOC_2H_4ONO_2$ [16051-48-2] HTKIMWYSZQQBP-UHFFFAOYSA-N	3.9×10^2		Burkholder et al. (2019)	L	
	3.9×10^2		Burkholder et al. (2015)	L	
	3.9×10^2		Sander et al. (2011)	L	
	3.9×10^2		Sander et al. (2006)	L	
	3.8×10^2	8600	Shepson et al. (1996)	M	
	3.9×10^2		Kames and Schurath (1992)	M	12
	5.7×10^1		Keshavarz et al. (2022)	Q	
	9.0×10^{-1}		Duchowicz et al. (2020)	Q	299
	4.2×10^1		Wang et al. (2017)	Q	80, 238
	5.5×10^2		Wang et al. (2017)	Q	80, 239
	7.6		Wang et al. (2017)	Q	80, 240
	3.9×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^2		Raventos-Duran et al. (2010)	Q	244
	9.9×10^2		Raventos-Duran et al. (2010)	Q	245
	1.7×10^2		Hilal et al. (2008)	Q	
8.5×10^1		Modarresi et al. (2007)	Q	67	
	9200	Kühne et al. (2005)	Q		
	3.8×10^2		Duchowicz et al. (2020)	?	185, 21
		8700	Kühne et al. (2005)	?	



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-nitrooxy-2-propanol <chem>C3H7O4N</chem> [20266-65-3] OMDFJTSKBNDDRM-UHFFFAOYSA-N	6.6×10^1	10000	Burkholder et al. (2019)	L	
	6.6×10^1		Burkholder et al. (2015)	L	
	6.6×10^1		Sander et al. (2011)	L	
	6.6×10^1		Sander et al. (2006)	L	
	1.1×10^2		Shepson et al. (1996)	M	
	6.6×10^1		Kames and Schurath (1992)	M	578, 12
	7.2×10^1		Kames and Schurath (1992)	M	578, 12
	7.7×10^1		Keshavarz et al. (2022)	Q	
	9.3×10^{-1}		Duchowicz et al. (2020)	Q	
	3.9×10^1		Wang et al. (2017)	Q	80, 238
	3.6×10^2		Wang et al. (2017)	Q	80, 239
	1.7		Wang et al. (2017)	Q	80, 240
	3.1×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^2		Raventos-Duran et al. (2010)	Q	244
7.8×10^2	Raventos-Duran et al. (2010)	Q	245		
9.5×10^1	Hilal et al. (2008)	Q			
5.5×10^1	Modarresi et al. (2007)	Q	67		
1.1×10^2	Duchowicz et al. (2020)	?	185, 21		
2-nitrooxy-1-propanol <chem>C3H7O4N</chem> [20266-74-4] HGMMKIIGJXXMW-UHFFFAOYSA-N	7.2×10^1	8800	Burkholder et al. (2019)	L	
	7.2×10^1		Burkholder et al. (2015)	L	
	7.2×10^1		Sander et al. (2011)	L	
	7.2×10^1		Sander et al. (2006)	L	
	4.4×10^1		Shepson et al. (1996)	M	
	6.6×10^1		Kames and Schurath (1992)	M	578, 12
	7.2×10^1		Kames and Schurath (1992)	M	578, 12
	7.7×10^1		Keshavarz et al. (2022)	Q	
	9.3×10^{-1}		Duchowicz et al. (2020)	Q	184
	3.9×10^1		Wang et al. (2017)	Q	80, 238
	2.7×10^2		Wang et al. (2017)	Q	80, 239
	1.6		Wang et al. (2017)	Q	80, 240
	3.1×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^1		Raventos-Duran et al. (2010)	Q	244
7.8×10^2	Raventos-Duran et al. (2010)	Q	245		
8.6×10^1	Hilal et al. (2008)	Q			
6.9×10^1	Modarresi et al. (2007)	Q	67		
4.4×10^1	Duchowicz et al. (2020)	?	185, 21		
1-nitrooxy-2-butanol <chem>C4H9O4N</chem> [147794-11-4] KNUQGVIXAYDSOX-UHFFFAOYSA-N	8.9×10^1	9200	Treves et al. (2000)	M	28
	5.7×10^1		Shepson et al. (1996)	M	
	1.0×10^2		Keshavarz et al. (2022)	Q	
	1.7		Duchowicz et al. (2020)	Q	299
	3.2×10^1		Wang et al. (2017)	Q	80, 238
	1.9×10^2		Wang et al. (2017)	Q	80, 239
	1.1		Wang et al. (2017)	Q	80, 240
	2.5×10^1		Raventos-Duran et al. (2010)	Q	242, 243
7.8×10^1	Raventos-Duran et al. (2010)	Q	244		
6.2×10^2	Raventos-Duran et al. (2010)	Q	245		



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.1×10^1		Hilal et al. (2008)	Q	
	5.4×10^1		Modarresi et al. (2007)	Q	67
	5.7×10^1		Duchowicz et al. (2020)	?	185, 21
2-nitrooxy-1-butanol $C_4H_9O_4N$ [147794-12-5] YXMNEYKMHSBVTU-UHFFFAOYSA-N	8.8×10^1	9600	Treves et al. (2000)	M	28
	5.9×10^1		Shepson et al. (1996)	M	
	1.0×10^2		Keshavarz et al. (2022)	Q	
	1.7		Duchowicz et al. (2020)	Q	299
	3.2×10^1		Wang et al. (2017)	Q	80, 238
	1.6×10^2		Wang et al. (2017)	Q	80, 239
	1.6		Wang et al. (2017)	Q	80, 240
	2.5×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^1		Raventos-Duran et al. (2010)	Q	244
	6.2×10^2		Raventos-Duran et al. (2010)	Q	245
	6.0×10^1		Hilal et al. (2008)	Q	
	5.4×10^1		Modarresi et al. (2007)	Q	67
	5.9×10^1		Duchowicz et al. (2020)	?	185, 21
2-nitrooxy-3-butanol $C_4H_9O_4N$ [147794-10-3] CGFCSKMZZXPWEY-UHFFFAOYSA-N	1.0×10^2	9500	Shepson et al. (1996)	M	
	1.0×10^2		Keshavarz et al. (2022)	Q	
	6.8×10^{-1}		Duchowicz et al. (2020)	Q	299
	3.6×10^1		Wang et al. (2017)	Q	80, 238
	2.0×10^2		Wang et al. (2017)	Q	80, 239
	9.3×10^{-1}		Wang et al. (2017)	Q	80, 240
	2.5×10^1		Raventos-Duran et al. (2010)	Q	271, 243
	7.8×10^1		Raventos-Duran et al. (2010)	Q	244
	6.2×10^2		Raventos-Duran et al. (2010)	Q	245
	5.4×10^1		Hilal et al. (2008)	Q	
	7.4×10^1		Modarresi et al. (2007)	Q	67
	1.0×10^2		Duchowicz et al. (2020)	?	185, 21
3-nitrooxy-1-butanol $C_4H_9O_4N$ FOHXKGDMSQVTH-UHFFFAOYSA-N	1.4×10^2		Treves et al. (2000)	M	28
	2.6×10^1		Wang et al. (2017)	Q	80, 238
	5.1×10^2		Wang et al. (2017)	Q	80, 239
	5.0		Wang et al. (2017)	Q	80, 240
4-nitrooxy-1-butanol $C_4H_9O_4N$ [22911-39-3] FBOGSWRRYABFKU-UHFFFAOYSA-N	2.9×10^2		Treves et al. (2000)	M	28
	2.2×10^1		Wang et al. (2017)	Q	80, 238
	7.4×10^2		Wang et al. (2017)	Q	80, 239
	1.6×10^1		Wang et al. (2017)	Q	80, 240
4-nitrooxy-2-butanol $C_4H_9O_4N$ (3-hydroxy-1-nitrooxy-butane) [141299-18-5] WUKDMTQXKGFHBU-UHFFFAOYSA-N	1.3×10^2		Treves et al. (2000)	M	28
	2.6×10^1		Wang et al. (2017)	Q	80, 238
	6.5×10^2		Wang et al. (2017)	Q	80, 239
	3.4		Wang et al. (2017)	Q	80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-nitrooxy-1-pentanol $C_5H_{11}O_4N$ SVIFKHUNGQLAEN-UHFFFAOYSA-N	2.0×10^2 2.0×10^1 3.4×10^2 1.3×10^1		Treves et al. (2000) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q	28 80, 238 80, 239 80, 240
5-nitrooxy-1-pentanol $C_5H_{11}O_4N$ DVOSRLSVEOCANS-UHFFFAOYSA-N	2.0×10^2		Ebert et al. (2023)	?	579
5-nitrooxy-2-pentanol $C_5H_{11}O_4N$ (MCM:HO2C5NO3) RIQPKERROQFFJK-UHFFFAOYSA-N	3.6×10^2 2.1×10^1 2.0×10^1 4.4×10^2 6.5	9900	Treves et al. (2000) Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q Q	28 437 80, 238 80, 239 80, 240
1-nitrooxy-2-propanone $CH_3COCH_2ONO_2$ (nitrooxyacetone) [6745-71-7] ISWXYJQANHQYSR-UHFFFAOYSA-N	1.0×10^1 1.0×10^1 1.0×10^1 1.0×10^1 1.0×10^1 7.6 1.4×10^2 5.0×10^{-1} 2.5×10^1 3.9×10^1 7.8×10^1 1.2×10^2		Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Kames and Schurath (1992) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008)	L L L L M Q Q Q Q Q Q Q	12 80, 238 80, 239 80, 240 242, 243 244 245
ISOP1N6CO $C_5H_7NO_5$ XXORYENTKCFFSM-UHFFFAOYSA-N	2.1×10^5	14000	Wieser et al. (2023)	Q	437
C52COCONO2 $C_5H_7NO_5$ QJXLMYNMVOSKND-UHFFFAOYSA-N	6.7×10^1	11000	Wieser et al. (2023)	Q	437
ISOP1N23O4CO $C_5H_7NO_5$ WBVYILWVTRBDJ-UHFFFAOYSA-N	1.5×10^3	12000	Wieser et al. (2023)	Q	437
ROO6R7ONO2 $C_6H_{11}NO_5$ COKJDYWOSQONMU-UHFFFAOYSA-N	7.5×10^4	13000	Wieser et al. (2023)	Q	437
2-heptyl nitrate $C_7H_{15}NO_3$ (C7H15ONO2) HHXLSUKHLTWKR-UHFFFAOYSA-N	2.3×10^{-3}	6600	Wieser et al. (2023)	Q	437



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
C7OHONO2 C ₇ H ₁₅ NO ₄ MZJHMUSTUUJGSJ-UHFFFAOYSA-N	1.2×10^1	11000	Wieser et al. (2023)	Q	437
C622CONO2 C ₇ H ₁₁ NO ₅ DJCVHBPJHAWIU-UHFFFAOYSA-N	9.9×10^2	14000	Wieser et al. (2023)	Q	437
2-octyl nitrate C ₈ H ₁₇ NO ₃ (C8H17ONO2) QCOKASLKYUXYJH-UHFFFAOYSA-N	6.8	7000	Wieser et al. (2023)	Q	437
C8OHONO2 C ₈ H ₁₇ NO ₄ UEQWMROIQKFM-UHFFFAOYSA-N	9.0	11000	Wieser et al. (2023)	Q	437
C824ONO2 C ₈ H ₁₃ NO ₅ YMYILPYDFNRVBZ-UHFFFAOYSA-N	9.5×10^6	14000	Wieser et al. (2023)	Q	437
C819ONO2 C ₈ H ₁₃ NO ₆ XLUWXWLWQTYVOF-UHFFFAOYSA-N	3.9×10^6	16000	Wieser et al. (2023)	Q	437
C92ONO2 C ₉ H ₁₅ NO ₅ PNFDSIMYWKOAKE-UHFFFAOYSA-N	4.7×10^5	15000	Wieser et al. (2023)	Q	437
NORLIMONO2 C ₉ H ₁₅ NO ₆ MUTWZANDXPDWFF-UHFFFAOYSA-N	3.8×10^8	16000	Wieser et al. (2023)	Q	437
C822CONO2 C ₉ H ₁₃ NO ₅ RVFLVBTUEWAABB-UHFFFAOYSA-N	6.2×10^1	13000	Wieser et al. (2023)	Q	437
C817CONO2 C ₉ H ₁₃ NO ₆ LHFXXFGIVAQFTO-UHFFFAOYSA-N	1.2×10^5	15000	Wieser et al. (2023)	Q	437
C9CONO2 C ₁₀ H ₁₅ NO ₅ FNVMVXZLPDKVAS-UHFFFAOYSA-N	8.0×10^1	20000	Wieser et al. (2023)	Q	437
LIMONO2 C ₁₀ H ₁₅ NO ₅ DEKWHDOXDJNWRD-UHFFFAOYSA-N	3.8×10^4	14000	Wieser et al. (2023)	Q	437



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-ethanediol dinitrate	6.3		Burkholder et al. (2019)	L	
O ₃ NCH ₂ CH ₂ ONO ₂	6.3		Burkholder et al. (2015)	L	
(1,2-ethane dinitrate)	6.3		Sander et al. (2011)	L	
[628-96-6]	6.3		Sander et al. (2006)	L	
UQXKXGWWGFRWLX-UHFFFAOYSA-N	7.8×10^{-1}		Fischer and Ballschmiter (1998b)	M	580
	6.3		Kames and Schurath (1992)	M	12
	9.9×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	9.9		Raventos-Duran et al. (2010)	Q	244
	1.6×10^1		Raventos-Duran et al. (2010)	Q	245
	8.2		Hilal et al. (2008)	Q	
	4.9×10^{-1}		Modarresi et al. (2007)	Q	67
1,2-propanediol dinitrate	1.7		Burkholder et al. (2019)	L	
C ₃ H ₆ (ONO ₂) ₂	1.7		Burkholder et al. (2015)	L	
(1,2-propane dinitrate)	1.7		Sander et al. (2011)	L	
[6423-43-4]	1.7		Sander et al. (2006)	L	
PSXCGTLGGVDFWU-UHFFFAOYSA-N	3.2×10^{-1}		Fischer and Ballschmiter (1998b)	M	580
	1.7		Kames and Schurath (1992)	M	12
	1.0×10^1		HSDB (2015)	Q	99
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
	3.1		Raventos-Duran et al. (2010)	Q	244
	9.9		Raventos-Duran et al. (2010)	Q	245
	2.7		Hilal et al. (2008)	Q	
1,3-propanediol dinitrate	1.6		Burkholder et al. (2019)	L	581
C ₃ H ₆ N ₂ O ₆	1.6		Burkholder et al. (2015)	L	582
[3457-90-7]	1.3		Fischer and Ballschmiter (1998b)	M	580
KOSAMXZBGUISK-UHFFFAOYSA-N	1.2		Raventos-Duran et al. (2010)	Q	242, 243
	3.9		Raventos-Duran et al. (2010)	Q	244
	9.9		Raventos-Duran et al. (2010)	Q	245
	4.4		Hilal et al. (2008)	Q	
1,2,3-propanetriol trinitrate	2.3×10^2		HSDB (2015)	V	
C ₃ H ₅ N ₃ O ₉	1.9×10^2		Yaws (2003)	X	237, 12
(nitroglycerin)	4.9×10^1		Raventos-Duran et al. (2010)	Q	242, 243
[55-63-0]	3.9×10^2		Raventos-Duran et al. (2010)	Q	244
SNIOPGDIGTZGOP-UHFFFAOYSA-N	3.9×10^3		Raventos-Duran et al. (2010)	Q	245
	1.9×10^2		Gharagheizi et al. (2010)	Q	246
	3.9×10^1		Hilal et al. (2008)	Q	
	1.0×10^2		Yaws (1999)	?	21, 12
1,2-butanediol dinitrate	2.1×10^{-1}		Fischer and Ballschmiter (1998b)	M	580
C ₄ H ₈ N ₂ O ₆	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	271, 243
[20820-41-1]	1.6		Raventos-Duran et al. (2010)	Q	244
CTISQZXUUHJNC-UHFFFAOYSA-N	7.8		Raventos-Duran et al. (2010)	Q	245



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-butanediol dinitrate $C_4H_8N_2O_6$ [6423-44-5] DGFBLNMRARLFTU-UHFFFAOYSA-N	5.7×10^{-1} 9.9×10^{-1} 1.6 7.8		Fischer and Ballschmiter (1998b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M Q Q Q	580 242, 243 244 245
1,4-butanediol dinitrate $C_4H_8N_2O_6$ [3457-91-8] QELUAJBXJAWSRC-UHFFFAOYSA-N	1.6 9.9×10^{-1} 3.1 7.8 2.7		Fischer and Ballschmiter (1998b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008)	M Q Q Q Q	580 242, 243 244 245
2,3-butanediol dinitrate $C_4H_8N_2O_6$ [6423-45-6] RVDDYBGRQLZMSB-UHFFFAOYSA-N	1.2×10^{-1} 4.9×10^{-1} 1.6 7.8		Fischer and Ballschmiter (1998b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M Q Q Q	580 242, 243 244 245
1,2-pentanediol dinitrate $C_5H_{10}N_2O_6$ [89365-05-9] MZWHVGLDAWPHHW-UHFFFAOYSA-N	1.3×10^{-1}		Fischer and Ballschmiter (1998b)	M	580
1,4-pentanediol dinitrate $C_5H_{10}N_2O_6$ [25385-63-1] IUTIKUKYGRINOD-UHFFFAOYSA-N	3.9×10^{-1}		Fischer and Ballschmiter (1998b)	M	580
1,5-pentanediol dinitrate $C_5H_{10}N_2O_6$ [3457-92-9] MIYIEPHJPVBEV-UHFFFAOYSA-N	1.2 9.9×10^{-1} 2.0 6.2		Fischer and Ballschmiter (1998b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M Q Q Q	580 242, 243 244 245
(2R,4S)-2,4-pentanediol dinitrate $C_5H_{10}N_2O_6$ (<i>cis</i> -2,4-pentanediol dinitrate) [208252-05-5]	2.2×10^{-1}		Fischer and Ballschmiter (1998b)	M	580
(2R,4R)-2,4-pentanediol dinitrate $C_5H_{10}N_2O_6$ (<i>trans</i> -2,4-pentanediol dinitrate) [208252-04-4]	1.4×10^{-1}		Fischer and Ballschmiter (1998b)	M	580
1,2-hexanediol dinitrate $C_6H_{12}N_2O_6$ [110539-07-6] UJKJGCZXPXTGS-UHFFFAOYSA-N	9.6×10^{-2}		Fischer and Ballschmiter (1998b)	M	580
1,5-hexanediol dinitrate $C_6H_{12}N_2O_6$ [206443-83-6] PGDWEAOSOZKFKU-UHFFFAOYSA-N	2.7×10^{-1}		Fischer and Ballschmiter (1998b)	M	580



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,6-hexanediol dinitrate $C_6H_{12}N_2O_6$ [3457-93-0] GCVAYIWGKFFWEU-UHFFFAOYSA-N	1.5		Fischer and Ballschmiter (1998b)	M	580
2,5-hexanediol dinitrate $C_6H_{12}N_2O_6$ [99115-63-6] ISSLCMSTXXUOEU-UHFFFAOYSA-N	3.1×10^{-1} 6.2×10^{-1} 6.2×10^{-1} 4.9		Fischer and Ballschmiter (1998b) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M Q Q Q	580 271, 243 244 245
(1R,2S)-1,2-cyclohexanediol dinitrate $C_6H_{10}N_2O_6$ (<i>cis</i> -1,2-cyclohexanediol dinitrate) [32342-28-2]	1.3		Fischer and Ballschmiter (1998b)	M	580
(1R,2R)-1,2-cyclohexanediol dinitrate $C_6H_{10}N_2O_6$ (<i>trans</i> -1,2-cyclohexanediol dinitrate) [32342-29-3]	5.2×10^{-1}		Fischer and Ballschmiter (1998b)	M	580
(1R,3S)-1,3-cyclohexanediol dinitrate $C_6H_{10}N_2O_6$ (<i>cis</i> -1,3-cyclohexanediol dinitrate) [170994-36-2]	3.4		Fischer and Ballschmiter (1998b)	M	580
(1R,3R)-1,3-cyclohexanediol dinitrate $C_6H_{10}N_2O_6$ (<i>trans</i> -1,3-cyclohexanediol dinitrate) [170994-41-9]	6.8×10^{-1}		Fischer and Ballschmiter (1998b)	M	580
1,7-heptanediol dinitrate $C_7H_{14}N_2O_6$ [3457-94-1] KIERETFMVSIXI-UHFFFAOYSA-N	1.1		Fischer and Ballschmiter (1998b)	M	580
(1R,2R)-1,2-cycloheptanediol dinitrate $C_7H_{12}N_2O_6$ (<i>trans</i> -1,2-cycloheptanediol dinitrate) [208252-06-6]	8.8×10^{-1}		Fischer and Ballschmiter (1998b)	M	580



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-octanediol dinitrate $C_8H_{16}N_2O_6$ [121222-48-8] RLNKMZWMCSTIEM-UHFFFAOYSA-N	5.2×10^{-2}		Fischer and Ballschmiter (1998b)	M	580
1,8-octanediol dinitrate $C_8H_{16}N_2O_6$ [3457-95-2] BVIHOKFRPSZJEI-UHFFFAOYSA-N	7.8×10^{-1}		Fischer and Ballschmiter (1998b)	M	580
1,2-decanediol dinitrate $C_{10}H_{20}N_2O_6$ [60123-40-2] KKNGVXOJDUIADE-UHFFFAOYSA-N	2.0×10^{-2}		Fischer and Ballschmiter (1998b)	M	580
1,10-decanediol dinitrate $C_{10}H_{20}N_2O_6$ [3457-97-4] RHUZOYME LURURD-UHFFFAOYSA-N	4.3×10^{-1}		Fischer and Ballschmiter (1998b)	M	580
diethylene glycol dinitrate $C_4H_8N_2O_7$ [693-21-0] LYAGTVMJGHTIDH-UHFFFAOYSA-N	2.5×10^1 4.9×10^1 1.2×10^2 9.9×10^2 1.1×10^2 3.8		HSDB (2015) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q	 242, 243 244 245 67
ISOP1N2ONO2 $C_5H_8N_2O_6$ FQSKJUXVWIFNKX-UHFFFAOYSA-N	1.6	9400	Wieser et al. (2023)	Q	437
EPXISOPNNO2 $C_5H_8N_2O_7$ UAFKAIYDADHRMX-UHFFFAOYSA-N	5.3×10^1	13000	Wieser et al. (2023)	Q	437
ISOP1N23O4ONO2 $C_5H_8N_2O_7$ FSZUIXLMCRZJMS-UHFFFAOYSA-N	4.5×10^1	13000	Wieser et al. (2023)	Q	437
ISOP1N5ONO2 $C_5H_8N_2O_7$ WRGRJJOKHABEJT-UHFFFAOYSA-N	5.8×10^4	13000	Wieser et al. (2023)	Q	437
LIMAB15ONO22 $C_{10}H_{18}N_2O_8$ UNHNJOVXNACOSQ-UHFFFAOYSA-N	3.1×10^7	18000	Wieser et al. (2023)	Q	437



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
peroxyacetyl nitrate CH ₃ COONO ₂ (PAN) [2278-22-0] VGQXTTSLVLMQFHM-UHFFFAOYSA-N	2.8 × 10 ⁻²	5700	Burkholder et al. (2019)	L	
	2.8 × 10 ⁻²	5700	Burkholder et al. (2015)	L	
	2.9 × 10 ⁻²	5700	Warneck and Williams (2012)	L	
	2.8 × 10 ⁻²	5700	Sander et al. (2011)	L	
	2.8 × 10 ⁻²	5700	Sander et al. (2006)	L	
	2.9 × 10 ⁻²	5800	Leu and Zhang (1999)	L	
	3.0 × 10 ⁻²	5600	Easterbrook et al. (2023)	M	
	2.3 × 10 ⁻²	4800	Frenzel et al. (2000)	M	
	4.0 × 10 ⁻²		Kames and Schurath (1995)	M	12
	2.8 × 10 ⁻²	6500	Kames et al. (1991)	M	
	4.9 × 10 ⁻²		Holdren et al. (1984)	M	373
	3.6 × 10 ⁻²		Gaffney and Senum (1984)	X	389
	2.9 × 10 ⁻²	5900	Pandis and Seinfeld (1989)	C	
	3.6 × 10 ⁻²		Schwartz (1986)	C	87
	6.8 × 10 ⁻²		Keshavarz et al. (2022)	Q	
	6.1 × 10 ⁻¹		Duchowicz et al. (2020)	Q	184
	4.9		Wang et al. (2017)	Q	80, 238
	1.0 × 10 ¹		Wang et al. (2017)	Q	80, 239
	7.4 × 10 ⁻⁴		Wang et al. (2017)	Q	80, 240
	3.1 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	271, 243
	4.9		Raventos-Duran et al. (2010)	Q	244
	7.8 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	245
	2.2		Hilal et al. (2008)	Q	
	3.2		Modarresi et al. (2007)	Q	67
		4800	Kühne et al. (2005)	Q	
	3.6 × 10 ⁻²		Duchowicz et al. (2020)	?	185, 21
		6300	Kühne et al. (2005)	?	
			Warneck et al. (1996)	?	583
			Schurath et al. (1996)	W	584
peroxypropionyl nitrate C ₂ H ₅ COONO ₂ (PPN) [5796-89-4] TXINBPKSWKFMNB-UHFFFAOYSA-N	1.6 × 10 ⁻²	6000	Easterbrook et al. (2023)	M	
	2.9 × 10 ⁻²		Kames and Schurath (1995)	M	12
	3.9		Wang et al. (2017)	Q	80, 238
	4.1		Wang et al. (2017)	Q	80, 239
	3.6 × 10 ⁻⁴		Wang et al. (2017)	Q	80, 240
	2.5 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	242, 243
	2.0		Raventos-Duran et al. (2010)	Q	244
	6.2 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	245
			Warneck et al. (1996)	?	583
			Schurath et al. (1996)	W	585
nitro butaneperoxoate C ₃ H ₇ COONO ₂ (PnBN) [27746-48-1] HZUMMZVMNQSPFF-UHFFFAOYSA-N	2.3 × 10 ⁻²		Kames and Schurath (1995)	M	12
	3.2		Wang et al. (2017)	Q	80, 238
	2.2		Wang et al. (2017)	Q	80, 239
	2.6 × 10 ⁻⁴		Wang et al. (2017)	Q	80, 240
	1.6 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	242, 243
	1.2		Raventos-Duran et al. (2010)	Q	244
	4.9 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	245



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
			Warneck et al. (1996)	?	583
			Schurath et al. (1996)	W	586
peroxy-2-propenoyl nitrate CH ₂ C(CH ₃)COONO ₂ (peroxymethacryloyl nitrate; MPAN) [88181-75-3] LLZWPFQFEBKRLX-UHFFFAOYSA-N	1.7 × 10 ⁻² 7.4 4.8 2.4 × 10 ⁻⁴		Kames and Schurath (1995) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	M Q Q Q	12 80, 238 80, 239 80, 240
			Warneck et al. (1996)	W	583
			Schurath et al. (1996)	W	587
peroxy-isobutyryl nitrate C ₃ H ₇ COONO ₂ (PiBN) [65424-60-4] BDNFHGUXBRZLRQ-UHFFFAOYSA-N	9.9 × 10 ⁻³ 3.6 2.3 1.8 × 10 ⁻⁴ 1.6 × 10 ⁻² 1.2 4.9 × 10 ⁻²		Kames and Schurath (1995) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Warneck et al. (1996) Schurath et al. (1996)	M Q Q Q Q Q Q ? W	12 80, 238 80, 239 80, 240 242, 243 244 245 583 588
furoyl peroxyxynitrate C ₅ H ₃ NO ₆ (fur-PAN) NMNZVYLGOWCHOD-UHFFFAOYSA-N	9.3 × 10 ⁻² 1.6 × 10 ⁻¹	8800	Roberts et al. (2022) Roberts et al. (2022)	M Q	589
MCM:CH3O2NO2 CH ₃ NO ₄ LCFGXMPUQSXLQ-UHFFFAOYSA-N	4.1 × 10 ⁻¹ 1.5 × 10 ⁻¹ 1.7 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETHO2HNO3 C ₂ H ₅ NO ₅ IYCQDYQELIXMU-UHFFFAOYSA-N	9.3 × 10 ² 2.8 × 10 ³ 3.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NO3CH2CO3H C ₂ H ₃ NO ₆ VLCOOHYMNDETJ-UHFFFAOYSA-N	1.2 × 10 ⁴ 2.3 × 10 ³ 4.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NO3CH2PAN C ₂ H ₂ N ₂ O ₈ CSNUPQYBRZIENU-UHFFFAOYSA-N	5.6 × 10 ² 1.9 × 10 ³ 3.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACRPAN C ₃ H ₃ NO ₅ [157258-66-7] SFKRQQJZRXXGLC-UHFFFAOYSA-N	1.1 × 10 ¹ 7.4 4.6 × 10 ⁻⁴ 2.0 × 10 ⁻² 3.1 1.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	Q Q Q Q Q Q	80, 238 80, 239 80, 240 271, 243 244 245



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PR1O2HNO3 C ₃ H ₇ NO ₅ FROUFTMXOYPCX-UHFFFAOYSA-N	8.7 × 10 ² 1.0 × 10 ³ 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PR2O2HNO3 C ₃ H ₇ NO ₅ UHIVGIHVGRYUPL-UHFFFAOYSA-N	8.7 × 10 ² 1.1 × 10 ³ 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRNO3CO3H C ₃ H ₅ NO ₆ FMRKJWQAPYMRJD-UHFFFAOYSA-N	1.1 × 10 ⁴ 1.0 × 10 ³ 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRNO3PAN C ₃ H ₄ N ₂ O ₈ ZLJYZUGEJFPONP-UHFFFAOYSA-N	5.0 × 10 ² 4.6 × 10 ² 1.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BU1ENO3OOH C ₄ H ₉ NO ₅ MFTWJXGCASCYHP-UHFFFAOYSA-N	6.8 × 10 ² 5.5 × 10 ² 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3DBPAN C ₄ H ₅ NO ₅ YVSVRLGWMDVSPN-UHFFFAOYSA-N	1.4 × 10 ¹ 5.8 1.2 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C42NO33OOH C ₄ H ₉ NO ₅ CGBCWMNQOIZIB-UHFFFAOYSA-N	8.1 × 10 ² 5.1 × 10 ² 9.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C43NO34OOH C ₄ H ₉ NO ₅ BQDGWSCZHPGGT-UHFFFAOYSA-N	6.8 × 10 ² 5.5 × 10 ² 6.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4PAN9 C ₄ H ₄ N ₂ O ₈ SHASFEZZYJNCIM-UHFFFAOYSA-N	1.6 × 10 ³ 2.3 × 10 ³ 5.4 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPRANO3OOH C ₄ H ₉ NO ₅ DTPMQEMACNJTBX-UHFFFAOYSA-N	4.7 × 10 ² 3.2 × 10 ² 9.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPRBNO3OOH C ₄ H ₉ NO ₅ RCQWCNCMOFDCKD-UHFFFAOYSA-N	4.7 × 10 ² 3.5 × 10 ² 5.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPRBNO3PAN C ₄ H ₆ N ₂ O ₈ RAYRXKOIFAVDJK-UHFFFAOYSA-N	2.9 × 10 ² 1.1 × 10 ² 2.1 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPRNO3CO3H C ₄ H ₇ NO ₆ HDNCPGEGDTKOFQI-UHFFFAOYSA-N	6.2 × 10 ³ 2.2 × 10 ² 5.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NBUTDAOOH C ₄ H ₇ NO ₅ ZIAMBHNGSMXNCM-UHFFFAOYSA-N	2.0 × 10 ³ 1.2 × 10 ³ 6.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUTDBNO3 C ₄ H ₆ N ₂ O ₆ GCQJZAFTGYZGDG-UHFFFAOYSA-N	4.1 3.6 × 10 ¹ 1.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUTDBOOH C ₄ H ₇ NO ₅ SSNXKZNERJCDKO-UHFFFAOYSA-N	2.8 × 10 ³ 4.0 × 10 ³ 5.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC3CO3H C ₄ H ₅ NO ₆ ZXNVGOFZJSFAE-UHFFFAOYSA-N	3.6 × 10 ⁴ 5.0 × 10 ³ 3.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TC4H9NO3 C ₄ H ₉ NO ₃ [926-05-6] AZAKMLHUDVIDFN-UHFFFAOYSA-N	6.2 × 10 ⁻³ 9.1 × 10 ⁻³ 1.0 × 10 ⁻³ 4.9 × 10 ⁻³ 6.2 × 10 ⁻³ 2.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	Q Q Q Q Q Q	80, 238 80, 239 80, 240 242, 243 244 245
MCM:C3ME3PAN C ₅ H ₉ NO ₅ OLNWAQLSTCXURT-UHFFFAOYSA-N	2.8 1.7 1.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3MNO3CO3H C ₅ H ₉ NO ₆ UNTXQXBLSROXLI-UHFFFAOYSA-N	9.3 × 10 ³ 3.2 × 10 ² 2.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3MNO3PAN C ₅ H ₈ N ₂ O ₈ ULZBZSVLLIBTGC-UHFFFAOYSA-N	3.9 × 10 ² 1.6 × 10 ² 1.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C43NO3CO3H C ₅ H ₉ NO ₆ KYFRJEXZVMOAMN-UHFFFAOYSA-N	5.8 × 10 ³ 1.3 × 10 ² 1.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C43NO3PAN C ₅ H ₈ N ₂ O ₈ WPFKHDFVFPXDFZ-UHFFFAOYSA-N	2.2 × 10 ² 6.6 × 10 ¹ 1.3 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4M2NO3OOH C ₅ H ₁₁ NO ₅ BOAAVKBCMOPNIQ-UHFFFAOYSA-N	4.5 × 10 ² 1.6 × 10 ² 5.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4MNO31OOH C ₅ H ₁₁ NO ₅ LRRBWUKXCGVENZ-UHFFFAOYSA-N	6.3 × 10 ² 3.2 × 10 ² 7.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4MNO32OOH C ₅ H ₁₁ NO ₅ HXNZNKRZULBVRO-UHFFFAOYSA-N	6.3 × 10 ² 3.2 × 10 ² 4.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4NO32MOOH C ₅ H ₁₁ NO ₅ HCKTYRRBEFAEAC-UHFFFAOYSA-N	3.9 × 10 ² 1.7 × 10 ² 5.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4NO3CO3H C ₅ H ₉ NO ₆ JPUVYTOGMBABUQ-UHFFFAOYSA-N	8.3 × 10 ³ 3.0 × 10 ² 1.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4NO3M1OOH C ₅ H ₁₁ NO ₅ MWSZSODDMCBKIX-UHFFFAOYSA-N	3.9 × 10 ² 1.8 × 10 ² 3.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4NO3M2OOH C ₅ H ₁₁ NO ₅ QXHHHGYKLMZJBA-UHFFFAOYSA-N	4.5 × 10 ² 1.5 × 10 ² 4.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4NO3PAN C ₅ H ₈ N ₂ O ₈ GGZFCBHNGNBLNW-UHFFFAOYSA-N	3.2 × 10 ² 1.6 × 10 ² 1.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C51NO32OOH C ₅ H ₁₁ NO ₅ YPLQKABNDXJG-UHFFFAOYSA-N	6.3 × 10 ² 3.2 × 10 ² 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C52NO31OOH C ₅ H ₁₁ NO ₅ DCAGTGOPLFTTQ-UHFFFAOYSA-N	6.3 × 10 ² 3.2 × 10 ² 4.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C52NO33OOH C ₅ H ₁₁ NO ₅ FGGADFCNSPWJM-UHFFFAOYSA-N	6.3 × 10 ² 2.4 × 10 ² 4.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C53NO32OOH C ₅ H ₁₁ NO ₅ STNFTA CLRXEYDM-UHFFFAOYSA-N	6.3 × 10 ² 2.6 × 10 ² 2.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN18 C ₅ H ₆ N ₂ O ₈ JYUXMKSMIBDSN-UHFFFAOYSA-N	1.1 × 10 ³ 2.2 × 10 ³ 2.0 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN4 C ₅ H ₉ NO ₅ LGNOWHJLTKBAC-UHFFFAOYSA-N	2.8 1.5 1.3 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN6 C ₅ H ₉ NO ₅ VQRIYOXAZWZCOV-UHFFFAOYSA-N	2.0 1.4 1.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IPEANO3 C ₅ H ₁₁ NO ₃ QSSWLPYLLKHLB-UHFFFAOYSA-N	8.3 × 10 ⁻³ 1.5 × 10 ⁻² 4.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPEBNO3 C ₅ H ₁₁ NO ₃ OTVLXFGCWJFXJU-UHFFFAOYSA-N	8.3 × 10 ⁻³ 1.4 × 10 ⁻² 4.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPECNO3 C ₅ H ₁₁ NO ₃ UENFRVTUGZKXNH-UHFFFAOYSA-N	5.1 × 10 ⁻³ 6.6 × 10 ⁻³ 7.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC4CO3H C ₅ H ₇ NO ₆ SLKHOLIOGBFQB-UHFFFAOYSA-N	2.3 × 10 ⁴ 4.6 × 10 ³ 1.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NEOPNO3 C ₅ H ₁₁ NO ₃ YJGBGWFCQXIM-UHFFFAOYSA-N	5.1 × 10 ⁻³ 1.2 × 10 ⁻² 4.1 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NISOPNO3 C ₅ H ₈ N ₂ O ₆ JGJBVRGABXKDRR-UHFFFAOYSA-N	2.6 2.7 3.0 × 10 ¹ 1.3 × 10 ⁻²	9400	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:NISOPOOH C ₅ H ₉ NO ₅ IRFXVIPRKCCSLU-UHFFFAOYSA-N	9.7 × 10 ² 1.8 × 10 ³ 3.0 × 10 ³ 3.0 × 10 ¹	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:PPEN C ₅ H ₉ NO ₅ UUYNBJNAIGBJAO-UHFFFAOYSA-N	2.8 1.5 2.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C42MNO3OOH C ₆ H ₁₃ NO ₅ KKTQLMUUOWWZBO-UHFFFAOYSA-N	2.4 × 10 ² 4.5 × 10 ¹ 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C62NO33OOH C ₆ H ₁₃ NO ₅ PJRWVMFJYMZPCW-UHFFFAOYSA-N	5.6 × 10 ² 1.5 × 10 ² 4.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C63NO32OOH C ₆ H ₁₃ NO ₅ RLIDOIUHNSZVBK-UHFFFAOYSA-N	5.6 × 10 ² 1.9 × 10 ² 1.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C65NO36OOH C ₆ H ₁₃ NO ₅ ZVRSMGQHQDCSBC-UHFFFAOYSA-N	4.9 × 10 ² 2.2 × 10 ² 2.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C65NO3CO3H C ₆ H ₁₁ NO ₆ RASQUKWKKRVIQJ-UHFFFAOYSA-N	6.5 × 10 ³ 2.2 × 10 ² 1.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C65NO3PAN C ₆ H ₁₀ N ₂ O ₈ PNNYZMYAAWSJH-UHFFFAOYSA-N	3.0 × 10 ² 1.1 × 10 ² 6.5 × 10 ⁻⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C66NO35OOH C ₆ H ₁₃ NO ₅ YPVNGNKLOFDKIF-UHFFFAOYSA-N	4.9 × 10 ² 2.3 × 10 ² 9.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN10 C ₆ H ₁₁ NO ₅ INNSDEOCGQAU-TR-UHFFFAOYSA-N	2.6 1.3 1.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN15 C ₆ H ₁₁ NO ₅ GWYKJYISUPTXQD-UHFFFAOYSA-N	1.6 9.8 × 10 ⁻¹ 1.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN17 C ₆ H ₁₁ NO ₅ CUMLTNLXWSMQLS-UHFFFAOYSA-N	1.6 1.1 1.7 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN18 C ₆ H ₁₁ NO ₅ FPWBUNMBKRQCI-UHFFFAOYSA-N	3.0 1.4 1.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN3 C ₆ H ₁₁ NO ₅ BRVOFEXYZGASHOW-UHFFFAOYSA-N	2.6 1.1 1.5 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEXNO3 C ₆ H ₁₁ NO ₃ HLYOOCIMLHNMGO-UHFFFAOYSA-N	2.0 × 10 ⁻² 6.5 × 10 ⁻² 3.7 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEXBNO3 C ₆ H ₁₃ NO ₃ JLGBQJVVQLNMGV-UHFFFAOYSA-N	3.1 × 10 ⁻⁴ 6.5 × 10 ⁻³ 7.4 × 10 ⁻³ 4.3 × 10 ⁻⁴	6300	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:HEXCNO3 C ₆ H ₁₃ NO ₃ OJOZCOXRANAOPV-UHFFFAOYSA-N	6.5 × 10 ⁻³ 8.1 × 10 ⁻³ 3.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M22C43NO3 C ₆ H ₁₃ NO ₃ YUZOHIKIQPTSGJ-UHFFFAOYSA-N	4.8 × 10 ⁻³ 9.3 × 10 ⁻³ 3.7 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M22C4NO3 C ₆ H ₁₃ NO ₃ JOWPFKXUGRKJFA-UHFFFAOYSA-N	4.6 × 10 ⁻³ 1.0 × 10 ⁻² 5.5 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M23C43NO3 C ₆ H ₁₃ NO ₃ PMABLOPIFVACLQ-UHFFFAOYSA-N	4.8 × 10 ⁻³ 7.4 × 10 ⁻³ 7.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:M23C4NO3 C ₆ H ₁₃ NO ₃ HHRFTVZVEUIWEO-UHFFFAOYSA-N	7.8 × 10 ⁻³ 1.5 × 10 ⁻² 4.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2PEANO3 C ₆ H ₁₃ NO ₃ CETUNBADQVCCRS-UHFFFAOYSA-N	6.5 × 10 ⁻³ 1.1 × 10 ⁻² 3.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2PEBNO3 C ₆ H ₁₃ NO ₃ AYWPQHSaupNICG-UHFFFAOYSA-N	7.8 × 10 ⁻³ 7.8 × 10 ⁻³ 3.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2PECNO3 C ₆ H ₁₃ NO ₃ ZLERWGPawilHHJ-UHFFFAOYSA-N	7.8 × 10 ⁻³ 9.6 × 10 ⁻³ 3.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2PEDNO3 C ₆ H ₁₃ NO ₃ LFIPHSRTIDHJFT-UHFFFAOYSA-N	4.6 × 10 ⁻³ 5.1 × 10 ⁻³ 6.5 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M33C4NO3 C ₆ H ₁₃ NO ₃ DENSRMRCUIZNMK-UHFFFAOYSA-N	4.6 × 10 ⁻³ 9.8 × 10 ⁻³ 3.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M3PEANO3 C ₆ H ₁₃ NO ₃ HRVRJIMBILCGN-UHFFFAOYSA-N	6.5 × 10 ⁻³ 1.3 × 10 ⁻² 4.7 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M3PEBNO3 C ₆ H ₁₃ NO ₃ IEHIEWLLOPHOIZ-UHFFFAOYSA-N	7.8 × 10 ⁻³ 1.1 × 10 ⁻² 4.1 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M3PECNO3 C ₆ H ₁₃ NO ₃ GFKONLNVJRACGN-UHFFFAOYSA-N	4.6 × 10 ⁻³ 5.3 × 10 ⁻³ 6.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PHXN C ₆ H ₁₁ NO ₅ ITHMZXFokWUTQ-UHFFFAOYSA-N	2.2 1.1 1.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEPTNO3 C ₇ H ₁₅ NO ₃ RFSNRWONUSBTJN-UHFFFAOYSA-N	5.4 × 10 ⁻³ 6.3 × 10 ⁻³ 3.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2HEXANO3 C ₇ H ₁₅ NO ₃ YZGBSAOHUZMZSL-UHFFFAOYSA-N	6.2 × 10 ⁻³ 5.9 × 10 ⁻³ 4.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2HEXBNO3 C ₇ H ₁₅ NO ₃ CORAYZMLWQTcoE-UHFFFAOYSA-N	3.7 × 10 ⁻³ 3.9 × 10 ⁻³ 5.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:M3HEXANO3 C ₇ H ₁₅ NO ₃ ZIINVVZOGZDQJ-UHFFFAOYSA-N	6.2 × 10 ⁻³ 6.6 × 10 ⁻³ 3.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M3HEXBNO3 C ₇ H ₁₅ NO ₃ ADYNXMRWYWNIDX-UHFFFAOYSA-N	3.7 × 10 ⁻³ 4.4 × 10 ⁻³ 6.5 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PHPTN C ₇ H ₁₃ NO ₅ XCJVDRQLXVBEC-UHFFFAOYSA-N	1.8 8.9 × 10 ⁻¹ 2.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8BCNO3 C ₈ H ₁₃ NO ₃ OSNOKXIMBITXOJ-UHFFFAOYSA-N	4.0 × 10 ⁻² 3.2 × 10 ⁻² 3.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OCTNO3 C ₈ H ₁₇ NO ₃ KDICWCURMQOQP-UHFFFAOYSA-N	4.8 × 10 ⁻³ 5.0 × 10 ⁻³ 2.6 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NONNO3 C ₉ H ₁₉ NO ₃ YXUXBXICIGKFLH-UHFFFAOYSA-N	3.9 × 10 ⁻³ 3.8 × 10 ⁻³ 2.5 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DECNO3 C ₁₀ H ₂₁ NO ₃ VRGDYCVXNXCQKR-UHFFFAOYSA-N	3.0 × 10 ⁻³ 3.0 × 10 ⁻³ 2.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NAPINAOOH C ₁₀ H ₁₇ NO ₅ IKGBGFRUISEOBM-UHFFFAOYSA-N	1.6 × 10 ³ 2.3 × 10 ² 2.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NAPINBOOH C ₁₀ H ₁₇ NO ₅ RUHGEBIMHPPSGQ-UHFFFAOYSA-N	1.6 × 10 ³ 2.5 × 10 ² 6.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBPINAOOH C ₁₀ H ₁₇ NO ₅ VJCKFKSOBWLFB-UHFFFAOYSA-N	1.3 × 10 ³ 4.4 × 10 ² 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBPINBOOH C ₁₀ H ₁₇ NO ₅ AWECGRRBHMAEGP-UHFFFAOYSA-N	1.3 × 10 ³ 3.8 × 10 ² 7.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC91CO3H C ₁₀ H ₁₅ NO ₆ TWWFSGIBZQJYPL-UHFFFAOYSA-N	1.9 × 10 ⁴ 4.8 × 10 ² 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC91PAN C ₁₀ H ₁₄ N ₂ O ₈ LCMKIEFNSOTVJY-UHFFFAOYSA-N	8.0 × 10 ² 2.6 × 10 ² 9.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NLIMOOH C ₁₀ H ₁₇ NO ₅ HSXYRSLOXSIYGP-UHFFFAOYSA-N	1.4 × 10 ³ 6.9 × 10 ² 5.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:UDECN ₃ C ₁₁ H ₂₃ NO ₃ KGEKWWIIMVPQKA-UHFFFAOYSA-N	2.8 × 10 ⁻³ 2.4 × 10 ⁻³ 2.0 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DDECNO ₃ C ₁₂ H ₂₅ NO ₃ BVAQOKLOUKLOJD-UHFFFAOYSA-N	2.2 × 10 ⁻³ 1.9 × 10 ⁻³ 1.9 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBCOOH C ₁₅ H ₂₅ NO ₅ BEFFZATUSVKAHP-UHFFFAOYSA-N	1.4 × 10 ³ 8.7 × 10 ² 3.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6H5CH2NO ₃ C ₇ H ₇ NO ₃ WOIVNLSVAKYSKX-UHFFFAOYSA-N	4.3 × 10 ⁻¹ 7.1 × 10 ⁻¹ 3.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZN C ₇ H ₅ NO ₅ ONDCXZPWEKXYJE-UHFFFAOYSA-N	1.6 × 10 ² 2.6 × 10 ¹ 4.4 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6H5C2NO ₃ C ₈ H ₉ NO ₃ REJUUAZLLYKBCW-UHFFFAOYSA-N	3.6 × 10 ⁻¹ 5.6 × 10 ⁻¹ 4.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6H5CH2PAN C ₈ H ₇ NO ₅ KKRIGRPRRNIQVL-UHFFFAOYSA-N	1.4 × 10 ² 4.7 × 10 ¹ 1.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYLNO ₃ C ₈ H ₉ NO ₃ OIEIRDPNAPXLCB-UHFFFAOYSA-N	2.5 × 10 ⁻¹ 6.5 × 10 ⁻¹ 3.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYLPAN C ₈ H ₇ NO ₅ HJGURQOGPAEQPE-UHFFFAOYSA-N	8.9 × 10 ¹ 2.3 × 10 ¹ 4.1 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NSTYRENOOH C ₈ H ₉ NO ₅ LKBHTMHNYICQS-UHFFFAOYSA-N	3.0 × 10 ⁴ 1.1 × 10 ⁴ 1.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYLNO ₃ C ₈ H ₉ NO ₃ WKRHODAGVPDBTG-UHFFFAOYSA-N	2.5 × 10 ⁻¹ 7.1 × 10 ⁻¹ 2.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYLPAN C ₈ H ₇ NO ₅ TXXXSKKGTSQWKQ-UHFFFAOYSA-N	8.9 × 10 ¹ 3.1 × 10 ¹ 3.2 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PXYLNO3	2.5×10^{-1}		Wang et al. (2017)	Q	80, 238
C ₈ H ₉ NO ₃	7.8×10^{-1}		Wang et al. (2017)	Q	80, 239
SHZSDLPSACZYMH-UHFFFAOYSA-N	3.6×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:PXYLPAN	8.9×10^1		Wang et al. (2017)	Q	80, 238
C ₈ H ₇ NO ₅	2.6×10^1		Wang et al. (2017)	Q	80, 239
ZGFUWGCXWYZODV-UHFFFAOYSA-N	6.5×10^{-3}		Wang et al. (2017)	Q	80, 240
MCM:ETOLNO3	2.3×10^{-1}		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₁ NO ₃	3.2×10^{-1}		Wang et al. (2017)	Q	80, 239
LYNFROWVHACAMO-UHFFFAOYSA-N	1.9×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:PHC3NO3	3.3×10^{-1}		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₁ NO ₃	2.2×10^{-1}		Wang et al. (2017)	Q	80, 239
IFDAHDBLKMQHMM-UHFFFAOYSA-N	1.8×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:PHIC3NO3	2.2×10^{-1}		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₁ NO ₃	1.5×10^{-1}		Wang et al. (2017)	Q	80, 239
YCCLKZYFPBVLILU-UHFFFAOYSA-N	3.8×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:TM123BNO3	1.6×10^{-1}		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₁ NO ₃	9.8×10^{-1}		Wang et al. (2017)	Q	80, 239
GDXSUVXDQKEMHM-UHFFFAOYSA-N	3.0×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:TM123BPAN	5.9×10^1		Wang et al. (2017)	Q	80, 238
C ₉ H ₉ NO ₅	3.9×10^1		Wang et al. (2017)	Q	80, 239
VMALQUVLPIFIEM-UHFFFAOYSA-N	4.5×10^{-3}		Wang et al. (2017)	Q	80, 240
MCM:TM124BNO3	1.6×10^{-1}		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₁ NO ₃	9.3×10^{-1}		Wang et al. (2017)	Q	80, 239
VLXWVVSZKXVGNM-UHFFFAOYSA-N	3.6×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:TM124BPAN	5.9×10^1		Wang et al. (2017)	Q	80, 238
C ₉ H ₉ NO ₅	3.0×10^1		Wang et al. (2017)	Q	80, 239
SSMPYZHCWJGIJH-UHFFFAOYSA-N	7.4×10^{-3}		Wang et al. (2017)	Q	80, 240
MCM:TMBNO3	1.6×10^{-1}		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₁ NO ₃	5.5×10^{-1}		Wang et al. (2017)	Q	80, 239
CHDZRXQPKVNDRJ-UHFFFAOYSA-N	2.8×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:TMBPAN	5.9×10^1		Wang et al. (2017)	Q	80, 238
C ₉ H ₉ NO ₅	1.9×10^1		Wang et al. (2017)	Q	80, 239
QURBGWBLEPWFEF-UHFFFAOYSA-N	4.0×10^{-3}		Wang et al. (2017)	Q	80, 240
MCM:DM35EBNO3	1.4×10^{-1}		Wang et al. (2017)	Q	80, 238
C ₁₀ H ₁₃ NO ₃	2.4×10^{-1}		Wang et al. (2017)	Q	80, 239
CZPIEIXHQIQGZ-UHFFFAOYSA-N	1.7×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:EMHPAN	4.9×10^1		Wang et al. (2017)	Q	80, 238
C ₁₀ H ₁₁ NO ₅	1.1×10^1		Wang et al. (2017)	Q	80, 239
DPRDWMVUHNTRQI-UHFFFAOYSA-N	3.2×10^{-3}		Wang et al. (2017)	Q	80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DE35TNO3	1.1×10^{-1}		Wang et al. (2017)	Q	80, 238
C ₁₁ H ₁₅ NO ₃	1.5×10^{-1}		Wang et al. (2017)	Q	80, 239
XLLLSPDIGUQFTC-UHFFFAOYSA-N	1.6×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:PHAN	6.2×10^2		Wang et al. (2017)	Q	80, 238
C ₂ H ₃ NO ₆	9.6×10^3		Wang et al. (2017)	Q	80, 239
KMDWHTZYVJXWAH-UHFFFAOYSA-N	6.6×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:A2PAN	7.3×10^5		Wang et al. (2017)	Q	80, 238
C ₃ H ₅ NO ₇	2.3×10^6		Wang et al. (2017)	Q	80, 239
RQFAVCUBLOXKI-UHFFFAOYSA-N	2.2×10^1		Wang et al. (2017)	Q	80, 240
MCM:C3PAN1	1.1×10^4		Wang et al. (2017)	Q	80, 238
C ₃ H ₅ NO ₆	3.2×10^4		Wang et al. (2017)	Q	80, 239
ZDHDBTZUUXEIQG-UHFFFAOYSA-N	6.6×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:HO1C3NO3	2.8×10^1		Wang et al. (2017)	Q	80, 238
C ₃ H ₇ NO ₄	1.2×10^3		Wang et al. (2017)	Q	80, 239
[100502-66-7]	6.3		Wang et al. (2017)	Q	80, 240
PTMLFFXFTRSBJW-UHFFFAOYSA-N	2.0×10^1		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^2		Raventos-Duran et al. (2010)	Q	244
	7.8×10^2		Raventos-Duran et al. (2010)	Q	245
MCM:IPROPOLPAN	5.9×10^2		Wang et al. (2017)	Q	80, 238
C ₃ H ₅ NO ₆	1.1×10^4		Wang et al. (2017)	Q	80, 239
VGQGEUUGHUVAJJ-UHFFFAOYSA-N	2.0×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:BUTDANO3	1.0×10^2		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₄	2.3×10^3		Wang et al. (2017)	Q	80, 239
JVISETCEJQRQM-UHFFFAOYSA-N	3.0×10^1		Wang et al. (2017)	Q	80, 240
MCM:BUTDBNO3	9.8×10^1		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₄	2.5×10^2		Wang et al. (2017)	Q	80, 239
MVWTUBMDIKBQOB-UHFFFAOYSA-N	3.0		Wang et al. (2017)	Q	80, 240
MCM:C4PAN1	8.7×10^3		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₆	5.5×10^4		Wang et al. (2017)	Q	80, 239
ZAYFYZJEFHQRME-UHFFFAOYSA-N	2.1		Wang et al. (2017)	Q	80, 240
MCM:C4PAN2	1.3×10^6		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₇	1.7×10^7		Wang et al. (2017)	Q	80, 239
KFPIYXZEKUAVMP-UHFFFAOYSA-N	1.2×10^2		Wang et al. (2017)	Q	80, 240
MCM:C4PAN3	1.0×10^4		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₆	3.6×10^4		Wang et al. (2017)	Q	80, 239
PIBQEVCOXTXKAE-UHFFFAOYSA-N	4.2×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:C4PAN4	1.0×10^4		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₆	2.0×10^4		Wang et al. (2017)	Q	80, 239
NXHSYZWHYBOEBH-UHFFFAOYSA-N	4.0×10^{-1}		Wang et al. (2017)	Q	80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4PAN5 C ₄ H ₇ NO ₆ BZGCEXLVXRKX-UHFFFAOYSA-N	3.2 × 10 ² 4.1 × 10 ³ 5.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4PAN7 C ₄ H ₅ NO ₆ YKQOPDVAHDODD-UHFFFAOYSA-N	3.6 × 10 ⁴ 1.2 × 10 ⁵ 2.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4PAN8 C ₄ H ₅ NO ₆ QZC DOTFCQHJUGH-UHFFFAOYSA-N	1.5 × 10 ³ 7.1 × 10 ³ 6.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C56NO3 C ₄ H ₉ NO ₅ XYUWBXDOANMXIL-UHFFFAOYSA-N	8.0 × 10 ⁴ 9.1 × 10 ⁵ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HMPAN C ₄ H ₅ NO ₆ XPXMBKPWAOWBP-UHFFFAOYSA-N	2.1 × 10 ⁴ 1.4 × 10 ⁴ 6.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO13C4NO3 C ₄ H ₉ NO ₅ IOYLZWMTXYBAPI-UHFFFAOYSA-N	8.9 × 10 ⁴ 1.0 × 10 ⁶ 3.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C3PAN C ₄ H ₇ NO ₆ JGMDPJZYJFPSOE-UHFFFAOYSA-N	5.1 × 10 ² 6.2 × 10 ³ 9.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IBUTOLBNO3 C ₄ H ₉ NO ₄ ILMPSGIQBJFTRG-UHFFFAOYSA-N	2.2 × 10 ¹ 1.0 × 10 ² 6.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IBUTOLCNO3 C ₄ H ₉ NO ₄ OARBGYKXUANYLR-UHFFFAOYSA-N	2.6 × 10 ¹ 6.9 × 10 ² 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MACRNBPAN C ₄ H ₆ N ₂ O ₉ HHPQSZXUAZGAQ-UHFFFAOYSA-N	5.0 × 10 ⁴ 7.6 × 10 ⁵ 1.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MACRNCO3H C ₄ H ₇ NO ₇ VCAMMMQHKHRNFT-UHFFFAOYSA-N	2.4 × 10 ⁷ 2.3 × 10 ⁶ 1.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MACRNPAN C ₄ H ₆ N ₂ O ₉ YVNHVFNURNFQJQM-UHFFFAOYSA-N	9.8 × 10 ⁵ 2.8 × 10 ⁵ 1.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUTDAOH C ₄ H ₇ NO ₄ ZANUSWCYRLKDN-UHFFFAOYSA-N	9.8 × 10 ¹ 2.9 × 10 ² 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TBTOLNO3	2.2×10^1		Wang et al. (2017)	Q	80, 238
C ₄ H ₉ NO ₄	1.4×10^2		Wang et al. (2017)	Q	80, 239
SPXXYWSDFUWLEP-UHFFFAOYSA-N	9.8×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:C3M3OH2PAN	4.8×10^2		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₆	4.9×10^3		Wang et al. (2017)	Q	80, 239
NSGPYXAFGPXNMV-UHFFFAOYSA-N	2.8×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:C46PAN	1.6×10^4		Wang et al. (2017)	Q	80, 238
C ₅ H ₇ NO ₆	7.4×10^4		Wang et al. (2017)	Q	80, 239
WDMYRNZGJSFESH-UHFFFAOYSA-N	2.0		Wang et al. (2017)	Q	80, 240
MCM:C4OH2CPAN	3.7×10^5		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₇	3.5×10^6		Wang et al. (2017)	Q	80, 239
INCMEOVDRBCULR-UHFFFAOYSA-N	1.1		Wang et al. (2017)	Q	80, 240
MCM:C4OHPAN	4.3×10^2		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₆	3.7×10^3		Wang et al. (2017)	Q	80, 239
GAAOIPAQRGTBI-UHFFFAOYSA-N	5.3×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:C524NO3	1.7×10^5		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₅	2.6×10^6		Wang et al. (2017)	Q	80, 239
IRMGDWDXIVCKPE-UHFFFAOYSA-N	2.2×10^3		Wang et al. (2017)	Q	80, 240
MCM:C52NO3	2.0×10^1		Wang et al. (2017)	Q	80, 238
C ₅ H ₁₁ NO ₄	5.0×10^2		Wang et al. (2017)	Q	80, 239
NBCYUKLMSBOGIC-UHFFFAOYSA-N	6.5		Wang et al. (2017)	Q	80, 240
MCM:C54NO3	4.9×10^4		Wang et al. (2017)	Q	80, 238
C ₅ H ₁₁ NO ₅	3.8×10^5		Wang et al. (2017)	Q	80, 239
OXSZOTYJVSXIT-UHFFFAOYSA-N	9.1×10^2		Wang et al. (2017)	Q	80, 240
MCM:C57NO3CO3H	2.4×10^{10}		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₈	1.4×10^9		Wang et al. (2017)	Q	80, 239
BPRAPKBGVRGZEK-UHFFFAOYSA-N	3.6×10^3		Wang et al. (2017)	Q	80, 240
MCM:C57NO3PAN	9.8×10^8		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ N ₂ O ₁₀	2.7×10^8		Wang et al. (2017)	Q	80, 239
QHZGCLHPLOENFL-UHFFFAOYSA-N	2.5×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:C58NO3CO3H	3.5×10^9		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₈	5.8×10^7		Wang et al. (2017)	Q	80, 239
NFQMUFQLLKQQS-UHFFFAOYSA-N	5.1×10^1		Wang et al. (2017)	Q	80, 240
MCM:C58NO3PAN	1.4×10^8		Wang et al. (2017)	Q	80, 238
C ₅ H ₈ N ₂ O ₁₀	4.2×10^8		Wang et al. (2017)	Q	80, 239
VIMTZSSJOGPGII-UHFFFAOYSA-N	8.5×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:C5PAN10	1.2×10^6		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₇	2.5×10^7		Wang et al. (2017)	Q	80, 239
YRCMXGZRWLAVBH-UHFFFAOYSA-N	9.6×10^1		Wang et al. (2017)	Q	80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C5PAN11 C ₅ H ₉ NO ₆ ISSHIIFUOEHLT-UHFFFAOYSA-N	5.8 × 10 ³ 2.4 × 10 ⁴ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN12 C ₅ H ₉ NO ₇ VRGURBHINCFLEI-UHFFFAOYSA-N	7.3 × 10 ⁵ 1.0 × 10 ⁷ 9.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN13 C ₅ H ₉ NO ₇ GDYHQRWKNLRRCBR-UHFFFAOYSA-N	1.2 × 10 ⁶ 2.0 × 10 ⁷ 5.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN14 C ₅ H ₉ NO ₆ KAYGTWBSLGDXXRV-UHFFFAOYSA-N	9.3 × 10 ³ 2.2 × 10 ⁴ 5.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN15 C ₅ H ₉ NO ₆ DDVUSZKFLFMJLG-UHFFFAOYSA-N	5.8 × 10 ³ 9.3 × 10 ³ 5.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN17 C ₅ H ₇ NO ₆ WOHMTHRFBBCPEN-UHFFFAOYSA-N	2.3 × 10 ⁴ 1.3 × 10 ⁵ 2.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN19 C ₅ H ₇ NO ₆ SXXBKHKGTQGHOF-UHFFFAOYSA-N	2.3 × 10 ⁴ 1.0 × 10 ⁵ 1.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN1 C ₅ H ₉ NO ₆ BXAPPDLQCWAVAO-UHFFFAOYSA-N	8.3 × 10 ³ 4.0 × 10 ⁴ 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN3 C ₅ H ₉ NO ₆ GANOVMBQBFKDCJS-UHFFFAOYSA-N	8.3 × 10 ³ 3.3 × 10 ⁴ 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN5 C ₅ H ₉ NO ₆ SNADUXVVPGYKTN-UHFFFAOYSA-N	8.3 × 10 ³ 3.0 × 10 ⁴ 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN8 C ₅ H ₉ NO ₆ AVADEHRLLOLNNT-UHFFFAOYSA-N	8.3 × 10 ³ 1.9 × 10 ⁴ 7.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M3C4NO3 C ₅ H ₁₁ NO ₄ KRCHLCLXZFFPMO-UHFFFAOYSA-N	2.5 × 10 ¹ 5.0 × 10 ² 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM22C3NO3 C ₅ H ₁₁ NO ₄ GJZIQWDDCYOUOR-UHFFFAOYSA-N	1.4 × 10 ¹ 3.2 × 10 ² 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HM2C43NO3 C ₅ H ₁₁ NO ₄ OLXHFMQLUGEEM-UHFFFAOYSA-N	2.5 × 10 ¹ 4.1 × 10 ² 2.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM33C3NO3 C ₅ H ₁₁ NO ₄ LCUGTHWCLWAZIN-UHFFFAOYSA-N	1.4 × 10 ¹ 2.0 × 10 ² 5.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO13C5NO3 C ₅ H ₁₁ NO ₅ HRXGEJHIRPMYKD-UHFFFAOYSA-N	8.3 × 10 ⁴ 5.4 × 10 ⁵ 1.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO24C5NO3 C ₅ H ₁₁ NO ₅ GDKLMXJUXHUPHP-UHFFFAOYSA-N	8.3 × 10 ⁴ 5.8 × 10 ⁵ 1.4 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2C54NO3 C ₅ H ₁₁ NO ₄ BDOVYOMPHMUDCA-UHFFFAOYSA-N	2.5 × 10 ¹ 2.8 × 10 ² 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2M2C4NO3 C ₅ H ₁₁ NO ₄ JLEBTGVTEJACMC-UHFFFAOYSA-N	1.4 × 10 ¹ 3.6 × 10 ² 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C5NO3 C ₅ H ₁₁ NO ₄ VSJMKXXNGJNYTF-UHFFFAOYSA-N	2.0 × 10 ¹ 3.8 × 10 ² 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INAHCO3H C ₅ H ₉ NO ₈ NANYPKIUOGNIFQ-UHFFFAOYSA-N	1.2 × 10 ⁹ 4.9 × 10 ⁷ 5.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INAHPAN C ₅ H ₈ N ₂ O ₁₀ ISRNXRSYOJKFEQ-UHFFFAOYSA-N	5.0 × 10 ⁷ 6.8 × 10 ⁸ 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INAHPCO3H C ₅ H ₉ NO ₉ ZYWYMWCOZANRV-UHFFFAOYSA-N	1.8 × 10 ¹² 2.5 × 10 ⁹ 3.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INAHPPAN C ₅ H ₈ N ₂ O ₁₁ ZXVKOORKVQYPPA-UHFFFAOYSA-N	8.0 × 10 ¹⁰ 1.1 × 10 ⁹ 3.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INANCO3H C ₅ H ₈ N ₂ O ₁₀ HKZKRKUNOXITIG-UHFFFAOYSA-N	2.7 × 10 ⁹ 2.6 × 10 ⁸ 3.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INANO3 C ₅ H ₁₀ N ₂ O ₈ VVVQXVVEBOASSQ-UHFFFAOYSA-N	7.8 × 10 ⁶ 2.6 × 10 ⁷ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:INANPAN C ₅ H ₇ N ₃ O ₁₂ PTXQCTHWIXKTGJ-UHFFFAOYSA-N	1.2 × 10 ⁸ 3.7 × 10 ⁷ 4.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INAOH C ₅ H ₁₁ NO ₆ KOIOFJRFFFLZDV-UHFFFAOYSA-N	4.0 × 10 ⁷ 2.9 × 10 ⁸ 3.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INAOOH C ₅ H ₁₁ NO ₇ JIJPRURLLPNXAY-UHFFFAOYSA-N	5.3 × 10 ⁹ 4.7 × 10 ⁸ 2.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1HPCO3H C ₅ H ₉ NO ₉ UQVCIXBCKWUTPD-UHFFFAOYSA-N	1.5 × 10 ¹² 1.3 × 10 ⁹ 2.2 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1HPPAN C ₅ H ₈ N ₂ O ₁₁ MXDOILKWWFGWCS-UHFFFAOYSA-N	6.9 × 10 ¹⁰ 5.3 × 10 ⁸ 1.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1NACO3H C ₅ H ₈ N ₂ O ₁₀ IWCHPIGOQCZCCT-UHFFFAOYSA-N	2.6 × 10 ⁹ 2.5 × 10 ⁸ 8.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1NAPAN C ₅ H ₇ N ₃ O ₁₂ NYNQOGZUUKXJZD-UHFFFAOYSA-N	1.0 × 10 ⁸ 7.1 × 10 ⁷ 2.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1NBCO3H C ₅ H ₈ N ₂ O ₁₀ KPBUCMMBNBINOH-UHFFFAOYSA-N	2.6 × 10 ⁹ 2.0 × 10 ⁸ 3.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1NBPAN C ₅ H ₇ N ₃ O ₁₂ JLOMTJWSNAHKLK-UHFFFAOYSA-N	1.0 × 10 ⁸ 5.8 × 10 ⁷ 4.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1NO3 C ₅ H ₁₀ N ₂ O ₈ JJLGQNDHJZYHP-UHFFFAOYSA-N	7.8 × 10 ⁶ 1.4 × 10 ⁷ 8.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1OH C ₅ H ₁₁ NO ₆ CMMIHJKAMSCCNX-UHFFFAOYSA-N	6.9 × 10 ⁷ 1.7 × 10 ⁸ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1OOH C ₅ H ₁₁ NO ₇ QLIFJAFKYUVUMD-UHFFFAOYSA-N	5.3 × 10 ⁹ 1.1 × 10 ⁸ 1.9 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB2OOH C ₅ H ₁₁ NO ₇ KNHLEPZPJYMKZ-UHFFFAOYSA-N	5.3 × 10 ⁹ 5.6 × 10 ⁸ 4.7 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:INCNC03H C ₅ H ₈ N ₂ O ₁₀ OBBLXUYPBVASEH-UHFFFAOYSA-N	2.7 × 10 ⁹ 3.0 × 10 ⁸ 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INCNO3 C ₅ H ₁₀ N ₂ O ₈ YANCNBBJURWKL-UHFFFAOYSA-N	7.8 × 10 ⁶ 2.7 × 10 ⁷ 2.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INCNPAN C ₅ H ₇ N ₃ O ₁₂ MINPDRSMAYIHBB-UHFFFAOYSA-N	1.2 × 10 ⁸ 5.4 × 10 ⁷ 2.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INCOH C ₅ H ₁₁ NO ₆ CLYWBEAWDVTVRBE-UHFFFAOYSA-N	4.0 × 10 ⁷ 2.8 × 10 ⁸ 4.4 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INCOOH C ₅ H ₁₁ NO ₇ LZOWVVNBCGLMRZ-UHFFFAOYSA-N	5.3 × 10 ⁹ 6.9 × 10 ⁸ 2.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INDHCO3H C ₅ H ₉ NO ₈ QUYOEJZVAFIYRP-UHFFFAOYSA-N	3.5 × 10 ⁹ 5.3 × 10 ⁷ 5.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INDHPAN C ₅ H ₈ N ₂ O ₁₀ WUJYJPIJVADQSM-UHFFFAOYSA-N	1.4 × 10 ⁸ 6.3 × 10 ⁸ 3.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INDHPCO3H C ₅ H ₉ NO ₉ XHWXDLVQLOECHL-UHFFFAOYSA-N	1.5 × 10 ¹² 8.9 × 10 ⁸ 6.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INDHPPAN C ₅ H ₈ N ₂ O ₁₁ MNXXVJBKQIAYCJ-UHFFFAOYSA-N	6.9 × 10 ¹⁰ 4.4 × 10 ⁸ 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INDOH C ₅ H ₁₁ NO ₆ HMAKIHHEIANEM-UHFFFAOYSA-N	6.9 × 10 ⁷ 1.7 × 10 ⁸ 3.7 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INDOOH C ₅ H ₁₁ NO ₇ MAYHMSJZSHQSOH-UHFFFAOYSA-N	5.3 × 10 ⁹ 1.1 × 10 ⁸ 7.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ISOPANO3 C ₅ H ₉ NO ₄ ISDFXKLTMDWJL-UHFFFAOYSA-N	6.0 × 10 ¹ 1.9 × 10 ³ 1.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ISOPBNO3 C ₅ H ₉ NO ₄ CIXVZPWFWFMUOH-UHFFFAOYSA-N	5.6 × 10 ¹ 1.1 × 10 ² 3.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ISOPCNO3 C ₅ H ₉ NO ₄ IDJHVSQIJTEQU-UHFFFAOYSA-N	6.0 × 10 ¹ 1.9 × 10 ³ 2.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ISOPDNO3 C ₅ H ₉ NO ₄ PYTOMGVARIWPAT-UHFFFAOYSA-N	5.9 × 10 ¹ 1.8 × 10 ² 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2BU2OLNO3 C ₅ H ₁₁ NO ₄ AGMVBVSNQJHQAX-UHFFFAOYSA-N	2.0 × 10 ¹ 9.1 × 10 ¹ 5.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2BUOL2NO3 C ₅ H ₁₁ NO ₄ RQINUHXDGZGUX-UHFFFAOYSA-N	1.7 × 10 ¹ 7.4 × 10 ¹ 5.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M3BU2OLNO3 C ₅ H ₁₁ NO ₄ HJMHUJWXCZNPJL-UHFFFAOYSA-N	3.4 × 10 ¹ 1.4 × 10 ² 3.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MBOANO3 C ₅ H ₁₁ NO ₅ SMFXIBRHTKUPLI-UHFFFAOYSA-N	6.8 × 10 ⁴ 1.6 × 10 ⁵ 5.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MBOBNO3 C ₅ H ₁₁ NO ₅ DYXSFFPMZQUFC-UHFFFAOYSA-N	2.1 × 10 ⁴ 1.6 × 10 ⁵ 4.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ME2BUOLNO3 C ₅ H ₁₁ NO ₄ SBGDAJKUHMJEMT-UHFFFAOYSA-N	2.0 × 10 ¹ 8.1 × 10 ¹ 4.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ME3BUOLNO3 C ₅ H ₁₁ NO ₄ YWTWLHUMBHVJJS-UHFFFAOYSA-N	3.4 × 10 ¹ 1.4 × 10 ² 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC4OHCO3H C ₅ H ₉ NO ₇ PAYOKBFCVFNAB-UHFFFAOYSA-N	2.2 × 10 ⁷ 1.6 × 10 ⁶ 4.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC4OHCPAN C ₅ H ₈ N ₂ O ₉ JNBJPXCXYUJVV-UHFFFAOYSA-N	9.1 × 10 ⁵ 4.2 × 10 ⁵ 2.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC524NO3 C ₅ H ₁₀ N ₂ O ₉ NSZZUBPWOYNZJW-UHFFFAOYSA-N	2.7 × 10 ¹⁰ 1.6 × 10 ¹⁰ 1.0 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC524OH C ₅ H ₁₁ NO ₇ ZZGZKDXCMVGDGSK-UHFFFAOYSA-N	1.1 × 10 ¹¹ 1.4 × 10 ¹¹ 5.4 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NC524OOH C ₅ H ₁₁ NO ₈ IVLBZHUBMDVGP-UHFFFAOYSA-N	1.8 × 10 ¹³ 1.7 × 10 ¹¹ 9.3 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMBOAOOH C ₅ H ₁₁ NO ₆ JWWWMAKNKCQEPZ-UHFFFAOYSA-N	1.5 × 10 ⁶ 9.8 × 10 ⁴ 1.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMBOBOOH C ₅ H ₁₁ NO ₆ ZVOCBPRLBFFNTM-UHFFFAOYSA-N	1.5 × 10 ⁶ 4.3 × 10 ⁴ 3.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PE1ENEANO3 C ₅ H ₁₁ NO ₄ VVLSYMLJBKJHQI-UHFFFAOYSA-N	2.8 × 10 ¹ 1.1 × 10 ² 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PE1ENEBNO3 C ₅ H ₁₁ NO ₄ ZAYLQHAUCSLXCO-UHFFFAOYSA-N	2.8 × 10 ¹ 1.3 × 10 ² 6.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PE2ENEANO3 C ₅ H ₁₁ NO ₄ SNSYWPGYFVSWQC-UHFFFAOYSA-N	3.4 × 10 ¹ 1.2 × 10 ² 6.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PE2ENEBNO3 C ₅ H ₁₁ NO ₄ FSHUAFNCTFMDNJ-UHFFFAOYSA-N	3.4 × 10 ¹ 1.1 × 10 ² 2.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PROL11MNO3 C ₅ H ₁₁ NO ₄ XLOGQOLFBMMDEL-UHFFFAOYSA-N	1.7 × 10 ¹ 8.5 × 10 ¹ 5.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PROL1MPAN C ₅ H ₉ NO ₆ KGIFHBAEXLJKCU-UHFFFAOYSA-N	3.0 × 10 ² 2.5 × 10 ³ 1.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZBIPERNO3 C ₆ H ₇ NO ₆ RBJPNJQUNYROJW-UHFFFAOYSA-N	1.0 × 10 ⁶ 8.7 × 10 ⁴ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4ME2OHNO3 C ₆ H ₁₃ NO ₄ KWGTWPROGIVFDL-UHFFFAOYSA-N	1.1 × 10 ¹ 5.1 × 10 ¹ 1.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C518PAN C ₆ H ₉ NO ₆ SMGAVNKPBYPONP-UHFFFAOYSA-N	1.5 × 10 ⁴ 1.4 × 10 ⁴ 4.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C622NO3 C ₆ H ₁₁ NO ₄ UCAFMJJTBHTENA-UHFFFAOYSA-N	3.5 × 10 ¹ 4.0 × 10 ¹ 6.6 × 10 ² 2.0	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C624NO3 C ₆ H ₁₁ NO ₄ NPRBCQJDIIBUMY-UHFFFAOYSA-N	4.0 × 10 ¹ 3.8 × 10 ² 5.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C64OH5NO3 C ₆ H ₁₃ NO ₄ SZVWRLIYDKPIRS-UHFFFAOYSA-N	2.7 × 10 ¹ 7.8 × 10 ¹ 2.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C65OH4NO3 C ₆ H ₁₃ NO ₄ ZZPOFDLVCBSRPC-UHFFFAOYSA-N	2.7 × 10 ¹ 8.7 × 10 ¹ 5.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C66NO35OH C ₆ H ₁₃ NO ₄ FGVUHVRIXFWTDQ-UHFFFAOYSA-N	2.3 × 10 ¹ 8.9 × 10 ¹ 5.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C60H5NO3 C ₆ H ₁₃ NO ₄ WNZDORMXFCFFY-UHFFFAOYSA-N	2.3 × 10 ¹ 8.1 × 10 ¹ 8.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN11 C ₆ H ₁₁ NO ₆ MMZOJEONIKVQSZ-UHFFFAOYSA-N	7.8 × 10 ³ 2.8 × 10 ⁴ 6.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN13 C ₆ H ₁₁ NO ₆ UVFJOYDNGFNBNV-UHFFFAOYSA-N	4.5 × 10 ³ 1.8 × 10 ⁴ 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN14 C ₆ H ₁₁ NO ₆ OFISHWPBQMHPB-UHFFFAOYSA-N	4.5 × 10 ³ 1.9 × 10 ⁴ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN19 C ₆ H ₁₁ NO ₆ ZTVAXWHNQKLGFW-UHFFFAOYSA-N	7.8 × 10 ³ 2.6 × 10 ⁴ 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN1 C ₆ H ₁₁ NO ₆ INIWXNWKFGUMQJ-UHFFFAOYSA-N	6.5 × 10 ³ 2.6 × 10 ⁴ 6.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN20 C ₆ H ₁₁ NO ₆ HBAXDJNNSYEITK-UHFFFAOYSA-N	7.8 × 10 ³ 1.5 × 10 ⁴ 4.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN21 C ₆ H ₁₁ NO ₆ PXGXPDBWDXFTJ-UHFFFAOYSA-N	4.5 × 10 ³ 1.6 × 10 ⁴ 3.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN22 C ₆ H ₁₁ NO ₆ YIFZDOMLXOKIHL-UHFFFAOYSA-N	6.5 × 10 ³ 1.3 × 10 ⁴ 1.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6PAN23 C ₆ H ₁₁ NO ₆ OODNPGDDVDMKSB-UHFFFAOYSA-N	3.3 × 10 ² 2.6 × 10 ³ 4.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN4 C ₆ H ₁₁ NO ₆ ZWWUNLHZACGCEV-UHFFFAOYSA-N	7.8 × 10 ³ 2.1 × 10 ⁴ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN8 C ₆ H ₁₁ NO ₆ UOLRWSMDFSCHJH-UHFFFAOYSA-N	4.5 × 10 ³ 2.8 × 10 ⁴ 7.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CYHXOLANO3 C ₆ H ₁₁ NO ₄ GVSCAKVHXWAQQJ-UHFFFAOYSA-N	8.5 × 10 ¹ 4.6 × 10 ² 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H13M3C5NO3 C ₆ H ₁₃ NO ₅ ZRQJKBICSYYJDC-UHFFFAOYSA-N	4.6 × 10 ⁴ 2.8 × 10 ⁵ 4.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H1MC5NO3 C ₆ H ₁₃ NO ₄ YQESDLQNDPCVPT-UHFFFAOYSA-N	1.9 × 10 ¹ 3.6 × 10 ² 8.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2MC5NO3 C ₆ H ₁₃ NO ₄ OQOPDPWKHFKGPO-UHFFFAOYSA-N	1.9 × 10 ¹ 4.3 × 10 ² 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3M3C5NO3 C ₆ H ₁₃ NO ₄ KFPWVQORUDKTSF-UHFFFAOYSA-N	1.2 × 10 ¹ 2.5 × 10 ² 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM22C4NO3 C ₆ H ₁₃ NO ₄ VALJBIPPZHGXME-UHFFFAOYSA-N	1.2 × 10 ¹ 3.0 × 10 ² 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM23C4NO3 C ₆ H ₁₃ NO ₄ VYFSYIPQAVXJDI-UHFFFAOYSA-N	1.9 × 10 ¹ 4.8 × 10 ² 4.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HM33C4NO3 C ₆ H ₁₃ NO ₄ HUEIARDLQBFSAX-UHFFFAOYSA-N	1.2 × 10 ¹ 3.2 × 10 ² 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO1C6NO3 C ₆ H ₁₃ NO ₄ ITCMBKDCMKPMFX-UHFFFAOYSA-N	1.9 × 10 ¹ 2.5 × 10 ² 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO1MC5NO3 C ₆ H ₁₃ NO ₄ HKEZUADWXQLOIL-UHFFFAOYSA-N	1.9 × 10 ¹ 2.4 × 10 ² 4.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO2C6NO3 C ₆ H ₁₃ NO ₄ PAWWQEMXBSLVJC-UHFFFAOYSA-N	1.6 × 10 ¹ 1.9 × 10 ¹ 2.0 × 10 ²	10000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017)	Q Q Q	437 80, 238 80, 239
MCM:HO2M2C5NO3 C ₆ H ₁₃ NO ₄ VYPLOHRVLBPDEY-UHFFFAOYSA-N	1.2 × 10 ¹ 2.9 × 10 ² 5.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO2MC5NO3 C ₆ H ₁₃ NO ₄ HYCOTEZKEHIINQ-UHFFFAOYSA-N	1.9 × 10 ¹ 3.1 × 10 ² 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C6NO3 C ₆ H ₁₃ NO ₄ DLCRGHMYOYQLW-UHFFFAOYSA-N	1.9 × 10 ¹ 3.0 × 10 ² 2.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDNPHENOOH C ₆ H ₅ N ₃ O ₁₂ CXGWHQULUCBXTG-UHFFFAOYSA-N	1.2 × 10 ¹⁵ 3.2 × 10 ⁹ 1.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NNCATECOOH C ₆ H ₆ N ₂ O ₁₁ SEZKEDQZGXKDIE-UHFFFAOYSA-N	1.4 × 10 ¹⁶ 5.9 × 10 ⁸ 1.0 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPHENOH C ₆ H ₇ NO ₇ RMHIEAGXGVAIOV-UHFFFAOYSA-N	1.8 × 10 ⁹ 8.5 × 10 ⁶ 4.8 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPHENOOH C ₆ H ₇ NO ₈ AMKSGTJAMDYUMG-UHFFFAOYSA-N	4.7 × 10 ¹⁰ 5.8 × 10 ⁶ 4.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C622PAN C ₇ H ₁₁ NO ₆ YZCFVDKMDQZEJM-UHFFFAOYSA-N	1.3 × 10 ⁴ 2.8 × 10 ⁴ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C624PAN C ₇ H ₁₁ NO ₆ GVGFFJILZZBAQC-UHFFFAOYSA-N	1.3 × 10 ⁴ 2.0 × 10 ⁴ 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C720NO3 C ₇ H ₁₁ NO ₄ VRUSDNGIDALYSE-UHFFFAOYSA-N	1.6 × 10 ² 1.7 × 10 ³ 3.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7PAN1 C ₇ H ₁₃ NO ₆ HWQKKNUBUUPBAM-UHFFFAOYSA-N	3.7 × 10 ³ 2.1 × 10 ⁴ 2.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7PAN2 C ₇ H ₁₃ NO ₆ LEPHBBVBSNQAQS-UHFFFAOYSA-N	6.0 × 10 ³ 9.8 × 10 ³ 6.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:H2M2C65NO3 C ₇ H ₁₅ NO ₄ CAEJQFHLOCBFOE-UHFFFAOYSA-N	1.0×10 ¹ 1.4×10 ² 3.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M4C65NO3 C ₇ H ₁₅ NO ₄ GNQNFQXMHRYMA-UHFFFAOYSA-N	1.8×10 ¹ 2.1×10 ² 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2M5C65NO3 C ₇ H ₁₅ NO ₄ JWGQNCMAKPVWAL-UHFFFAOYSA-N	1.0×10 ¹ 9.6×10 ¹ 1.6×10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3M3C6NO3 C ₇ H ₁₅ NO ₄ HWCRTHIHVAVLJX-UHFFFAOYSA-N	1.0×10 ¹ 2.3×10 ² 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C76NO3 C ₇ H ₁₅ NO ₄ FLDFLEPRHCTYNR-UHFFFAOYSA-N	1.7×10 ¹ 1.5×10 ² 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MNNCATCOOH C ₇ H ₈ N ₂ O ₁₁ QARZHCGBSBCBWKI-UHFFFAOYSA-N	1.0×10 ¹⁶ 5.5×10 ⁹ 1.2×10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NCRESOH C ₇ H ₉ NO ₇ DNQMNVMUZARJRH-UHFFFAOYSA-N	9.8×10 ⁸ 3.4×10 ⁶ 7.3×10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NCRESOOH C ₇ H ₉ NO ₈ CBYLLFTZDVJCIH-UHFFFAOYSA-N	2.6×10 ¹⁰ 2.1×10 ⁶ 6.9×10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDNCRESOOH C ₇ H ₇ N ₃ O ₁₂ LRLYMWFODHJSH-UHFFFAOYSA-N	7.1×10 ¹⁴ 1.4×10 ⁹ 1.3×10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLBIPERNO3 C ₇ H ₉ NO ₆ BBVQCFWACDVWPL-UHFFFAOYSA-N	5.8×10 ⁵ 2.5×10 ⁴ 4.9×10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8PAN1 C ₈ H ₁₅ NO ₆ JRARROZAJMGAPP-UHFFFAOYSA-N	4.7×10 ³ 8.0×10 ³ 7.3×10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZBPERNO3 C ₈ H ₁₁ NO ₆ GVVNXZZYBMLIBS-UHFFFAOYSA-N	5.4×10 ⁵ 1.6×10 ⁴ 1.9×10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ENNCATCOOH C ₈ H ₁₀ N ₂ O ₁₁ SUCBZAKUUVBJMN-UHFFFAOYSA-N	8.7×10 ¹⁵ 3.2×10 ⁹ 5.8×10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HO3C86NO3 C ₈ H ₁₇ NO ₄ WNECKFLKAYSMQF-UHFFFAOYSA-N	1.4 × 10 ¹ 1.2 × 10 ² 1.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXNNCATOOH C ₈ H ₁₀ N ₂ O ₁₁ SNJAPGUPFXVMJK-UHFFFAOYSA-N	5.4 × 10 ¹⁵ 2.0 × 10 ⁹ 4.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXBYBIPENO3 C ₈ H ₁₁ NO ₆ QFCKPTYGEYQVET-UHFFFAOYSA-N	3.3 × 10 ⁵ 8.9 × 10 ³ 1.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDNEBZLOOH C ₈ H ₉ N ₃ O ₁₂ XZASAIPCUAIVQG-UHFFFAOYSA-N	6.3 × 10 ¹⁴ 8.5 × 10 ⁸ 4.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDNMXYLOOH C ₈ H ₉ N ₃ O ₁₂ AAXPRTISYYDKLT-UHFFFAOYSA-N	4.6 × 10 ¹⁴ 8.0 × 10 ⁹ 1.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDNOXYLOOH C ₈ H ₉ N ₃ O ₁₂ SEMBUWBKSEFTL-UHFFFAOYSA-N	8.5 × 10 ¹⁴ 2.3 × 10 ⁹ 9.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDNPXYLOOH C ₈ H ₉ N ₃ O ₁₂ YXONGYHUJBRFJO-UHFFFAOYSA-N	4.6 × 10 ¹⁴ 1.2 × 10 ⁹ 4.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NEBNZOLOH C ₈ H ₁₁ NO ₇ GKEIZOZEJLMBMT-UHFFFAOYSA-N	7.8 × 10 ⁸ 2.1 × 10 ⁶ 2.3 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NEBNZOLOOH C ₈ H ₁₁ NO ₈ DZFBJORWJYJOSR-UHFFFAOYSA-N	2.0 × 10 ¹⁰ 1.3 × 10 ⁶ 3.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMXYOLOH C ₈ H ₁₁ NO ₇ SFEIDLQIDXPNL-UHFFFAOYSA-N	5.4 × 10 ⁸ 1.4 × 10 ⁶ 3.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMXYOLOOH C ₈ H ₁₁ NO ₈ ZTRVHLWFIBLUPT-UHFFFAOYSA-N	1.4 × 10 ¹⁰ 8.1 × 10 ⁵ 6.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOXYOLOH C ₈ H ₁₁ NO ₇ UBRWKHDWLQNZCI-UHFFFAOYSA-N	6.6 × 10 ⁸ 2.3 × 10 ⁶ 1.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOXYOLOOH C ₈ H ₁₁ NO ₈ UHJNRWXMKFNWGO-UHFFFAOYSA-N	1.7 × 10 ¹⁰ 1.5 × 10 ⁶ 2.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NPXYOLOH <chem>C8H11NO7</chem>	6.6×10^8		Wang et al. (2017)	Q	80, 238
DMOUSJNYQFTOEV-UHFFFAOYSA-N	3.0×10^6		Wang et al. (2017)	Q	80, 239
	2.6×10^4		Wang et al. (2017)	Q	80, 240
MCM:NPXYOLOOH <chem>C8H11NO8</chem>	1.7×10^{10}		Wang et al. (2017)	Q	80, 238
XNVGITFEYRRJJBZ-UHFFFAOYSA-N	1.8×10^6		Wang et al. (2017)	Q	80, 239
	3.0×10^4		Wang et al. (2017)	Q	80, 240
MCM:OXNNCATOOH <chem>C8H10N2O11</chem>	1.0×10^{16}		Wang et al. (2017)	Q	80, 238
GYUDSTHOULZHUI-UHFFFAOYSA-N	3.5×10^8		Wang et al. (2017)	Q	80, 239
	3.2×10^4		Wang et al. (2017)	Q	80, 240
MCM:OXYBIPENO3 <chem>C8H11NO6</chem>	3.3×10^5		Wang et al. (2017)	Q	80, 238
QQSYVIZUYAYBZ-UHFFFAOYSA-N	9.1×10^3		Wang et al. (2017)	Q	80, 239
	2.0×10^4		Wang et al. (2017)	Q	80, 240
MCM:PXNNCATOOH <chem>C8H10N2O11</chem>	5.4×10^{15}		Wang et al. (2017)	Q	80, 238
PMLQPKQQVRFHBT-UHFFFAOYSA-N	2.0×10^8		Wang et al. (2017)	Q	80, 239
	4.5×10^4		Wang et al. (2017)	Q	80, 240
MCM:PXBYBIPENO3 <chem>C8H11NO6</chem>	3.3×10^5		Wang et al. (2017)	Q	80, 238
DHJHBQWQGWNRXCX-UHFFFAOYSA-N	9.3×10^3		Wang et al. (2017)	Q	80, 239
	2.9×10^2		Wang et al. (2017)	Q	80, 240
MCM:C9PAN1 <chem>C9H17NO6</chem>	3.7×10^3		Wang et al. (2017)	Q	80, 238
XXDOIRAKHRPRCF-UHFFFAOYSA-N	6.8×10^3		Wang et al. (2017)	Q	80, 239
	6.3×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:HO3C96NO3 <chem>C9H19NO4</chem>	1.1×10^1		Wang et al. (2017)	Q	80, 238
IBTJZAQBCFQTAU-UHFFFAOYSA-N	9.3×10^1		Wang et al. (2017)	Q	80, 239
	1.1		Wang et al. (2017)	Q	80, 240
MCM:IPBZBPRNO3 <chem>C9H13NO6</chem>	5.0×10^5		Wang et al. (2017)	Q	80, 238
VLTHUNWGYHRCPS-UHFFFAOYSA-N	1.5×10^4		Wang et al. (2017)	Q	80, 239
	1.2×10^2		Wang et al. (2017)	Q	80, 240
MCM:IPNNCATOOH <chem>C9H12N2O11</chem>	8.1×10^{15}		Wang et al. (2017)	Q	80, 238
QQQAPHFHFZPQHQ-UHFFFAOYSA-N	2.9×10^9		Wang et al. (2017)	Q	80, 239
	1.4×10^4		Wang et al. (2017)	Q	80, 240
MCM:METLBIPNO3 <chem>C9H13NO6</chem>	2.6×10^5		Wang et al. (2017)	Q	80, 238
VQZACYIDHNLNBQ-UHFFFAOYSA-N	5.9×10^3		Wang et al. (2017)	Q	80, 239
	2.8×10^1		Wang et al. (2017)	Q	80, 240
MCM:MTNNCATOOH <chem>C9H12N2O11</chem>	4.8×10^{15}		Wang et al. (2017)	Q	80, 238
ILPSXJBNDMCAEH-UHFFFAOYSA-N	1.2×10^9		Wang et al. (2017)	Q	80, 239
	9.3×10^3		Wang et al. (2017)	Q	80, 240
MCM:NDNIPBLOOH <chem>C9H11N3O12</chem>	5.9×10^{14}		Wang et al. (2017)	Q	80, 238
HEZPBZRCUHPAHJ-UHFFFAOYSA-N	8.0×10^8		Wang et al. (2017)	Q	80, 239
	2.8×10^2		Wang et al. (2017)	Q	80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NDNMETLOOH C ₉ H ₁₁ N ₃ O ₁₂ GVOHWVMFRUNQQB-UHFFFAOYSA-N	3.8 × 10 ¹⁴ 4.9 × 10 ⁹ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDNOETLOOH C ₉ H ₁₁ N ₃ O ₁₂ DLTVFZDBANLVJD-UHFFFAOYSA-N	6.9 × 10 ¹⁴ 1.4 × 10 ⁹ 1.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDNPBZLOOH C ₉ H ₁₁ N ₃ O ₁₂ JBFCLZRPRJLGG-UHFFFAOYSA-N	5.1 × 10 ¹⁴ 6.8 × 10 ⁸ 3.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDNPETLOOH C ₉ H ₁₁ N ₃ O ₁₂ HIQGLTMZAYSJQX-UHFFFAOYSA-N	3.8 × 10 ¹⁴ 6.8 × 10 ⁸ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDNT123OOH C ₉ H ₁₁ N ₃ O ₁₂ UGLBOUATFGGZQD-UHFFFAOYSA-N	4.8 × 10 ¹⁴ 1.1 × 10 ⁹ 1.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDNT124OOH C ₉ H ₁₁ N ₃ O ₁₂ JFYUNHMAYFMSCF-UHFFFAOYSA-N	2.6 × 10 ¹⁴ 5.5 × 10 ⁸ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NIPBNZOLOH C ₉ H ₁₃ NO ₇ IAYADIRZIVDBNK-UHFFFAOYSA-N	7.3 × 10 ⁸ 2.1 × 10 ⁶ 6.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NIPBZOLOOH C ₉ H ₁₃ NO ₈ UJRLUYDZOZESDX-UHFFFAOYSA-N	1.9 × 10 ¹⁰ 1.2 × 10 ⁶ 2.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMETOLOH C ₉ H ₁₃ NO ₇ JUUDFVZFULKTPV-UHFFFAOYSA-N	4.4 × 10 ⁸ 9.8 × 10 ⁵ 1.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMETOLOOH C ₉ H ₁₃ NO ₈ CCCPQNSHVNXETJ-UHFFFAOYSA-N	1.1 × 10 ¹⁰ 5.5 × 10 ⁵ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOETOLOH C ₉ H ₁₃ NO ₇ RRTVORKFFCYXCH-UHFFFAOYSA-N	6.5 × 10 ⁸ 2.9 × 10 ⁶ 4.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOETOLOOH C ₉ H ₁₃ NO ₈ CGRZNCNSBNPNBR-UHFFFAOYSA-N	1.7 × 10 ¹⁰ 1.7 × 10 ⁶ 2.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPBNZOLOH C ₉ H ₁₃ NO ₇ PSGNFPQCVGIEDF-UHFFFAOYSA-N	7.1 × 10 ⁸ 1.6 × 10 ⁶ 2.9 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NPBNZOLOOH C ₉ H ₁₃ NO ₈ SNFHXCYEBCZPSO-UHFFFAOYSA-N	1.9 × 10 ¹⁰ 9.8 × 10 ⁵ 2.2 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPETOLOH C ₉ H ₁₃ NO ₇ ILVSHXKPUYWBXM-UHFFFAOYSA-N	5.3 × 10 ⁸ 1.8 × 10 ⁶ 2.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPETOLOOH C ₉ H ₁₃ NO ₈ BKSLAYLCQMXXSES-UHFFFAOYSA-N	1.4 × 10 ¹⁰ 8.9 × 10 ⁵ 1.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NTM123LOOH C ₉ H ₁₃ NO ₈ BTWUGVBELCWISQ-UHFFFAOYSA-N	1.1 × 10 ¹⁰ 9.1 × 10 ⁵ 5.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NTM123OLOH C ₉ H ₁₃ NO ₇ DXGFZPSQDYIOOU-UHFFFAOYSA-N	4.4 × 10 ⁸ 1.6 × 10 ⁶ 7.4 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NTM124LOOH C ₉ H ₁₃ NO ₈ JDMNMHRINWGUFB-UHFFFAOYSA-N	1.1 × 10 ¹⁰ 1.3 × 10 ⁶ 3.4 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NTM124OLOH C ₉ H ₁₃ NO ₇ RASHBSOGBGFOLP-UHFFFAOYSA-N	4.4 × 10 ⁸ 2.3 × 10 ⁶ 2.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NTM135LOOH C ₉ H ₁₃ NO ₈ AUGMYCIDZMPUKI-UHFFFAOYSA-N	9.6 × 10 ⁹ 5.1 × 10 ⁵ 3.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NTM135OLOH C ₉ H ₁₃ NO ₇ RAAKFDOLNJCXRG-UHFFFAOYSA-N	3.6 × 10 ⁸ 1.1 × 10 ⁶ 2.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLBIPNO3 C ₉ H ₁₃ NO ₆ FQBYEMVYEQXMF-UHFFFAOYSA-N	2.6 × 10 ⁵ 6.2 × 10 ³ 6.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OTNNCATOOH C ₉ H ₁₂ N ₂ O ₁₁ QVFSJCAPJVJPQJ-UHFFFAOYSA-N	8.9 × 10 ¹⁵ 2.1 × 10 ⁸ 1.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZBPERNO3 C ₉ H ₁₃ NO ₆ XWXMYNZXCPDQA-UHFFFAOYSA-N	4.2 × 10 ⁵ 1.1 × 10 ⁴ 2.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLBIPNO3 C ₉ H ₁₃ NO ₆ SOIPWHDZHSJJN-UHFFFAOYSA-N	2.6 × 10 ⁵ 6.2 × 10 ³ 1.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:PNNCATCOOH C ₉ H ₁₂ N ₂ O ₁₁ VZHROOMDJDZFR-UHFFFAOYSA-N	6.9 × 10 ¹⁵ 2.5 × 10 ⁹ 4.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PTNNCATOOH C ₉ H ₁₂ N ₂ O ₁₁ DSPOEZNZVBSNSI-UHFFFAOYSA-N	4.8 × 10 ¹⁵ 1.2 × 10 ⁸ 1.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:T123NCTOOH C ₉ H ₁₃ NO ₉ QTWHDHJHZAXHRP-UHFFFAOYSA-N	9.3 × 10 ¹⁶ 3.4 × 10 ¹⁰ 2.6 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:T123NNCOOH C ₉ H ₁₂ N ₂ O ₁₁ DNVSLQYQCSWFT-UHFFFAOYSA-N	3.0 × 10 ¹⁵ 8.9 × 10 ⁸ 1.4 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:T124NCTOOH C ₉ H ₁₃ NO ₉ TXEYLBVXEVRQAA-UHFFFAOYSA-N	1.7 × 10 ¹⁷ 3.4 × 10 ⁹ 6.9 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:T124NNCOOH C ₉ H ₁₂ N ₂ O ₁₁ ATYVZJLHFNLHKS-UHFFFAOYSA-N	3.0 × 10 ¹⁵ 1.0 × 10 ⁸ 7.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123BPNO3 C ₉ H ₁₃ NO ₆ RQYQJMSOWIBID-UHFFFAOYSA-N	1.8 × 10 ⁵ 4.9 × 10 ³ 2.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124BPNO3 C ₉ H ₁₃ NO ₆ KUPKWWJOBXRSMW-UHFFFAOYSA-N	1.8 × 10 ⁵ 3.8 × 10 ³ 9.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135BPNO3 C ₉ H ₁₃ NO ₆ VYQMVFHQGVVJTP-UHFFFAOYSA-N	2.1 × 10 ⁵ 6.2 × 10 ³ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:APINANO3 C ₁₀ H ₁₇ NO ₄ YITBNQHGOCKTCE-UHFFFAOYSA-N	6.9 × 10 ¹ 7.3 × 10 ¹ 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:APINBNO3 C ₁₀ H ₁₇ NO ₄ AFJBVFUFZQZRG-UHFFFAOYSA-N	6.9 × 10 ¹ 9.3 × 10 ¹ 2.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:APINCNO3 C ₁₀ H ₁₇ NO ₄ IHZLDCJLQGWYSY-UHFFFAOYSA-N	7.6 × 10 ¹ 9.3 × 10 ² 4.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BPINANO3 C ₁₀ H ₁₇ NO ₄ LIKORQJDVXFRRR-UHFFFAOYSA-N	6.2 × 10 ¹ 9.6 × 10 ¹ 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BPINBNO3 C ₁₀ H ₁₇ NO ₄ PIICVRQEXAAMFO-UHFFFAOYSA-N	6.2 × 10 ¹ 1.5 × 10 ² 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BPINCNO3 C ₁₀ H ₁₇ NO ₄ IVSZOCZGKNSHLW-UHFFFAOYSA-N	6.6 × 10 ¹ 1.7 × 10 ³ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C10PAN1 C ₁₀ H ₁₉ NO ₆ PVQDOCVRZVICAL-UHFFFAOYSA-N	3.4 × 10 ³ 6.0 × 10 ³ 6.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C918PAN C ₁₀ H ₁₅ NO ₆ GIWCNEZLGDWNGI-UHFFFAOYSA-N	8.7 × 10 ² 1.1 × 10 ⁴ 6.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMEBIPNO3 C ₁₀ H ₁₅ NO ₆ LWYZBKFMLLCHQU-UHFFFAOYSA-N	1.7 × 10 ⁵ 4.2 × 10 ³ 7.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C106NO3 C ₁₀ H ₂₁ NO ₄ LRSOGLAVONYUMB-UHFFFAOYSA-N	1.0 × 10 ¹ 7.6 × 10 ¹ 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMANO3 C ₁₀ H ₁₇ NO ₄ LZDKYYHMAURBIK-UHFFFAOYSA-N	8.4 × 10 ¹ 6.5 × 10 ¹ 1.8 × 10 ² 2.8	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:LIMBNO3 C ₁₀ H ₁₇ NO ₄ WIRXFNWUDJEZSG-UHFFFAOYSA-N	6.5 × 10 ¹ 2.3 × 10 ² 5.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMCNO3 C ₁₀ H ₁₇ NO ₄ ZELLOEPLERCREX-UHFFFAOYSA-N	8.6 × 10 ¹ 8.1 × 10 ¹ 6.2 × 10 ² 8.1	19000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:NDMEPHOLOH C ₁₀ H ₁₅ NO ₇ XEZYIWLRTFENIO-UHFFFAOYSA-N	3.0 × 10 ⁸ 7.4 × 10 ⁵ 1.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDMEPLOOH C ₁₀ H ₁₅ NO ₈ CUWWVZNCHDONFF-UHFFFAOYSA-N	7.4 × 10 ⁹ 3.4 × 10 ⁵ 7.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DETLBIPNO3 C ₁₁ H ₁₇ NO ₆ HUKONYHKUULPQM-UHFFFAOYSA-N	1.6 × 10 ⁵ 3.1 × 10 ³ 4.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C116NO3 C ₁₁ H ₂₃ NO ₄ ZSRHOFPLHKNYIP-UHFFFAOYSA-N	8.0 6.2 × 10 ¹ 9.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NDEMPHOLOH C ₁₁ H ₁₇ NO ₇ SFAWLNVZQJDAW-UHFFFAOYSA-N	2.6 × 10 ⁸ 4.7 × 10 ⁵ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDEMPLOOH C ₁₁ H ₁₇ NO ₈ KQXYOILDOZYPH-UHFFFAOYSA-N	6.2 × 10 ⁹ 2.4 × 10 ⁵ 1.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HO3C126NO3 C ₁₂ H ₂₅ NO ₄ NBVYOETUGSGBPE-UHFFFAOYSA-N	6.5 4.8 × 10 ¹ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCANO3 C ₁₅ H ₂₅ NO ₄ DXJZLWPVAKBFC-UHFFFAOYSA-N	6.0 × 10 ¹ 1.1 × 10 ³ 2.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCBNO3 C ₁₅ H ₂₅ NO ₄ GGDFBGYMWXISJ-UHFFFAOYSA-N	6.0 × 10 ¹ 1.7 × 10 ³ 2.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCCNO3 C ₁₅ H ₂₅ NO ₄ AJHNYRDSMBHFTD-UHFFFAOYSA-N	8.5 × 10 ¹ 2.0 × 10 ³ 1.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:GLYPAN C ₂ HNO ₆ WWNQODGUPABTBB-UHFFFAOYSA-N	4.5 × 10 ³ 1.4 × 10 ³ 4.2 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NO3CH2CHO C ₂ H ₃ NO ₄ ABUBKAMLUVOXSP-UHFFFAOYSA-N	1.1 × 10 ¹ 9.3 × 10 ¹ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3PAN2 C ₃ H ₃ NO ₆ JCWPFKBPQPIIIA-UHFFFAOYSA-N	3.6 × 10 ³ 4.0 × 10 ³ 5.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOPRNO3 C ₃ H ₅ NO ₄ IIFXHQMWCHWMFS-UHFFFAOYSA-N	1.0 × 10 ¹ 3.9 × 10 ¹ 3.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUTAL2NO3 C ₄ H ₇ NO ₄ JTMAFXAEAWTSPM-UHFFFAOYSA-N	8.1 1.9 × 10 ¹ 1.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUTALNO3 C ₄ H ₇ NO ₄ YGQOBBYMNDZOFN-UHFFFAOYSA-N	8.1 4.6 × 10 ¹ 1.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4CONO3OOH C ₄ H ₇ NO ₆ OPYZRKWHBYWVVF-UHFFFAOYSA-N	7.1 × 10 ⁵ 2.1 × 10 ⁵ 1.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4NO3COOOH C ₄ H ₇ NO ₆ LPNJZRUFUCUXQKM-UHFFFAOYSA-N	7.1 × 10 ⁵ 1.1 × 10 ⁴ 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOC2PAN C ₄ H ₅ NO ₆ RNHARUXEGCOCNU-UHFFFAOYSA-N	2.8 × 10 ³ 9.3 × 10 ³ 2.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CONM2CHO C ₄ H ₅ NO ₅ UXLHNUQVUCPVFF-UHFFFAOYSA-N	5.1 × 10 ³ 1.6 × 10 ³ 4.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CONM2CO3H C ₄ H ₅ NO ₇ KDPSYMPAERQTCV-UHFFFAOYSA-N	5.6 × 10 ⁶ 1.0 × 10 ⁵ 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CONM2PAN C ₄ H ₄ N ₂ O ₉ PRUSZGKEVUCSBM-UHFFFAOYSA-N	2.6 × 10 ⁵ 4.5 × 10 ⁴ 2.8 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IBUALANO3 C ₄ H ₇ NO ₄ BBEYVRKCPRBWGK-UHFFFAOYSA-N	8.1 6.0 × 10 ¹ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IBUDIALPAN C ₄ H ₅ NO ₆ ANKFJODHGNELSW-UHFFFAOYSA-N	3.3 × 10 ³ 1.4 × 10 ³ 6.0 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MALDIALPAN C ₄ H ₃ NO ₆ JVYQADFHFGBZRY-UHFFFAOYSA-N	1.1 × 10 ⁴ 2.3 × 10 ⁴ 2.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPRBNO3CHO C ₄ H ₇ NO ₄ ZFRSNPXDNOXJAG-UHFFFAOYSA-N	5.6 7.8 1.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC3CHO C ₄ H ₅ NO ₄ IRCIUAVPVOGPAB-UHFFFAOYSA-N	3.3 × 10 ¹ 1.1 × 10 ² 3.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3M3CHONO3 C ₅ H ₉ NO ₄ FSONNVXXYIKSKL-UHFFFAOYSA-N	4.7 1.6 × 10 ¹ 1.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3MCODBPAN C ₅ H ₅ NO ₆ ABUKHSDGKGHQTU-UHFFFAOYSA-N	7.6 × 10 ³ 2.2 × 10 ⁴ 6.8 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3MNO3CHO C ₅ H ₉ NO ₄ IIGIHDSEOSVDKL-UHFFFAOYSA-N	7.6 1.4 × 10 ¹ 1.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4CHOBNO3	6.8		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₄	2.5 × 10 ¹		Wang et al. (2017)	Q	80, 239
IRTPVYBICUATCF-UHFFFAOYSA-N	9.6 × 10 ⁻²		Wang et al. (2017)	Q	80, 240
MCM:C4NO3CHO	4.7		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₄	5.0		Wang et al. (2017)	Q	80, 239
WGTULXFSTHCAFV-UHFFFAOYSA-N	1.0 × 10 ⁻²		Wang et al. (2017)	Q	80, 240
MCM:C514NO3	6.0 × 10 ³		Wang et al. (2017)	Q	80, 238
C ₅ H ₇ NO ₅	3.6 × 10 ⁴		Wang et al. (2017)	Q	80, 239
CEGGSEAUULUFJEH-UHFFFAOYSA-N	2.8 × 10 ¹		Wang et al. (2017)	Q	80, 240
MCM:C52NO31CO	6.8		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₄	1.2 × 10 ¹		Wang et al. (2017)	Q	80, 239
OIPNOUWHATXHHM-UHFFFAOYSA-N	1.6 × 10 ⁻²		Wang et al. (2017)	Q	80, 240
MCM:CO1M22PAN	1.8 × 10 ³		Wang et al. (2017)	Q	80, 238
C ₅ H ₇ NO ₆	6.0 × 10 ²		Wang et al. (2017)	Q	80, 239
JNBWLXYXFYINSW-UHFFFAOYSA-N	4.4 × 10 ⁻³		Wang et al. (2017)	Q	80, 240
MCM:MC3COBPPAN	7.6 × 10 ³		Wang et al. (2017)	Q	80, 238
C ₅ H ₅ NO ₆	1.9 × 10 ⁴		Wang et al. (2017)	Q	80, 239
AENWJVXGXGCGHXR-UHFFFAOYSA-N	4.1 × 10 ⁻²		Wang et al. (2017)	Q	80, 240
MCM:NC4CHO	2.2 × 10 ¹		Wang et al. (2017)	Q	80, 238
C ₅ H ₇ NO ₄	9.8 × 10 ¹		Wang et al. (2017)	Q	80, 239
FHQODWGHGFJLCS-UHFFFAOYSA-N	6.3		Wang et al. (2017)	Q	80, 240
MCM:C522PAN	4.2 × 10 ³		Wang et al. (2017)	Q	80, 238
C ₆ H ₇ NO ₆	4.6 × 10 ³		Wang et al. (2017)	Q	80, 239
BLDVCFOHUDZGIY-UHFFFAOYSA-N	9.8 × 10 ⁻²		Wang et al. (2017)	Q	80, 240
MCM:C65NO36CHO	5.9		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₁ NO ₄	8.9		Wang et al. (2017)	Q	80, 239
AWOTULOVYXRZSX-UHFFFAOYSA-N	1.4 × 10 ⁻²		Wang et al. (2017)	Q	80, 240
MCM:CHOC4PAN	2.0 × 10 ³		Wang et al. (2017)	Q	80, 238
C ₆ H ₉ NO ₆	3.6 × 10 ³		Wang et al. (2017)	Q	80, 239
LKJHECXHBJSEQK-UHFFFAOYSA-N	3.1 × 10 ⁻¹		Wang et al. (2017)	Q	80, 240
MCM:CO1C6NO3	5.3		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₁ NO ₄	2.9 × 10 ¹		Wang et al. (2017)	Q	80, 239
BSOUFWBHIXMPX-UHFFFAOYSA-N	1.8		Wang et al. (2017)	Q	80, 240
MCM:C615PAN	1.2 × 10 ⁶		Wang et al. (2017)	Q	80, 238
C ₇ H ₉ NO ₇	2.3 × 10 ⁵		Wang et al. (2017)	Q	80, 239
QXDOZRAOCVERTF-UHFFFAOYSA-N	1.4 × 10 ⁻¹		Wang et al. (2017)	Q	80, 240
MCM:C729NO3	1.1 × 10 ¹		Wang et al. (2017)	Q	80, 238
C ₇ H ₁₁ NO ₄	3.2 × 10 ¹		Wang et al. (2017)	Q	80, 239
IVMGVFSKIJXXOW-UHFFFAOYSA-N	4.7 × 10 ⁻¹		Wang et al. (2017)	Q	80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C729PAN C ₈ H ₁₁ NO ₆ UQYKHVYVMQUYAN-UHFFFAOYSA-N	3.6 × 10 ³ 1.6 × 10 ³ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C810NO3 C ₈ H ₁₃ NO ₅ CHBSGOHAWLCLGZ-UHFFFAOYSA-N	2.8 × 10 ³ 7.3 × 10 ³ 4.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C822NO3 C ₈ H ₁₃ NO ₄ JWAJNALJDDSHOA-UHFFFAOYSA-N	2.9 × 10 ¹ 8.9 2.6 × 10 ¹ 1.1	10000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:C830NO3 C ₈ H ₁₃ NO ₄ FXBNRUCAFEP CZ-UHFFFAOYSA-N	1.0 × 10 ¹ 2.8 × 10 ¹ 7.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C831NO3 C ₈ H ₁₃ NO ₅ OVEOYJGENOZMLJ-UHFFFAOYSA-N	2.8 × 10 ³ 9.3 × 10 ³ 5.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C89NO3 C ₈ H ₁₃ NO ₄ JVGNHSSLWSUTIF-UHFFFAOYSA-N	1.0 × 10 ¹ 2.8 × 10 ¹ 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC826OOH C ₈ H ₁₃ NO ₇ LIEZCAIBRALIF-UHFFFAOYSA-N	1.9 × 10 ⁸ 5.1 × 10 ⁷ 3.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C822PAN C ₉ H ₁₃ NO ₆ AEOJBADXLVGVNE-UHFFFAOYSA-N	2.8 × 10 ³ 1.1 × 10 ³ 3.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C830PAN C ₉ H ₁₃ NO ₆ NSAJKAFLWKCEMC-UHFFFAOYSA-N	3.2 × 10 ³ 2.4 × 10 ³ 1.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C89PAN C ₉ H ₁₃ NO ₆ MAIUDZACSGCMBD-UHFFFAOYSA-N	3.2 × 10 ³ 2.5 × 10 ³ 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC91CHO C ₁₀ H ₁₅ NO ₄ AVQCYCZMFYNOE-UHFFFAOYSA-N	1.6 × 10 ¹ 1.4 × 10 ¹ 8.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C126NO3 C ₁₂ H ₁₉ NO ₄ LCRFVSVKVOPOBC-UHFFFAOYSA-N	1.1 × 10 ¹ 3.4 × 10 ¹ 7.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C126PAN C ₁₃ H ₁₉ NO ₆ TVUSLNPYCCAOKX-UHFFFAOYSA-N	3.4 × 10 ³ 1.8 × 10 ³ 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C136NO3	8.7		Wang et al. (2017)	Q	80, 238
C ₁₃ H ₂₁ NO ₄	3.0×10^1		Wang et al. (2017)	Q	80, 239
FAQBCXSJSFDOSN-UHFFFAOYSA-N	8.0		Wang et al. (2017)	Q	80, 240
MCM:NC1313OOH	2.0×10^8		Wang et al. (2017)	Q	80, 238
C ₁₃ H ₂₁ NO ₇	9.1×10^7		Wang et al. (2017)	Q	80, 239
AIWUKZRYSUWIQN-UHFFFAOYSA-N	2.3×10^3		Wang et al. (2017)	Q	80, 240
MCM:C136PAN	3.1×10^3		Wang et al. (2017)	Q	80, 238
C ₁₄ H ₂₁ NO ₆	1.4×10^3		Wang et al. (2017)	Q	80, 239
HVYQJFOLIDVKQK-UHFFFAOYSA-N	4.1		Wang et al. (2017)	Q	80, 240
MCM:C42AOH	1.8×10^3		Wang et al. (2017)	Q	80, 238
C ₃ H ₅ NO ₅	1.6×10^4		Wang et al. (2017)	Q	80, 239
CQVFGUOZVNZAM-UHFFFAOYSA-N	5.5		Wang et al. (2017)	Q	80, 240
MCM:HCOCOHPAN	1.2×10^5		Wang et al. (2017)	Q	80, 238
C ₃ H ₃ NO ₇	5.4×10^5		Wang et al. (2017)	Q	80, 239
GGQYFRDCXKQIA-UHFFFAOYSA-N	2.1×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:C41NO3	5.0×10^6		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₆	1.4×10^7		Wang et al. (2017)	Q	80, 239
SGYMPVWBXCWGY-UHFFFAOYSA-N	1.1×10^3		Wang et al. (2017)	Q	80, 240
MCM:C42OH	1.8×10^6		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₆	1.6×10^7		Wang et al. (2017)	Q	80, 239
OIAGCOLJHCONRV-UHFFFAOYSA-N	1.7×10^2		Wang et al. (2017)	Q	80, 240
MCM:C42OOH	1.3×10^8		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₇	1.4×10^7		Wang et al. (2017)	Q	80, 239
KUKJNXCETLVUQA-UHFFFAOYSA-N	1.8×10^2		Wang et al. (2017)	Q	80, 240
MCM:C4OCCOHN03	1.7×10^3		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₅	9.8×10^3		Wang et al. (2017)	Q	80, 239
NEHFOAWUQWHZTI-UHFFFAOYSA-N	1.6		Wang et al. (2017)	Q	80, 240
MCM:COCCOHN03	3.3×10^4		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₅	3.2×10^4		Wang et al. (2017)	Q	80, 239
HMCDHWALZVCNKO-UHFFFAOYSA-N	6.8		Wang et al. (2017)	Q	80, 240
MCM:COHM2PAN	6.5×10^4		Wang et al. (2017)	Q	80, 238
C ₄ H ₅ NO ₇	2.2×10^5		Wang et al. (2017)	Q	80, 239
UXUAXYPQPQXRR-UHFFFAOYSA-N	5.0×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:MACRNB	1.0×10^3		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₅	1.3×10^4		Wang et al. (2017)	Q	80, 239
DLZDCWJOERFHAS-UHFFFAOYSA-N	1.1		Wang et al. (2017)	Q	80, 240
MCM:MACRNO3	2.0×10^4		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₅	7.1×10^3		Wang et al. (2017)	Q	80, 239
ALINXPRBVMXOGH-UHFFFAOYSA-N	3.2		Wang et al. (2017)	Q	80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4M2ALOHNO3 C ₅ H ₇ NO ₆ UOGOTHSJBKVR-RR-UHFFFAOYSA-N	8.5 × 10 ⁵ 1.4 × 10 ⁶ 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C510OH C ₅ H ₉ NO ₆ ZCOZZYNQPKXJEJ-UHFFFAOYSA-N	1.0 × 10 ⁶ 1.2 × 10 ⁷ 8.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C510OOH C ₅ H ₉ NO ₇ GGBWELVRYZRQMP-UHFFFAOYSA-N	7.1 × 10 ⁷ 1.4 × 10 ⁷ 1.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C57NO3 C ₅ H ₉ NO ₆ KHAJTJUOMDNQGW-UHFFFAOYSA-N	2.0 × 10 ⁷ 1.3 × 10 ⁷ 6.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C58NO3 C ₅ H ₉ NO ₆ UZUIBKBJXOKLGO-UHFFFAOYSA-N	2.8 × 10 ⁶ 1.0 × 10 ⁷ 5.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNC524CO C ₅ H ₈ N ₂ O ₉ WXHJTLKSHGDIHS-UHFFFAOYSA-N	7.1 × 10 ⁹ 9.6 × 10 ⁸ 1.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HNC524CO C ₅ H ₉ NO ₇ UHQMTOKWUFCE-RL-UHFFFAOYSA-N	2.9 × 10 ⁹ 1.5 × 10 ¹⁰ 5.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HPNC524CO C ₅ H ₉ NO ₈ QASKBBWYSGCPQ-UHFFFAOYSA-N	4.7 × 10 ¹² 1.7 × 10 ¹⁰ 1.9 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INAHCHO C ₅ H ₉ NO ₆ GJDCYRXOLZPRL-UHFFFAOYSA-N	1.0 × 10 ⁶ 1.5 × 10 ⁷ 1.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INAHPCHO C ₅ H ₉ NO ₇ WOIAKHQAPCBXNP-UHFFFAOYSA-N	1.6 × 10 ⁹ 2.6 × 10 ⁷ 1.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INANCHO C ₅ H ₈ N ₂ O ₈ AOWQROMNZIXQLR-UHFFFAOYSA-N	2.5 × 10 ⁶ 1.7 × 10 ⁶ 6.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1HPCHO C ₅ H ₉ NO ₇ PPUPDRIHXISUBS-UHFFFAOYSA-N	1.4 × 10 ⁹ 1.9 × 10 ⁷ 1.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1NACHO C ₅ H ₈ N ₂ O ₈ FPDRKJBIBBIBW-UHFFFAOYSA-N	2.0 × 10 ⁶ 7.4 × 10 ⁶ 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:INB1NBCHO C ₅ H ₈ N ₂ O ₈ DIJODJNNHWDXRN-UHFFFAOYSA-N	2.0 × 10 ⁶ 5.4 × 10 ⁶ 2.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INCNCHO C ₅ H ₈ N ₂ O ₈ QYWHAZCEYLWYSZ-UHFFFAOYSA-N	2.5 × 10 ⁶ 3.4 × 10 ⁶ 3.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INDHCHO C ₅ H ₉ NO ₆ LXJORHVMGZGMRK-UHFFFAOYSA-N	2.8 × 10 ⁶ 1.6 × 10 ⁷ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INDHPCHO C ₅ H ₉ NO ₇ NKPCKBYOCYFEQQ-UHFFFAOYSA-N	1.4 × 10 ⁹ 1.3 × 10 ⁷ 4.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMALNACO3H C ₅ H ₇ NO ₈ WWJYGONDDIBFHK-UHFFFAOYSA-N	9.3 × 10 ⁸ 2.0 × 10 ⁶ 8.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMALNAPAN C ₅ H ₆ N ₂ O ₁₀ JNHZFZYBXYVXPX-UHFFFAOYSA-N	4.3 × 10 ⁷ 6.0 × 10 ⁷ 2.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMALNBCO3H C ₅ H ₇ NO ₈ ASZGKTQVJXPLHM-UHFFFAOYSA-N	9.3 × 10 ⁸ 3.9 × 10 ⁷ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMALNBPAN C ₅ H ₆ N ₂ O ₁₀ QNDDWZGVLTYMIK-UHFFFAOYSA-N	4.3 × 10 ⁷ 1.3 × 10 ⁷ 1.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMBOBCO C ₅ H ₉ NO ₅ ZWLCCOCHFERQT-UHFFFAOYSA-N	1.8 × 10 ⁴ 2.2 × 10 ⁴ 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1H4C5PAN C ₆ H ₉ NO ₇ XKXYOEFJYDLELH-UHFFFAOYSA-N	5.9 × 10 ⁶ 2.5 × 10 ⁷ 1.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C623NO3 C ₆ H ₁₁ NO ₆ UTKYBRKMQKBGOV-UHFFFAOYSA-N	4.2 × 10 ⁷ 6.0 × 10 ⁷ 2.2 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C67NO3 C ₆ H ₁₁ NO ₅ MTROCBFSNOSSFY-UHFFFAOYSA-N	1.5 × 10 ⁴ 6.9 × 10 ⁴ 4.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C68NO3 C ₆ H ₁₁ NO ₅ DFCRZDMTYDUCKH-UHFFFAOYSA-N	1.5 × 10 ⁴ 6.8 × 10 ⁴ 1.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CO1H63NO3	1.4×10^4		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₁ NO ₅	6.0×10^5		Wang et al. (2017)	Q	80, 239
QWPYKWKOPQKYFO-UHFFFAOYSA-N	1.7×10^3		Wang et al. (2017)	Q	80, 240
MCM:NC623OH	4.2×10^7		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₁ NO ₆	2.7×10^8		Wang et al. (2017)	Q	80, 239
LIALSLHETRNECK-UHFFFAOYSA-N	2.3×10^2		Wang et al. (2017)	Q	80, 240
MCM:NC623OOH	1.0×10^9		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₁ NO ₇	6.0×10^7		Wang et al. (2017)	Q	80, 239
LUCHEJMQFYPEG-UHFFFAOYSA-N	6.9×10^4		Wang et al. (2017)	Q	80, 240
MCM:C728NO3	1.5×10^8	17000	Wieser et al. (2023)	Q	437
C ₇ H ₁₃ NO ₆	3.2×10^7		Wang et al. (2017)	Q	80, 238
CDBHNFQBKSTCON-UHFFFAOYSA-N	2.0×10^8		Wang et al. (2017)	Q	80, 239
	3.0×10^5		Wang et al. (2017)	Q	80, 240
MCM:C730NO3	3.5×10^9	17000	Wieser et al. (2023)	Q	437
C ₇ H ₁₃ NO ₆	3.2×10^7		Wang et al. (2017)	Q	80, 238
RVWIAVBELSCRER-UHFFFAOYSA-N	1.4×10^9		Wang et al. (2017)	Q	80, 239
	9.8×10^4		Wang et al. (2017)	Q	80, 240
MCM:NC728OH	3.2×10^7		Wang et al. (2017)	Q	80, 238
C ₇ H ₁₃ NO ₆	5.4×10^8		Wang et al. (2017)	Q	80, 239
RMGZPHZIJLBXA-UHFFFAOYSA-N	9.8×10^4		Wang et al. (2017)	Q	80, 240
MCM:NC728OOH	7.8×10^8		Wang et al. (2017)	Q	80, 238
C ₇ H ₁₃ NO ₇	2.0×10^8		Wang et al. (2017)	Q	80, 239
NMPAVXKBWDGSMK-UHFFFAOYSA-N	2.1×10^5		Wang et al. (2017)	Q	80, 240
MCM:NC730OH	3.2×10^7		Wang et al. (2017)	Q	80, 238
C ₇ H ₁₃ NO ₆	2.4×10^8		Wang et al. (2017)	Q	80, 239
ZPFRZNAADTZJOS-UHFFFAOYSA-N	1.5×10^4		Wang et al. (2017)	Q	80, 240
MCM:NC730OOH	7.8×10^8		Wang et al. (2017)	Q	80, 238
C ₇ H ₁₃ NO ₇	2.7×10^9		Wang et al. (2017)	Q	80, 239
LJYXGYOAXKBDIY-UHFFFAOYSA-N	6.0×10^4		Wang et al. (2017)	Q	80, 240
MCM:C826NO3	9.8×10^6		Wang et al. (2017)	Q	80, 238
C ₈ H ₁₃ NO ₆	4.6×10^7		Wang et al. (2017)	Q	80, 239
HYUHCBAOFNBPC-UHFFFAOYSA-N	5.5×10^4		Wang et al. (2017)	Q	80, 240
MCM:NC826OH	9.8×10^6		Wang et al. (2017)	Q	80, 238
C ₈ H ₁₃ NO ₆	6.2×10^7		Wang et al. (2017)	Q	80, 239
UXZRCYKYQRKKOI-UHFFFAOYSA-N	3.5×10^3		Wang et al. (2017)	Q	80, 240
MCM:C127NO3	1.9×10^4		Wang et al. (2017)	Q	80, 238
C ₁₂ H ₁₉ NO ₅	1.7×10^5		Wang et al. (2017)	Q	80, 239
RZJFRKYKJWJXLW-UHFFFAOYSA-N	4.2×10^2		Wang et al. (2017)	Q	80, 240
MCM:C1311NO3	1.7×10^4		Wang et al. (2017)	Q	80, 238
C ₁₃ H ₂₁ NO ₅	1.4×10^5		Wang et al. (2017)	Q	80, 239
HIIZKUNLVYOKLJ-UHFFFAOYSA-N	1.0×10^4		Wang et al. (2017)	Q	80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C1313NO3 C ₁₃ H ₂₁ NO ₆ SXMORIYKGFOKAB-UHFFFAOYSA-N	9.1 × 10 ⁶ 5.8 × 10 ⁷ 2.2 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC1313OH C ₁₃ H ₂₁ NO ₆ RAUQQNONBFDDJB-UHFFFAOYSA-N	9.1 × 10 ⁶ 6.8 × 10 ⁷ 5.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3NO3COOOH C ₃ H ₅ NO ₆ JXBSDKIVLYRFTK-UHFFFAOYSA-N	5.8 × 10 ⁵ 4.0 × 10 ⁴ 2.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH3COPAN C ₃ H ₃ NO ₆ BNYSUSDQQIWDZS-UHFFFAOYSA-N	2.6 × 10 ³ 2.1 × 10 ³ 2.2 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BUTONENO3 C ₄ H ₇ NO ₄ KFRUNLQRYXGRRS-UHFFFAOYSA-N	7.1 3.5 × 10 ¹ 7.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO23C4NO3 C ₄ H ₅ NO ₅ RSORCZUYAJEINP-UHFFFAOYSA-N	3.9 × 10 ³ 4.3 × 10 ³ 7.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2C3PAN C ₄ H ₅ NO ₆ VXGDXYQGFKIYJ-UHFFFAOYSA-N	2.4 × 10 ³ 4.0 × 10 ³ 1.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2N3CO3H C ₄ H ₅ NO ₇ PLOOSZKRSUJJKF-UHFFFAOYSA-N	6.8 × 10 ⁶ 5.5 × 10 ⁵ 4.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2N3PAN C ₄ H ₄ N ₂ O ₉ RXUYCSQEPKEYNB-UHFFFAOYSA-N	3.1 × 10 ⁵ 2.3 × 10 ⁵ 2.3 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2-oxobutyl nitrate C ₄ H ₇ NO ₄ [138779-12-1] OVISQPFXRZOFI-UHFFFAOYSA-N	5.9 5.9 × 10 ¹ 3.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:COC4NO3OOH C ₄ H ₇ NO ₆ AEHFBVVGPA XMNG-UHFFFAOYSA-N	5.1 × 10 ⁵ 1.8 × 10 ⁴ 1.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MEKANO3 C ₄ H ₇ NO ₄ SQFMCLNZTZWUJY-UHFFFAOYSA-N	5.9 1.3 × 10 ² 8.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMVK C ₄ H ₅ NO ₄ YTEQPVIDLVVHW-UHFFFAOYSA-N	1.7 × 10 ¹ 1.0 × 10 ² 3.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C4M2NO3ONE C ₅ H ₉ NO ₄ DIMHFQKQZMGY-UHFFFAOYSA-N	3.8 7.3 5.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4M3NO3ONE C ₅ H ₉ NO ₄ SAHLZHFQIFWKH-UHFFFAOYSA-N	5.5 3.4 × 10 ¹ 1.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4MCNO3OOH C ₅ H ₉ NO ₆ AOCDDMVLVTZNT-UHFFFAOYSA-N	2.9 × 10 ⁵ 8.3 × 10 ⁴ 2.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C51NO324CO C ₅ H ₇ NO ₅ KIDZPQUIRFWTHY-UHFFFAOYSA-N	3.6 × 10 ³ 2.0 × 10 ⁴ 8.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C51NO32CO C ₅ H ₉ NO ₄ TTZVKGPORTQGG-UHFFFAOYSA-N	4.9 3.2 × 10 ¹ 2.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C52NO33CO C ₅ H ₉ NO ₄ VOCQUTRGVIAJPG-UHFFFAOYSA-N	5.5 1.6 × 10 ¹ 6.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C53NO324CO C ₅ H ₇ NO ₅ QYJXVKSLJQONK-UHFFFAOYSA-N	3.7 × 10 ³ 7.4 × 10 ³ 1.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C53NO32CO C ₅ H ₉ NO ₄ LVGYWFUEHRGRSS-UHFFFAOYSA-N	5.5 1.7 × 10 ¹ 6.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CONO3OOH C ₅ H ₉ NO ₆ ZDTBCADGPXXLKE-UHFFFAOYSA-N	2.9 × 10 ⁵ 3.7 × 10 ³ 3.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5COO2NO2 C ₅ H ₅ NO ₆ BZPLAICQOBBIOR-UHFFFAOYSA-N	7.6 × 10 ³ 3.9 × 10 ⁴ 4.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5NO3O4OOH C ₅ H ₉ NO ₆ CASCWEIOXSCVGJ-UHFFFAOYSA-N	4.8 × 10 ⁵ 4.6 × 10 ³ 1.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5NO3OAOOH C ₅ H ₉ NO ₆ FLHIUJMTRYIPLY-UHFFFAOYSA-N	4.2 × 10 ⁵ 5.3 × 10 ⁵ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5ONO34OOH C ₅ H ₉ NO ₆ LOZNRBAEPWQBFW-UHFFFAOYSA-N	4.8 × 10 ⁵ 1.5 × 10 ⁵ 2.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C5PAN16 C ₅ H ₇ NO ₆ IZEBTYZDWKBBFQ-UHFFFAOYSA-N	1.9 × 10 ³ 2.0 × 10 ³ 5.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN2 C ₅ H ₇ NO ₆ XMORPKXVSPHXDA-UHFFFAOYSA-N	1.9 × 10 ³ 9.6 × 10 ³ 5.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN7 C ₅ H ₇ NO ₆ VONRVKPFQAOOPX-UHFFFAOYSA-N	2.2 × 10 ³ 1.5 × 10 ³ 3.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5PAN9 C ₅ H ₅ NO ₇ HJZPHZLLKGPYCO-UHFFFAOYSA-N	1.3 × 10 ⁶ 2.5 × 10 ⁵ 5.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DIEKBNO3 C ₅ H ₉ NO ₄ WKTFKAAKLZJYGP-UHFFFAOYSA-N	4.9 5.5 × 10 ¹ 5.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INANCOCO3H C ₅ H ₆ N ₂ O ₁₀ OKQCOTADQFFQES-UHFFFAOYSA-N	4.4 × 10 ⁸ 1.4 × 10 ⁷ 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INANCOPAN C ₅ H ₅ N ₃ O ₁₂ OHXWPTYTKFCNFA-UHFFFAOYSA-N	1.9 × 10 ⁷ 5.3 × 10 ⁶ 8.0 × 10 ⁻⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIPKBNO3 C ₅ H ₉ NO ₄ PNKPSVUHDDVFRU-UHFFFAOYSA-N	5.5 5.5 × 10 ¹ 6.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPRKNO3 C ₅ H ₉ NO ₄ GMHWHQCXUOCSQQ-UHFFFAOYSA-N	5.5 3.9 × 10 ¹ 4.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3COCPAN C ₆ H ₉ NO ₆ QAGGXZNGFPYUOO-UHFFFAOYSA-N	1.6 × 10 ³ 1.1 × 10 ³ 4.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4MCOBPAN C ₆ H ₇ NO ₆ OBEVNDXPXGMJPT-UHFFFAOYSA-N	5.1 × 10 ³ 3.3 × 10 ⁴ 1.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C62NO335CO C ₆ H ₉ NO ₅ ABDNFJAHWTWRFH-UHFFFAOYSA-N	3.4 × 10 ³ 6.0 × 10 ³ 3.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C62NO33CO C ₆ H ₁₁ NO ₄ OBVLXHVNJQTRAU-UHFFFAOYSA-N	4.6 9.8 4.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C63NO32CO	4.6		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₁ NO ₄	1.1×10^1		Wang et al. (2017)	Q	80, 239
QSKMGJAWRGUYGL-UHFFFAOYSA-N	5.5×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:C64NO335CO	3.4×10^3		Wang et al. (2017)	Q	80, 238
C ₆ H ₉ NO ₅	4.2×10^3		Wang et al. (2017)	Q	80, 239
CHGSCHAFWLLPDM-UHFFFAOYSA-N	8.0×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:C66NO35CO	4.3		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₁ NO ₄	2.2×10^1		Wang et al. (2017)	Q	80, 239
NNYDFJRPKYRBEY-UHFFFAOYSA-N	1.4×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:C6CO134PAN	1.1×10^6		Wang et al. (2017)	Q	80, 238
C ₆ H ₇ NO ₇	1.4×10^5		Wang et al. (2017)	Q	80, 239
OIZONYBQGYWDV-UHFFFAOYSA-N	2.2×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:C6CONO3OOH	3.9×10^5		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₁ NO ₆	1.3×10^5		Wang et al. (2017)	Q	80, 239
JAMSWIXAFBYGGR-UHFFFAOYSA-N	3.8×10^2		Wang et al. (2017)	Q	80, 240
MCM:C6DCARBPAN	7.1×10^3		Wang et al. (2017)	Q	80, 238
C ₆ H ₇ NO ₆	1.8×10^4		Wang et al. (2017)	Q	80, 239
QTAROYORLXCHIO-UHFFFAOYSA-N	3.0×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:C6NO324CO	2.9×10^3		Wang et al. (2017)	Q	80, 238
C ₆ H ₉ NO ₅	1.1×10^4		Wang et al. (2017)	Q	80, 239
ZLHGCQIPJTVAEP-UHFFFAOYSA-N	4.4		Wang et al. (2017)	Q	80, 240
MCM:C6NO3COOOH	3.3×10^5		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₁ NO ₆	2.6×10^5		Wang et al. (2017)	Q	80, 239
HQTZSBFILMVSJZ-UHFFFAOYSA-N	5.9×10^2		Wang et al. (2017)	Q	80, 240
MCM:C6PAN12	1.7×10^3		Wang et al. (2017)	Q	80, 238
C ₆ H ₉ NO ₆	3.4×10^3		Wang et al. (2017)	Q	80, 239
LSIJQLAUAXHOJI-UHFFFAOYSA-N	2.0×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:C6PAN16	1.2×10^3		Wang et al. (2017)	Q	80, 238
C ₆ H ₉ NO ₆	5.3×10^2		Wang et al. (2017)	Q	80, 239
JDUNWYCOIXFXGK-UHFFFAOYSA-N	1.8×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:C6PAN2	1.6×10^3		Wang et al. (2017)	Q	80, 238
C ₆ H ₉ NO ₆	4.9×10^3		Wang et al. (2017)	Q	80, 239
BSRDZZSTWMTZHH-UHFFFAOYSA-N	4.0×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:C6PAN5	1.7×10^3		Wang et al. (2017)	Q	80, 238
C ₆ H ₉ NO ₆	3.4×10^3		Wang et al. (2017)	Q	80, 239
AYORGEAGFIRFHU-UHFFFAOYSA-N	4.1×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:C6PAN6	1.7×10^3		Wang et al. (2017)	Q	80, 238
C ₆ H ₉ NO ₆	6.6×10^2		Wang et al. (2017)	Q	80, 239
STXATUQYWORJHN-UHFFFAOYSA-N	1.5×10^{-2}		Wang et al. (2017)	Q	80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C6PAN7 C ₆ H ₇ NO ₇ FEUNFERSGUKVTQ-UHFFFAOYSA-N	1.3 × 10 ⁶ 1.0 × 10 ⁵ 2.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CONO3C6OOH C ₆ H ₁₁ NO ₆ BPHZXGKZHPQLPB-UHFFFAOYSA-N	3.9 × 10 ⁵ 7.3 × 10 ⁴ 1.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CYHXONANO3 C ₆ H ₉ NO ₄ VLCBNIODXGFPBM-UHFFFAOYSA-N	1.4 × 10 ¹ 3.6 × 10 ² 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ECO3PAN C ₆ H ₅ NO ₈ GLZSBLKUFXYINN-UHFFFAOYSA-N	7.8 × 10 ⁸ 4.0 × 10 ⁷ 3.4 × 10 ⁻⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EIPKBNO3 C ₆ H ₁₁ NO ₄ QPLZWEVCYZLTYL-UHFFFAOYSA-N	4.6 2.7 × 10 ¹ 2.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX2ONANO3 C ₆ H ₁₁ NO ₄ OZSNHPHDGAJMHG-UHFFFAOYSA-N	4.6 2.2 × 10 ¹ 2.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX2ONBNO3 C ₆ H ₁₁ NO ₄ JYVFNKYOALTNTA-UHFFFAOYSA-N	4.6 3.0 × 10 ¹ 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX3ONANO3 C ₆ H ₁₁ NO ₄ KTYGBCIWLHIEKP-UHFFFAOYSA-N	4.6 2.0 × 10 ¹ 4.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HEX3ONDNO3 C ₆ H ₁₁ NO ₄ PRTKDFINSKNZSU-UHFFFAOYSA-N	4.3 3.6 × 10 ¹ 6.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:M2BKANO3 C ₆ H ₁₁ NO ₄ NYAAKBDXIQFYDD-UHFFFAOYSA-N	5.1 2.6 × 10 ¹ 3.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MC4CODBPAN C ₆ H ₇ NO ₆ WHFHKQLMYAOVSU-UHFFFAOYSA-N	5.1 × 10 ³ 3.3 × 10 ⁴ 2.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBKANO3 C ₆ H ₁₁ NO ₄ PKJJSCYTBLEMI-UHFFFAOYSA-N	3.0 1.5 × 10 ¹ 1.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBKNO3 C ₆ H ₁₁ NO ₄ OYSBYTCKEAIMOW-UHFFFAOYSA-N	3.0 2.6 × 10 ¹ 5.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NBZQOOH C ₆ H ₅ NO ₇ NXGVPQDYDGLWQQ-UHFFFAOYSA-N	3.2 × 10 ⁹ 5.6 × 10 ⁸ 1.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C627PAN C ₇ H ₉ NO ₇ FQVTWXYWQQSSRX-UHFFFAOYSA-N	9.1 × 10 ⁵ 3.0 × 10 ⁶ 2.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7ADCPAN C ₇ H ₉ NO ₆ OFKNKTFVCSQBW-UHFFFAOYSA-N	3.5 × 10 ³ 4.3 × 10 ⁴ 8.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7DCPAN C ₇ H ₉ NO ₆ ZGBUEZLBCHGZPP-UHFFFAOYSA-N	5.5 × 10 ³ 9.6 × 10 ³ 1.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7DDCPAN C ₇ H ₉ NO ₆ WCHGYJHJZMHIAR-UHFFFAOYSA-N	4.6 × 10 ³ 1.4 × 10 ⁴ 5.5 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7PAN3 C ₇ H ₇ NO ₈ XMNXEJJPBOBVEP-UHFFFAOYSA-N	6.3 × 10 ⁸ 1.7 × 10 ⁷ 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IC7DCPAN C ₇ H ₉ NO ₆ NZLPHNCQTJFNH-UHFFFAOYSA-N	6.3 × 10 ³ 1.0 × 10 ⁴ 8.1 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC71CO C ₇ H ₇ NO ₆ CDHAVACRDDMHGZ-UHFFFAOYSA-N	3.9 × 10 ⁶ 2.5 × 10 ⁷ 1.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC71OOH C ₇ H ₉ NO ₇ CIJBWVMVCSXGACJ-UHFFFAOYSA-N	4.5 × 10 ⁸ 1.6 × 10 ⁹ 5.6 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC72OOH C ₇ H ₇ NO ₈ RYHDNZNGTJUGAD-UHFFFAOYSA-N	3.0 × 10 ¹¹ 3.6 × 10 ¹⁰ 5.8 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPTLQOOH C ₇ H ₇ NO ₇ WIZJVJIMHIROQF-UHFFFAOYSA-N	2.2 × 10 ⁹ 4.8 × 10 ⁸ 6.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5DBEPAN C ₈ H ₉ NO ₇ OYOZKJOWUFGKRQ-UHFFFAOYSA-N	2.5 × 10 ⁶ 1.1 × 10 ⁶ 9.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5EDBPAN C ₈ H ₉ NO ₇ KNPMBKOCKIUXFV-UHFFFAOYSA-N	2.5 × 10 ⁶ 1.1 × 10 ⁶ 7.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C727PAN C ₈ H ₁₁ NO ₇ WBGZRMCIPEEGH-UHFFFAOYSA-N	8.5 × 10 ⁵ 6.9 × 10 ⁵ 4.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7CODBPAN C ₈ H ₁₁ NO ₆ QVHZZCVTEAGIPK-UHFFFAOYSA-N	3.7 × 10 ³ 7.6 × 10 ³ 3.8 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C817NO3 C ₈ H ₁₃ NO ₅ ZONZWPKPCIWKRN-UHFFFAOYSA-N	3.9 × 10 ⁴ 2.2 × 10 ³ 3.8 × 10 ⁴ 3.1 × 10 ²	12000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:NMXYQOOH C ₈ H ₉ NO ₇ MDRQMTCLFWPCNU-UHFFFAOYSA-N	1.2 × 10 ⁹ 9.6 × 10 ⁷ 4.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOXYQOOH C ₈ H ₉ NO ₇ SFYCEAPRSKIFCS-UHFFFAOYSA-N	1.5 × 10 ⁹ 3.8 × 10 ⁸ 4.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPEBQOOH C ₈ H ₉ NO ₇ HZFUWULOZSGVHH-UHFFFAOYSA-N	2.0 × 10 ⁹ 2.6 × 10 ⁸ 5.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPXYQOOH C ₈ H ₉ NO ₇ LMPSHWMXIGVDOI-UHFFFAOYSA-N	1.2 × 10 ⁹ 9.3 × 10 ⁷ 2.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C816PAN C ₉ H ₁₃ NO ₆ JXXOSNUALVJMLQ-UHFFFAOYSA-N	2.3 × 10 ³ 1.4 × 10 ³ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C817PAN C ₉ H ₁₃ NO ₇ AGDIJRUEYYZKI-UHFFFAOYSA-N	6.9 × 10 ⁵ 1.6 × 10 ⁶ 3.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C827PAN C ₉ H ₁₃ NO ₇ QMDLSNSKOZAILD-UHFFFAOYSA-N	4.8 × 10 ⁵ 5.3 × 10 ⁵ 2.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C828PAN C ₉ H ₁₁ NO ₈ LCFHBKSAGMTDCX-UHFFFAOYSA-N	3.6 × 10 ⁸ 1.1 × 10 ⁷ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C88PAN C ₉ H ₁₁ NO ₇ KLGKHKJTYFCRCN-UHFFFAOYSA-N	1.7 × 10 ⁶ 1.4 × 10 ⁷ 3.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C917NO3 C ₉ H ₁₃ NO ₅ KVVWUPUMJPKRVQS-UHFFFAOYSA-N	4.3 × 10 ³ 2.5 × 10 ⁵ 2.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C923NO3 C ₉ H ₁₅ NO ₄ JEWJQSHMOKPQHI-UHFFFAOYSA-N	3.2 × 10 ¹ 6.0 2.5 × 10 ¹	11000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017)	Q Q Q	437 80, 238 80, 239
MCM:C928NO3 C ₉ H ₁₅ NO ₅ HCHMIBGRYQMLLZ-UHFFFAOYSA-N	1.2 × 10 ³ 3.2 × 10 ⁴ 6.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C96NO3 C ₉ H ₁₅ NO ₄ MMTOEOITRCIZDG-UHFFFAOYSA-N	6.6 5.0 × 10 ¹ 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C9DCNO3 C ₉ H ₁₁ NO ₅ TURIVFFHDFEFMU-UHFFFAOYSA-N	1.6 × 10 ⁴ 7.3 × 10 ⁵ 3.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C9PAN2 C ₉ H ₁₃ NO ₆ VXDDXZNSANCGN-UHFFFAOYSA-N	2.6 × 10 ³ 3.2 × 10 ³ 8.7 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NIPRBQOOH C ₉ H ₁₁ NO ₇ KGZDDJNUZZWZIJ-UHFFFAOYSA-N	1.8 × 10 ⁹ 1.8 × 10 ⁸ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NLMKAOOH C ₉ H ₁₅ NO ₆ ZOTFHCKOVMRARL-UHFFFAOYSA-N	5.0 × 10 ⁵ 8.9 × 10 ⁵ 5.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMETLQOOH C ₉ H ₁₁ NO ₇ FSVFAZAPMWXECG-UHFFFAOYSA-N	1.1 × 10 ⁹ 5.0 × 10 ⁷ 1.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOETLQOOH C ₉ H ₁₁ NO ₇ GHGZYHLEQYQZHR-UHFFFAOYSA-N	1.2 × 10 ⁹ 2.1 × 10 ⁸ 3.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINANO3 C ₉ H ₁₃ NO ₄ JEOFIBHUYPQAJL-UHFFFAOYSA-N	2.3 × 10 ¹ 2.3 × 10 ² 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINBNO3 C ₉ H ₁₃ NO ₄ QGVNTXJLRAHBMW-UHFFFAOYSA-N	2.3 × 10 ¹ 3.1 × 10 ² 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOPINCNO3 C ₉ H ₁₃ NO ₄ CLMUTFVSCXCGKI-UHFFFAOYSA-N	1.3 × 10 ¹ 8.1 × 10 ¹ 1.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPETLQOOH C ₉ H ₁₁ NO ₇ IMJMJNZTMWKOFO-UHFFFAOYSA-N	1.1 × 10 ⁹ 4.8 × 10 ⁷ 2.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NPPRBQOOH C ₉ H ₁₁ NO ₇	1.6 × 10 ⁹		Wang et al. (2017)	Q	80, 238
MMAZKJNYHBQGDL-UHFFFAOYSA-N	1.8 × 10 ⁸		Wang et al. (2017)	Q	80, 239
	1.7 × 10 ²		Wang et al. (2017)	Q	80, 240
MCM:NTM124QOOH C ₉ H ₁₁ NO ₇	8.1 × 10 ⁸		Wang et al. (2017)	Q	80, 238
ZMXXAPJGXNLYQU-UHFFFAOYSA-N	6.9 × 10 ⁷		Wang et al. (2017)	Q	80, 239
	5.3 × 10 ¹		Wang et al. (2017)	Q	80, 240
MCM:C1011NO3 C ₁₀ H ₁₇ NO ₄	5.4		Wang et al. (2017)	Q	80, 238
KLQCUGBDZZARMU-UHFFFAOYSA-N	2.5 × 10 ¹		Wang et al. (2017)	Q	80, 239
	1.0 × 10 ¹		Wang et al. (2017)	Q	80, 240
MCM:C10PAN2 C ₁₀ H ₁₅ NO ₆	2.1 × 10 ³		Wang et al. (2017)	Q	80, 238
XGWGKMXMPDAK-UHFFFAOYSA-N	2.6 × 10 ³		Wang et al. (2017)	Q	80, 239
	4.7		Wang et al. (2017)	Q	80, 240
MCM:C923PAN C ₁₀ H ₁₅ NO ₆	2.0 × 10 ³		Wang et al. (2017)	Q	80, 238
ZVYIPTRRRFMSSU-UHFFFAOYSA-N	1.0 × 10 ³		Wang et al. (2017)	Q	80, 239
	2.3		Wang et al. (2017)	Q	80, 240
MCM:C928PAN C ₁₀ H ₁₅ NO ₇	3.8 × 10 ⁵		Wang et al. (2017)	Q	80, 238
MIISGCVMOACDOR-UHFFFAOYSA-N	1.5 × 10 ⁶		Wang et al. (2017)	Q	80, 239
	2.0 × 10 ¹		Wang et al. (2017)	Q	80, 240
MCM:NC101CO C ₁₀ H ₁₅ NO ₄	1.4 × 10 ¹		Wang et al. (2017)	Q	80, 238
BCIULZBFFUODJR-UHFFFAOYSA-N	4.4 × 10 ¹		Wang et al. (2017)	Q	80, 239
	4.2 × 10 ⁻¹		Wang et al. (2017)	Q	80, 240
MCM:NC101OOH C ₁₀ H ₁₅ NO ₆	6.0 × 10 ⁵		Wang et al. (2017)	Q	80, 238
AQVSRWLWLNUXIOL-UHFFFAOYSA-N	3.4 × 10 ⁵		Wang et al. (2017)	Q	80, 239
	5.8 × 10 ³		Wang et al. (2017)	Q	80, 240
MCM:NC102OOH C ₁₀ H ₁₅ NO ₇	1.9 × 10 ⁸		Wang et al. (2017)	Q	80, 238
ZNOCNLMTXMLFU-UHFFFAOYSA-N	4.0 × 10 ⁸		Wang et al. (2017)	Q	80, 239
	4.1 × 10 ⁴		Wang et al. (2017)	Q	80, 240
MCM:C1011PAN C ₁₁ H ₁₇ NO ₆	1.9 × 10 ³		Wang et al. (2017)	Q	80, 238
PRDFPHJPDVZXHH-UHFFFAOYSA-N	2.2 × 10 ³		Wang et al. (2017)	Q	80, 239
	2.9		Wang et al. (2017)	Q	80, 240
MCM:C131NO3 C ₁₃ H ₂₁ NO ₅	2.3 × 10 ³		Wang et al. (2017)	Q	80, 238
HFRDBZMTZNPZMV-UHFFFAOYSA-N	3.5 × 10 ⁴		Wang et al. (2017)	Q	80, 239
	2.2 × 10 ³		Wang et al. (2017)	Q	80, 240
MCM:C131PAN C ₁₄ H ₂₁ NO ₇	7.3 × 10 ⁵		Wang et al. (2017)	Q	80, 238
YHMAABVAIQVHRP-UHFFFAOYSA-N	2.0 × 10 ⁶		Wang et al. (2017)	Q	80, 239
	1.3 × 10 ³		Wang et al. (2017)	Q	80, 240
MCM:C141NO3 C ₁₄ H ₂₃ NO ₄	5.9		Wang et al. (2017)	Q	80, 238
JPXQKVXALDMDKF-UHFFFAOYSA-N	3.3 × 10 ¹		Wang et al. (2017)	Q	80, 239
	3.6 × 10 ¹		Wang et al. (2017)	Q	80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NBCKOOH C ₁₄ H ₂₃ NO ₆ IMGMBKHVHTQTK-UHFFFAOYSA-N	4.8 × 10 ⁵ 4.4 × 10 ⁵ 1.5 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C141PAN C ₁₅ H ₂₃ NO ₆ PGNAVHCNSKAOHZ-UHFFFAOYSA-N	1.9 × 10 ³ 1.8 × 10 ³ 2.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4PAN10 C ₄ H ₅ NO ₈ JOAGXXIRMSWAAZ-UHFFFAOYSA-N	5.1 × 10 ⁷ 1.9 × 10 ⁷ 2.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4PAN6 C ₄ H ₅ NO ₇ QRAIBPAZBCTEOB-UHFFFAOYSA-N	8.1 × 10 ⁴ 5.4 × 10 ⁵ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO3C4NO3OH C ₄ H ₇ NO ₅ HZFDSYFRCPAXEA-UHFFFAOYSA-N	8.9 × 10 ² 3.2 × 10 ⁴ 2.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HMVKANO3 C ₄ H ₇ NO ₅ UFDPWCOBIOWDKA-UHFFFAOYSA-N	1.2 × 10 ³ 1.4 × 10 ⁴ 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HMVKNO3 C ₄ H ₇ NO ₆ NCLLRWDJHCXXDR-UHFFFAOYSA-N	3.0 × 10 ⁶ 3.5 × 10 ⁷ 2.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HNBIACET C ₄ H ₅ NO ₆ HPGBXXMJBUDRLY-UHFFFAOYSA-N	5.9 × 10 ⁵ 1.4 × 10 ⁶ 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HNMVKOH C ₄ H ₇ NO ₆ KPZZNRQGHDTQNJ-UHFFFAOYSA-N	1.1 × 10 ⁶ 6.8 × 10 ⁶ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HNMVKOOH C ₄ H ₇ NO ₇ CTKAFSDGNPEZFU-UHFFFAOYSA-N	1.8 × 10 ⁹ 2.4 × 10 ⁷ 1.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MVKNO3 C ₄ H ₇ NO ₅ SCJQQBZNBCTOQ-UHFFFAOYSA-N	2.4 × 10 ⁴ 2.0 × 10 ⁴ 4.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MVKOHANO3 C ₄ H ₇ NO ₆ DMSMZXCVMKBQGA-UHFFFAOYSA-N	6.9 × 10 ⁵ 5.5 × 10 ⁵ 1.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4MCONO3OH C ₅ H ₉ NO ₅ VRAOJUVNSLNISW-UHFFFAOYSA-N	4.8 × 10 ² 1.5 × 10 ⁴ 1.5 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C517NO3 C ₅ H ₉ NO ₅ DLLRFAPEEPVGBN-UHFFFAOYSA-N	1.6 × 10 ⁴ 1.9 × 10 ⁵ 7.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C51NO3 C ₅ H ₉ NO ₅ OMTWKQRBUUWUQB-UHFFFAOYSA-N	1.9 × 10 ⁴ 2.3 × 10 ⁵ 2.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5NO3CO4OH C ₅ H ₉ NO ₅ GEKIHWHZVPPEBT-UHFFFAOYSA-N	1.6 × 10 ⁴ 3.1 × 10 ⁵ 9.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO2OH3MPAN C ₅ H ₇ NO ₇ KOFNDQLSBTYFBZ-UHFFFAOYSA-N	4.5 × 10 ⁴ 1.6 × 10 ⁵ 6.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CO3H4PAN C ₅ H ₇ NO ₇ KVXLZPRANFUVNJ-UHFFFAOYSA-N	6.5 × 10 ⁴ 2.8 × 10 ⁵ 1.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H1C23C4PAN C ₅ H ₅ NO ₈ ZNIKVNWPMOTSJK-UHFFFAOYSA-N	1.9 × 10 ⁸ 7.4 × 10 ⁷ 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3C2C4PAN C ₅ H ₇ NO ₇ UDPFGHOTTZCMEQ-UHFFFAOYSA-N	2.8 × 10 ⁵ 2.2 × 10 ⁶ 4.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HMVKBPAN C ₅ H ₇ NO ₇ VVIGYLNPENSGX-UHFFFAOYSA-N	5.5 × 10 ⁶ 3.6 × 10 ⁶ 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INANCO C ₅ H ₈ N ₂ O ₈ IESHUNGXVKLDSS-UHFFFAOYSA-N	1.5 × 10 ⁶ 1.2 × 10 ⁶ 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INBICO C ₅ H ₉ NO ₆ ASROEBVFUUHBLI-UHFFFAOYSA-N	1.7 × 10 ⁶ 1.8 × 10 ⁷ 2.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INCCO C ₅ H ₉ NO ₆ HXWBEXHMXOGKY-UHFFFAOYSA-N	3.9 × 10 ⁵ 2.9 × 10 ⁵ 3.2 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4COMOHAN C ₆ H ₇ NO ₈ KHOZKKAVCHSHMN-UHFFFAOYSA-N	2.8 × 10 ⁷ 9.3 × 10 ⁶ 3.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4MOHOPAN C ₆ H ₉ NO ₇ LVRCIQOIMLYHB-UHFFFAOYSA-N	6.0 × 10 ⁴ 1.9 × 10 ⁵ 3.8 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C517PAN C ₆ H ₉ NO ₇ BRUHFHISVNPBN-UHFFFAOYSA-N	4.9 × 10 ⁶ 9.1 × 10 ⁶ 4.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C519PAN C ₆ H ₉ NO ₇ QFUOUYQJXVYVTOO-UHFFFAOYSA-N	4.9 × 10 ⁶ 9.6 × 10 ⁶ 3.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5045OHPAN C ₆ H ₉ NO ₇ VCYALMFEDUSLKE-UHFFFAOYSA-N	5.6 × 10 ⁴ 1.7 × 10 ⁵ 5.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C610NO3 C ₆ H ₁₁ NO ₅ KOUUCDJHLKRSEQ-UHFFFAOYSA-N	1.8 × 10 ⁴ 1.5 × 10 ⁵ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C614NO3 C ₆ H ₉ NO ₆ QPXWFZAVXNBNFW-UHFFFAOYSA-N	1.2 × 10 ⁷ 8.9 × 10 ⁶ 2.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C61NO3 C ₆ H ₁₁ NO ₅ SYDWDJOZRNKVSU-UHFFFAOYSA-N	1.8 × 10 ⁴ 1.4 × 10 ⁵ 6.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C63NO3 C ₆ H ₁₁ NO ₅ RHTCZESJRHZQFA-UHFFFAOYSA-N	1.6 × 10 ⁴ 9.8 × 10 ⁴ 3.1 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C64NO3 C ₆ H ₁₁ NO ₅ IYYWGRLOLOMZAZ-UHFFFAOYSA-N	1.1 × 10 ⁴ 8.3 × 10 ⁴ 1.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CONO34OH C ₆ H ₁₁ NO ₅ OLTUAQAPCXKDOJ-UHFFFAOYSA-N	1.8 × 10 ⁴ 1.6 × 10 ⁴ 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6NO3CO4OH C ₆ H ₁₁ NO ₅ WWUUDQUMERSNEM-UHFFFAOYSA-N	1.3 × 10 ⁴ 1.8 × 10 ⁵ 4.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6NO3CO5OH C ₆ H ₁₁ NO ₅ IZBQRALUURUKJG-UHFFFAOYSA-N	1.4 × 10 ⁴ 8.1 × 10 ⁴ 1.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6PAN9 C ₆ H ₉ NO ₇ NJFFIXOWLQJQIZ-UHFFFAOYSA-N	1.6 × 10 ⁵ 5.1 × 10 ⁵ 6.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MIBKAOHNO3 C ₆ H ₁₁ NO ₅ YCHDRSSXCQCYSO-UHFFFAOYSA-N	1.1 × 10 ⁴ 6.3 × 10 ⁴ 1.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C61CPAN C ₇ H ₉ NO ₈ FWCVDVIZOKXUGJ-UHFFFAOYSA-N	3.1 × 10 ⁷ 1.2 × 10 ⁷ 1.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C62CPAN C ₇ H ₉ NO ₈ LHOMRHSYFWOPZ-UHFFFAOYSA-N	3.6 × 10 ⁷ 1.3 × 10 ⁷ 7.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C712NO3 C ₇ H ₁₃ NO ₅ RPPGGLBPWJPSSV-UHFFFAOYSA-N	1.0 × 10 ⁴ 5.4 × 10 ⁴ 7.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C719NO3 C ₇ H ₁₁ NO ₆ IXGSPJVVHFTXPK-UHFFFAOYSA-N	1.0 × 10 ⁸ 4.8 × 10 ⁹ 2.8 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C72NO3 C ₇ H ₁₃ NO ₅ MWIGFUUCEWIBB-UHFFFAOYSA-N	1.6 × 10 ⁴ 6.5 × 10 ⁴ 2.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C77NO3 C ₇ H ₁₃ NO ₅ KZCKPUAVFWISTB-UHFFFAOYSA-N	1.0 × 10 ⁴ 5.0 × 10 ⁴ 7.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3C25C6PAN C ₇ H ₉ NO ₈ GUUOCMMOMFUPSI-UHFFFAOYSA-N	1.4 × 10 ⁸ 6.8 × 10 ⁸ 1.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6MOHCOPAN C ₈ H ₉ NO ₈ PDGRPGJWHYLYKK-UHFFFAOYSA-N	9.6 × 10 ⁷ 1.1 × 10 ⁹ 6.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7CO2OHPAN C ₈ H ₉ NO ₈ MICPXOSCTLYWLE-UHFFFAOYSA-N	9.6 × 10 ⁷ 1.1 × 10 ⁹ 4.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C829NO3 C ₈ H ₁₃ NO ₆ CDMYSTRAPZWSHD-UHFFFAOYSA-N	4.2 × 10 ⁶ 1.3 × 10 ⁶ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C82NO3 C ₈ H ₁₅ NO ₅ HUKHBWOLGKLCRF-UHFFFAOYSA-N	1.3 × 10 ⁴ 4.1 × 10 ⁴ 7.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6E02OHPAN C ₉ H ₁₁ NO ₈ YGQCKHJQVYPZE-UHFFFAOYSA-N	7.6 × 10 ⁷ 6.9 × 10 ⁸ 3.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7MJPPAN C ₉ H ₁₁ NO ₈ XJDHGIQDEMCTOX-UHFFFAOYSA-N	7.6 × 10 ⁷ 6.5 × 10 ⁸ 8.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C7MOHCOPAN C ₉ H ₁₁ NO ₈ SORJSZWEJGTGJA-UHFFFAOYSA-N	5.5 × 10 ⁷ 1.7 × 10 ⁹ 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C927NO3 C ₉ H ₁₅ NO ₅ RKOGSSYMWVPWJW-UHFFFAOYSA-N	1.0 × 10 ⁴ 1.1 × 10 ⁵ 2.9 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C93NO3 C ₉ H ₁₇ NO ₅ OEOAFFOONSSLD-UHFFFAOYSA-N	1.0 × 10 ⁴ 3.4 × 10 ⁴ 5.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C98NO3 C ₉ H ₁₅ NO ₆ PQCIVFJRBSNULM-UHFFFAOYSA-N	4.0 × 10 ⁶ 5.6 × 10 ⁶ 1.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMKANO3 C ₉ H ₁₅ NO ₅ OCTKYXAOGSBDZD-UHFFFAOYSA-N	2.3 × 10 ⁴ 2.2 × 10 ⁵ 1.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LMKBNO3 C ₉ H ₁₅ NO ₅ MVWAQQXSBOJSHS-UHFFFAOYSA-N	2.3 × 10 ⁴ 2.6 × 10 ⁵ 2.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C103NO3 C ₁₀ H ₁₉ NO ₅ NTZGBOUJHFYKIP-UHFFFAOYSA-N	8.3 × 10 ³ 3.0 × 10 ⁴ 4.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C920PAN C ₁₀ H ₁₅ NO ₇ JPFVAVYDZBUWDH-UHFFFAOYSA-N	3.1 × 10 ⁵ 5.9 × 10 ⁵ 1.9 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C113NO3 C ₁₁ H ₂₁ NO ₅ XIMKJTRLGBXFHP-UHFFFAOYSA-N	7.4 × 10 ³ 2.8 × 10 ⁴ 9.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C123NO3 C ₁₂ H ₂₃ NO ₅ MVMJPHZGIRWSLB-UHFFFAOYSA-N	6.0 × 10 ³ 2.5 × 10 ⁴ 3.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C133NO3 C ₁₃ H ₂₁ NO ₇ ODJFBKGDWLDLDF-UHFFFAOYSA-N	1.2 × 10 ⁹ 5.1 × 10 ⁸ 1.8 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCKANO3 C ₁₄ H ₂₃ NO ₅ YULYIMPPXZFYHU-UHFFFAOYSA-N	2.5 × 10 ⁴ 6.0 × 10 ⁵ 1.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCKBNO3 C ₁₄ H ₂₃ NO ₅ VHSFPWDPGIQBJY-UHFFFAOYSA-N	2.5 × 10 ⁴ 1.0 × 10 ⁶ 1.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C142NO3 C ₁₄ H ₂₃ NO ₅ AZGAJOUTVTVYWD-UHFFFAOYSA-N	1.1 × 10 ⁴ 1.9 × 10 ⁵ 1.4 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C143NO3 C ₁₄ H ₂₃ NO ₆ NNHMCYUMVAAOGX-UHFFFAOYSA-N	3.4 × 10 ⁶ 5.0 × 10 ⁷ 1.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMGLYOX C ₃ H ₃ NO ₅ OPXOPVKLHYDIMX-UHFFFAOYSA-N	6.0 × 10 ³ 4.1 × 10 ³ 3.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C312COPAN C ₄ H ₃ NO ₇ RRBQALAYWSLXKO-UHFFFAOYSA-N	2.2 × 10 ⁶ 2.8 × 10 ⁵ 3.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4CONO3CO C ₄ H ₅ NO ₅ RXLGSPPVWHCFU-UHFFFAOYSA-N	6.5 × 10 ³ 8.3 × 10 ³ 2.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NCO23CHO C ₄ H ₃ NO ₆ VZDGBDWMYVQZKU-UHFFFAOYSA-N	3.6 × 10 ⁶ 9.8 × 10 ⁵ 1.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4CO2DBPAN C ₅ H ₃ NO ₇ BTFAHSUMXINULH-UHFFFAOYSA-N	6.9 × 10 ⁶ 2.5 × 10 ⁶ 4.9 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4M22CONO3 C ₅ H ₇ NO ₅ FQGALMVJSZOCNN-UHFFFAOYSA-N	3.5 × 10 ³ 1.6 × 10 ³ 5.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C512NO3 C ₅ H ₇ NO ₅ OAONLGDTCNNTSO-UHFFFAOYSA-N	4.4 × 10 ³ 2.0 × 10 ⁴ 8.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOC3COPAN C ₅ H ₅ NO ₇ MEMYBUJIAQZMF-UHFFFAOYSA-N	1.7 × 10 ⁶ 3.8 × 10 ⁵ 9.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INANCOCHO C ₅ H ₆ N ₂ O ₈ ALBXLNVOOLMBSV-UHFFFAOYSA-N	4.0 × 10 ⁵ 2.6 × 10 ⁵ 1.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C511PAN C ₆ H ₇ NO ₇ ADLPISUKTIUEBV-UHFFFAOYSA-N	1.6 × 10 ⁶ 8.9 × 10 ⁵ 8.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5124COPAN C ₆ H ₅ NO ₈ DHCQJQARWDKNBK-UHFFFAOYSA-N	1.0 × 10 ⁹ 1.3 × 10 ⁷ 2.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C512PAN C ₆ H ₇ NO ₇ OLSCQSOEJBIJSE-UHFFFAOYSA-N	1.4 × 10 ⁶ 1.1 × 10 ⁶ 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C515PAN C ₆ H ₅ NO ₈ QIUJGMPSWRWOQB-UHFFFAOYSA-N	1.0 × 10 ⁹ 3.0 × 10 ⁷ 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CO2DBPAN C ₆ H ₅ NO ₇ LCULQJDFGZNNJC-UHFFFAOYSA-N	4.7 × 10 ⁶ 2.1 × 10 ⁶ 2.8 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5DBC02PAN C ₆ H ₅ NO ₇ QMYFVWHUFARKUQS-UHFFFAOYSA-N	4.7 × 10 ⁶ 2.1 × 10 ⁶ 3.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C626NO3 C ₆ H ₉ NO ₅ OCVBVQJPDKPHST-UHFFFAOYSA-N	4.0 × 10 ³ 5.1 × 10 ⁴ 1.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6COCHOPAN C ₆ H ₇ NO ₇ YGLXJUWEIHLTAS-UHFFFAOYSA-N	1.4 × 10 ⁶ 2.6 × 10 ⁶ 8.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4DBM2PAN C ₇ H ₇ NO ₇ LSIPSXVETZQMKN-UHFFFAOYSA-N	3.0 × 10 ⁶ 3.0 × 10 ⁶ 5.4 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C617PAN C ₇ H ₉ NO ₇ PZZHENCPCXAAMZ-UHFFFAOYSA-N	8.7 × 10 ⁵ 9.6 × 10 ⁴ 6.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C618PAN C ₇ H ₉ NO ₇ TUYXNXVHKYICNT-UHFFFAOYSA-N	8.7 × 10 ⁵ 7.8 × 10 ⁴ 5.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C626PAN C ₇ H ₉ NO ₇ JTOZIQOFBRFINW-UHFFFAOYSA-N	1.3 × 10 ⁶ 2.0 × 10 ⁶ 1.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C717NO3 C ₇ H ₉ NO ₆ YBNFZXHUOLIKA-UHFFFAOYSA-N	2.4 × 10 ⁶ 8.0 × 10 ⁵ 2.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C718NO3 C ₇ H ₁₁ NO ₅ WMUFPKACUPNARK-UHFFFAOYSA-N	2.2 × 10 ³ 3.5 × 10 ³ 3.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C731NO3 C ₇ H ₁₁ NO ₅ WJSMASANGLXUCK-UHFFFAOYSA-N	3.2 × 10 ³ 4.5 × 10 ⁴ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C7CO2DBPAN C ₇ H ₇ NO ₇ FJSOTAPJABDDID-UHFFFAOYSA-N	3.7 × 10 ⁶ 1.2 × 10 ⁶ 2.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC61CO3H C ₇ H ₇ NO ₉ RCADYDMYBSYTRH-UHFFFAOYSA-N	1.7 × 10 ¹² 6.2 × 10 ⁸ 6.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC6PAN1 C ₇ H ₆ N ₂ O ₁₁ LNWBMFOWVOYBBT-UHFFFAOYSA-N	6.6 × 10 ¹⁰ 2.4 × 10 ⁸ 2.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4DBMEPAN C ₈ H ₉ NO ₇ JDCDQJWNYIFIQT-UHFFFAOYSA-N	2.5 × 10 ⁶ 1.6 × 10 ⁶ 3.5 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C718PAN C ₈ H ₁₁ NO ₇ IZJQRCOOVGKQNV-UHFFFAOYSA-N	7.1 × 10 ⁵ 2.3 × 10 ⁵ 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C731PAN C ₈ H ₁₁ NO ₇ BCDBCVPVNWUJZK-UHFFFAOYSA-N	1.1 × 10 ⁶ 1.7 × 10 ⁶ 4.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8CO2DBPAN C ₈ H ₉ NO ₇ IPAWZRQBQOFFJA-UHFFFAOYSA-N	3.4 × 10 ⁶ 6.9 × 10 ⁵ 1.4 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8DBC02PAN C ₈ H ₉ NO ₇ ZDCAPCKMKJMPHV-UHFFFAOYSA-N	3.5 × 10 ⁶ 8.0 × 10 ⁵ 1.0 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C87PAN C ₉ H ₁₁ NO ₈ KZPDHKTZKNFJF-UHFFFAOYSA-N	6.0 × 10 ⁸ 2.8 × 10 ⁷ 7.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C915NO3 C ₉ H ₁₃ NO ₅ CFOCUCLSGKHNEG-UHFFFAOYSA-N	5.9 × 10 ³ 3.2 × 10 ⁴ 5.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C916NO3 C ₉ H ₁₃ NO ₆ VOXWVUUGDBUCW-UHFFFAOYSA-N	1.5 × 10 ⁶ 1.1 × 10 ⁶ 4.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C918NO3 C ₉ H ₁₃ NO ₅ AMOFMDWAGAYJCS-UHFFFAOYSA-N	5.9 × 10 ³ 5.6 × 10 ³ 5.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C919NO3 C ₉ H ₁₃ NO ₆ DCZHYWWXGROBKB-UHFFFAOYSA-N	1.5 × 10 ⁶ 1.0 × 10 ⁶ 8.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C930NO3 C ₉ H ₁₃ NO ₆ DDSHYSHFPVKRPI-UHFFFAOYSA-N	1.1 × 10 ⁶ 5.6 × 10 ⁵ 1.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1010NO3 C ₁₀ H ₁₅ NO ₅ GVXIDPZAUWXFPR-UHFFFAOYSA-N	3.0 × 10 ³ 8.5 × 10 ³ 4.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1012NO3 C ₁₀ H ₁₇ NO ₅ XKIZNDJDSYDNBL-UHFFFAOYSA-N	1.5 × 10 ³ 8.1 × 10 ³ 2.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C106NO3 C ₁₀ H ₁₅ NO ₆ DSEFLMWIAZKUSJ-UHFFFAOYSA-N	1.0 × 10 ⁶ 7.3 × 10 ⁵ 4.9 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C108NO3 C ₁₀ H ₁₅ NO ₆ MVSLQVXNIWKHQS-UHFFFAOYSA-N	1.0 × 10 ⁶ 2.2 × 10 ⁵ 6.6 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NLIMALOOH C ₁₀ H ₁₇ NO ₇ NTLQQKIUYMIZPN-UHFFFAOYSA-N	1.1 × 10 ⁸ 3.4 × 10 ⁷ 2.8 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PINALNO3 C ₁₀ H ₁₅ NO ₅ FNTMCASBPWQXGD-UHFFFAOYSA-N	3.4 × 10 ³ 1.6 × 10 ⁴ 3.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C116NO3 C ₁₁ H ₁₇ NO ₅ AWSJYNTZBDMUKU-UHFFFAOYSA-N	4.3 × 10 ³ 3.7 × 10 ⁴ 3.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C116PAN C ₁₂ H ₁₇ NO ₇ IHJLCJPVFFZKMO-UHFFFAOYSA-N	1.4 × 10 ⁶ 2.3 × 10 ⁶ 1.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1210NO3 C ₁₂ H ₁₉ NO ₅ IJHSXQWUSMROBJ-UHFFFAOYSA-N	3.4 × 10 ³ 4.1 × 10 ⁴ 7.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1210PAN C ₁₃ H ₁₉ NO ₇ PWZZEUPXUFAYML-UHFFFAOYSA-N	1.1 × 10 ⁶ 2.0 × 10 ⁶ 1.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBCALOOH C ₁₅ H ₂₅ NO ₇ TUYLAULXHOKFAG-UHFFFAOYSA-N	1.1 × 10 ⁸ 8.5 × 10 ⁷ 7.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H3NCO2CHO C ₄ H ₅ NO ₆ VCTGKRYJUDQYFK-UHFFFAOYSA-N	1.8 × 10 ⁵ 3.6 × 10 ⁶ 3.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:HMVKNGLYOX C ₄ H ₅ NO ₆ VDDXFUNTPSDTJP-UHFFFAOYSA-N	2.2 × 10 ⁷ 9.3 × 10 ⁵ 9.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1GLYOX C ₅ H ₇ NO ₆ NAZCWKUVRXJZPX-UHFFFAOYSA-N	1.2 × 10 ⁷ 3.1 × 10 ⁵ 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INCGLYOX C ₅ H ₇ NO ₆ DGCXGPGOOTUCCO-UHFFFAOYSA-N	6.2 × 10 ⁵ 4.8 × 10 ⁵ 3.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5CO2OHPAN C ₆ H ₅ NO ₈ MLSWEUDOYVEBFO-UHFFFAOYSA-N	2.1 × 10 ⁸ 1.7 × 10 ⁹ 7.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C6CO2OHPAN C ₇ H ₇ NO ₈ GITGCCFTTYJWBUT-UHFFFAOYSA-N	1.4 × 10 ⁸ 1.4 × 10 ⁹ 4.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5M2OHPAN C ₈ H ₉ NO ₈ MJYXUWCXTAYXTN-UHFFFAOYSA-N	9.6 × 10 ⁷ 2.0 × 10 ⁹ 7.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C7OHC2PAN C ₈ H ₉ NO ₈ WKRTWLVIYFYGIB-UHFFFAOYSA-N	1.1 × 10 ⁸ 8.3 × 10 ⁸ 1.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C5MEJPAN C ₉ H ₁₁ NO ₈ KTOTUVLJTIGMKC-UHFFFAOYSA-N	7.6 × 10 ⁷ 1.2 × 10 ⁹ 5.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8CO2OHPAN C ₉ H ₁₁ NO ₈ UEMVFSSSLHUULZ-UHFFFAOYSA-N	1.0 × 10 ⁸ 6.6 × 10 ⁸ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C8OHC2PAN C ₉ H ₁₁ NO ₈ GUTUSTBTBKWXHL-UHFFFAOYSA-N	9.1 × 10 ⁷ 5.8 × 10 ⁸ 1.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:LIMALNO3 C ₁₀ H ₁₇ NO ₆ FDBNDHKWTKEDSC-UHFFFAOYSA-N	1.3 × 10 ⁸ 5.3 × 10 ⁶ 3.2 × 10 ⁷ 3.1 × 10 ⁴	23000	Wieser et al. (2023) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q Q	437 80, 238 80, 239 80, 240
MCM:NLIMALOH C ₁₀ H ₁₇ NO ₆ NNOYJMJCUDKQLW-UHFFFAOYSA-N	5.3 × 10 ⁶ 4.8 × 10 ⁷ 2.7 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C117NO3 C ₁₁ H ₁₇ NO ₆ VRGCJRKSASUXOA-UHFFFAOYSA-N	7.4 × 10 ⁶ 1.0 × 10 ⁷ 2.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C118NO3 C ₁₁ H ₁₇ NO ₇ RHEKUCZWBZRVBN-UHFFFAOYSA-N	2.2 × 10 ⁹ 6.5 × 10 ⁸ 3.2 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1215NO3 C ₁₂ H ₁₉ NO ₇ HIFZNEWSKKHKQF-UHFFFAOYSA-N	1.8 × 10 ⁹ 1.1 × 10 ¹⁰ 2.6 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C128NO3 C ₁₂ H ₁₉ NO ₆ XVMHBNQZULJJQH-UHFFFAOYSA-N	6.5 × 10 ⁶ 5.3 × 10 ⁷ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1312NO3 C ₁₃ H ₂₁ NO ₆ LCWPKTPKZZROTf-UHFFFAOYSA-N	5.0 × 10 ⁶ 1.4 × 10 ⁸ 3.2 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCALNO3 C ₁₅ H ₂₅ NO ₆ KJHBLMRUHUAACD-UHFFFAOYSA-N	4.9 × 10 ⁶ 5.3 × 10 ⁷ 8.7 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBCALOH C ₁₅ H ₂₅ NO ₆ YUOPYTDNMDNILJ-UHFFFAOYSA-N	4.9 × 10 ⁶ 6.2 × 10 ⁷ 6.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NO3CH2CO2H C ₂ H ₃ NO ₅ VHOVOPOBBVJMEP-UHFFFAOYSA-N	1.6 × 10 ³ 8.3 × 10 ⁴ 1.7 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRNO3CO2H C ₃ H ₅ NO ₅ DVOPCQDTEPKYKW-UHFFFAOYSA-N	1.5 × 10 ³ 9.1 × 10 ³ 7.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MPRNO3CO2H C ₄ H ₇ NO ₅ MSBKTJKUKRRTZO-UHFFFAOYSA-N	8.3 × 10 ² 3.3 × 10 ³ 3.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC3CO2H C ₄ H ₅ NO ₅ IYBHCPMQXJSPPT-UHFFFAOYSA-N	4.8 × 10 ³ 1.4 × 10 ⁴ 4.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C3MNO3CO2H C ₅ H ₉ NO ₅ CCKPHGGNTPAJHG-UHFFFAOYSA-N	1.1 × 10 ³ 2.2 × 10 ³ 2.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C43NO3CO2H C ₅ H ₉ NO ₅ PAJLSJNKCRUQAA-UHFFFAOYSA-N	6.8 × 10 ² 1.4 × 10 ³ 2.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C4NO3CO2H C ₅ H ₉ NO ₅ LHOHBJOUNVJDSQ-UHFFFAOYSA-N	9.8 × 10 ² 2.0 × 10 ³ 2.7 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NC4CO2H	3.2×10^3		Wang et al. (2017)	Q	80, 238
C ₅ H ₇ NO ₅	9.6×10^3		Wang et al. (2017)	Q	80, 239
ZKTRJZJYWMAEEY-UHFFFAOYSA-N	7.3×10^1		Wang et al. (2017)	Q	80, 240
MCM:C65NO3CO2H	8.7×10^2		Wang et al. (2017)	Q	80, 238
C ₆ H ₁₁ NO ₅	1.1×10^3		Wang et al. (2017)	Q	80, 239
JEDGAPUZBUOYQF-UHFFFAOYSA-N	2.5×10^1		Wang et al. (2017)	Q	80, 240
MCM:C721PAN	5.6×10^5		Wang et al. (2017)	Q	80, 238
C ₈ H ₁₁ NO ₇	4.3×10^6		Wang et al. (2017)	Q	80, 239
OMUZIQDFMVGNTC-UHFFFAOYSA-N	6.3×10^1		Wang et al. (2017)	Q	80, 240
MCM:C811NO3	1.5×10^3		Wang et al. (2017)	Q	80, 238
C ₈ H ₁₃ NO ₅	1.7×10^4		Wang et al. (2017)	Q	80, 239
WYXUZPCNBFFDRO-UHFFFAOYSA-N	5.6×10^2		Wang et al. (2017)	Q	80, 240
MCM:C823NO3	1.3×10^3		Wang et al. (2017)	Q	80, 238
C ₈ H ₁₃ NO ₅	2.2×10^4		Wang et al. (2017)	Q	80, 239
QAJOXMTYFQHPC-UHFFFAOYSA-N	4.8×10^2		Wang et al. (2017)	Q	80, 240
MCM:C811PAN	4.7×10^5		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₃ NO ₇	3.1×10^6		Wang et al. (2017)	Q	80, 239
BOYXRVFXXWMBNIT-UHFFFAOYSA-N	3.5×10^2		Wang et al. (2017)	Q	80, 240
MCM:C823PAN	4.2×10^5		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₃ NO ₇	1.3×10^6		Wang et al. (2017)	Q	80, 239
GRHNTSHNCZZYLE-UHFFFAOYSA-N	2.6×10^2		Wang et al. (2017)	Q	80, 240
MCM:C137NO3	1.3×10^3		Wang et al. (2017)	Q	80, 238
C ₁₃ H ₂₁ NO ₅	3.8×10^4		Wang et al. (2017)	Q	80, 239
CGGOUXQAADNZJX-UHFFFAOYSA-N	2.5×10^3		Wang et al. (2017)	Q	80, 240
MCM:C137PAN	4.6×10^5		Wang et al. (2017)	Q	80, 238
C ₁₄ H ₂₁ NO ₇	2.5×10^6		Wang et al. (2017)	Q	80, 239
KJDMPPVAHMJBAAO-UHFFFAOYSA-N	9.1×10^2		Wang et al. (2017)	Q	80, 240
MCM:MACRNBCO2H	1.5×10^5		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₆	2.6×10^6		Wang et al. (2017)	Q	80, 239
WQOIEXBGIWRREH-UHFFFAOYSA-N	3.6×10^3		Wang et al. (2017)	Q	80, 240
MCM:MACRNCO2H	3.0×10^6		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₆	8.5×10^5		Wang et al. (2017)	Q	80, 239
GPIMHHNLCYMAO-UHFFFAOYSA-N	5.1×10^3		Wang et al. (2017)	Q	80, 240
MCM:C57NO3CO2H	2.8×10^9		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₇	1.6×10^8		Wang et al. (2017)	Q	80, 239
VNPCVOYEGJTTSH-UHFFFAOYSA-N	2.3×10^5		Wang et al. (2017)	Q	80, 240
MCM:C58NO3CO2H	4.1×10^8		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₇	5.0×10^8		Wang et al. (2017)	Q	80, 239
QOEJXJLKIMUJIJ-UHFFFAOYSA-N	1.0×10^4		Wang et al. (2017)	Q	80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:INAHCO2H C ₅ H ₉ NO ₇ KDGUUBLLRPAORR-UHFFFAOYSA-N	1.4 × 10 ⁸ 1.7 × 10 ⁹ 5.0 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INAHPCO2H C ₅ H ₉ NO ₈ CHIBIMSWIBBRD-UHFFFAOYSA-N	2.3 × 10 ¹¹ 2.5 × 10 ⁹ 1.6 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INANCO2H C ₅ H ₈ N ₂ O ₉ QEPBKMYMBRWSSY-UHFFFAOYSA-N	3.6 × 10 ⁸ 3.6 × 10 ⁷ 4.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1HPCO2H C ₅ H ₉ NO ₈ XWZUZABUMCCUCE-UHFFFAOYSA-N	2.0 × 10 ¹¹ 2.9 × 10 ⁸ 1.8 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1NACO2H C ₅ H ₈ N ₂ O ₉ FONBWUWRCYCPB-UHFFFAOYSA-N	3.0 × 10 ⁸ 5.1 × 10 ⁶ 1.8 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INB1NBCO2H C ₅ H ₈ N ₂ O ₉ YGORAHXKXOIMV-UHFFFAOYSA-N	3.0 × 10 ⁸ 7.3 × 10 ⁶ 2.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INCNCO2H C ₅ H ₈ N ₂ O ₉ LXTUVHDUSAOJOD-UHFFFAOYSA-N	3.6 × 10 ⁸ 2.0 × 10 ⁷ 1.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C139NO3 C ₁₃ H ₂₁ NO ₇ UFNZJLDHNJULFY-UHFFFAOYSA-N	6.6 × 10 ⁷ 1.9 × 10 ⁸ 6.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CONM2CO2H C ₄ H ₅ NO ₆ LTGNKSWVEYSUMY-UHFFFAOYSA-N	7.4 × 10 ⁵ 8.3 × 10 ⁴ 3.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMALNACO2H C ₅ H ₇ NO ₇ REHIBMNEJUPYOU-UHFFFAOYSA-N	1.2 × 10 ⁸ 4.5 × 10 ⁷ 6.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMALNBCO2H C ₅ H ₇ NO ₇ RAMGTVAYJVLLRG-UHFFFAOYSA-N	1.2 × 10 ⁸ 1.9 × 10 ⁷ 5.9 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:INANCOCO2H C ₅ H ₆ N ₂ O ₉ XEVMEFHPLZUFAK-UHFFFAOYSA-N	5.8 × 10 ⁷ 8.5 × 10 ⁶ 6.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C732NO3 C ₇ H ₁₁ NO ₆ SXYZBZXZNRVERD-UHFFFAOYSA-N	4.7 × 10 ⁵ 3.7 × 10 ⁷ 4.9 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C732PAN C ₈ H ₁₁ NO ₈ WNUKRJOERGBBRT-UHFFFAOYSA-N	1.7×10 ⁸ 1.7×10 ⁹ 2.0×10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1211NO3 C ₁₂ H ₁₉ NO ₆ DQVGSELEPUBSS-UHFFFAOYSA-N	5.1×10 ⁵ 5.6×10 ⁷ 2.9×10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1211PAN C ₁₃ H ₁₉ NO ₈ IROGWMVYBREROI-UHFFFAOYSA-N	1.6×10 ⁸ 4.2×10 ⁹ 9.8×10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C813NO3 C ₈ H ₁₃ NO ₇ GYZVFQOTJWTVBE-UHFFFAOYSA-N	8.5×10 ⁸ 4.6×10 ⁷ 7.1×10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1212NO3 C ₁₂ H ₁₉ NO ₈ NTNWJSADTNTFHH-UHFFFAOYSA-N	2.3×10 ¹⁰ 1.3×10 ¹⁰ 3.0×10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1213NO3 C ₁₂ H ₁₉ NO ₈ FRAJAIDKFGOMCR-UHFFFAOYSA-N	2.6×10 ¹¹ 1.8×10 ¹¹ 3.6×10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1310NO3 C ₁₃ H ₂₁ NO ₇ YNRLOWIUKIUEHR-UHFFFAOYSA-N	7.3×10 ⁸ 1.4×10 ¹⁰ 3.0×10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C151NO3 C ₁₅ H ₂₅ NO ₇ BHPYCCPMXIBJRO-UHFFFAOYSA-N	7.4×10 ⁸ 2.6×10 ¹⁰ 8.7×10 ⁸		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOOCH2NO3 C ₂ H ₃ NO ₅ OAQKKIQQLJUJT-UHFFFAOYSA-N	5.8 1.4×10 ¹ 2.3×10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOOMPAN C ₃ H ₃ NO ₇ XZTQWYQUABOKPG-UHFFFAOYSA-N	1.8×10 ³ 1.6×10 ³ 1.9×10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETHFORMNO3 C ₃ H ₅ NO ₅ DOXRBP LNMOIQPG-UHFFFAOYSA-N	5.4 3.5 1.6×10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METACETNO3 C ₃ H ₅ NO ₅ HRSAJZJM UADCNM-UHFFFAOYSA-N	3.9 1.9×10 ¹ 3.6×10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMCFNO3 C ₃ H ₃ NO ₇ IFMSYUVMGRDEM-UHFFFAOYSA-N	1.8×10 ³ 1.1×10 ⁴ 7.3×10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ACEC2H4NO3	3.2		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₅	2.5×10^1		Wang et al. (2017)	Q	80, 239
QOXSFWPQUXLCP1-UHFFFAOYSA-N	9.8×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:ACETMEPAN	1.2×10^3		Wang et al. (2017)	Q	80, 238
C ₄ H ₅ NO ₇	1.8×10^3		Wang et al. (2017)	Q	80, 239
QMSGSFOWAUFKPL-UHFFFAOYSA-N	1.7×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:COO2C3PAN	1.2×10^3		Wang et al. (2017)	Q	80, 238
C ₄ H ₅ NO ₇	1.6×10^3		Wang et al. (2017)	Q	80, 239
YQMLKDOXYNVNTM-UHFFFAOYSA-N	7.1×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:ETACETNO3	3.6		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₅	3.5		Wang et al. (2017)	Q	80, 239
KORDSAOMZNGUAL-UHFFFAOYSA-N	2.4×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:IPRFORMNO3	3.0		Wang et al. (2017)	Q	80, 238
C ₄ H ₇ NO ₅	6.9×10^{-1}		Wang et al. (2017)	Q	80, 239
DZSICYNSKFSRMV-UHFFFAOYSA-N	1.8×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:NBZFUOOH	2.2×10^8		Wang et al. (2017)	Q	80, 238
C ₄ H ₅ NO ₇	3.0×10^6		Wang et al. (2017)	Q	80, 239
TXWHLSUKLWEERR-UHFFFAOYSA-N	2.5×10^3		Wang et al. (2017)	Q	80, 240
MCM:ACCOMEPAN	5.3×10^4		Wang et al. (2017)	Q	80, 238
C ₅ H ₅ NO ₈	5.1×10^5		Wang et al. (2017)	Q	80, 239
ZQOVYYMCAFZVPL-UHFFFAOYSA-N	1.9		Wang et al. (2017)	Q	80, 240
MCM:ACETC2PAN	1.0×10^3		Wang et al. (2017)	Q	80, 238
C ₅ H ₇ NO ₇	2.1×10^3		Wang et al. (2017)	Q	80, 239
VMVPPLVFXDAZML-UHFFFAOYSA-N	6.5×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:COO2C4PAN	1.0×10^3		Wang et al. (2017)	Q	80, 238
C ₅ H ₇ NO ₇	1.7×10^3		Wang et al. (2017)	Q	80, 239
GBAXNZCSCJEGAE-UHFFFAOYSA-N	1.6×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:IPRACBNO3	2.8		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₅	8.1		Wang et al. (2017)	Q	80, 239
ZEVPCUWRFCOHL-UHFFFAOYSA-N	3.4×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:IPRACBPAN	1.1×10^3		Wang et al. (2017)	Q	80, 238
C ₅ H ₇ NO ₇	3.9×10^2		Wang et al. (2017)	Q	80, 239
UJCZQTHKWBYHPW-UHFFFAOYSA-N	2.2×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:IPRACNO3	2.0		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₅	8.0×10^{-1}		Wang et al. (2017)	Q	80, 239
JAQKAPGOMZJVBI-UHFFFAOYSA-N	2.2×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:MTBEAALNO3	2.7		Wang et al. (2017)	Q	80, 238
C ₅ H ₉ NO ₅	2.5		Wang et al. (2017)	Q	80, 239
NIMOOIUOXYQIIM-UHFFFAOYSA-N	1.4×10^{-1}		Wang et al. (2017)	Q	80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MTBEALPAN C ₅ H ₇ NO ₇ WKTKTTPKCZOXAQ-UHFFFAOYSA-N	9.6 × 10 ² 6.5 × 10 ¹ 1.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPRACANO3 C ₅ H ₉ NO ₅ FPQZKAXTSOKJRB-UHFFFAOYSA-N	2.8 8.1 3.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPRACBNO3 C ₅ H ₉ NO ₅ HTKMYQNNJMTEJQ-UHFFFAOYSA-N	2.8 1.9 1.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPRACCNO3 C ₅ H ₉ NO ₅ PSJLJILPBUIXRJ-UHFFFAOYSA-N	2.8 1.5 × 10 ¹ 3.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPXYFUOOH C ₅ H ₇ NO ₇ ARRSNVNVYKUGFK-UHFFFAOYSA-N	1.2 × 10 ⁸ 8.9 × 10 ⁵ 5.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NTLFUOOH C ₅ H ₇ NO ₇ OAXQEILKHMZHNH-UHFFFAOYSA-N	2.0 × 10 ⁸ 2.2 × 10 ⁶ 1.1 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MCOOTBNO3 C ₆ H ₁₁ NO ₅ BCWPDUXSEGSVPT-UHFFFAOYSA-N	1.6 2.9 1.2 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUACANO3 C ₆ H ₁₁ NO ₅ GNPRUWODPALWHJ-UHFFFAOYSA-N	2.6 6.9 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUACBNO3 C ₆ H ₁₁ NO ₅ UFOXFUDLAIUTHC-UHFFFAOYSA-N	2.6 5.0 4.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBUACCNO3 C ₆ H ₁₁ NO ₅ PYXJHVBEHHCABK-UHFFFAOYSA-N	2.6 1.4 1.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NDMMALYOOH C ₆ H ₇ NO ₈ RZSLUQVSVWAZFJ-UHFFFAOYSA-N	2.2 × 10 ¹¹ 9.8 × 10 ⁷ 2.5 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NEBFUOOH C ₆ H ₉ NO ₇ CZSCMTWZZQSKMX-UHFFFAOYSA-N	1.8 × 10 ⁸ 1.4 × 10 ⁶ 9.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMXYFUOOH C ₆ H ₉ NO ₇ URYSYTGABCBCDM-UHFFFAOYSA-N	1.1 × 10 ⁸ 4.9 × 10 ⁵ 6.3 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NOXYFUOOH C ₆ H ₉ NO ₇ CPPAIMSHWPDUBG-UHFFFAOYSA-N	6.8 × 10 ⁷ 3.2 × 10 ⁵ 2.4 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NTMB1FUOOH C ₆ H ₉ NO ₇ WRMOSOIHGVCROMO-UHFFFAOYSA-N	1.1 × 10 ⁸ 1.7 × 10 ⁷ 2.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PRCOOMPAN C ₆ H ₉ NO ₇ NSDDFRROKQLRJ-UHFFFAOYSA-N	8.9 × 10 ² 5.6 × 10 ² 1.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:SBUACANO3 C ₆ H ₁₁ NO ₅ FWAMAOLJLFAOA-UHFFFAOYSA-N	1.6 5.3 × 10 ⁻¹ 1.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:SBUACBNO3 C ₆ H ₁₁ NO ₅ FVMFJLQQOIKLHP-UHFFFAOYSA-N	3.0 4.0 2.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TBUACPAN C ₆ H ₉ NO ₇ WTCUHXTZKDYOTB-UHFFFAOYSA-N	6.3 × 10 ² 7.3 × 10 ¹ 2.6 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NIPBFUOOH C ₇ H ₁₁ NO ₇ MJSJHBOZYWKETN-UHFFFAOYSA-N	1.7 × 10 ⁸ 1.3 × 10 ⁶ 5.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMEBFUOOH C ₇ H ₁₁ NO ₇ LKMBYBKEMVMSAU-UHFFFAOYSA-N	1.0 × 10 ⁸ 3.2 × 10 ⁵ 3.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPBFUOOH C ₇ H ₁₁ NO ₇ DGKCEZHRNXTHAZ-UHFFFAOYSA-N	1.5 × 10 ⁸ 1.1 × 10 ⁶ 4.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NTMB2FUOOH C ₇ H ₁₁ NO ₇ IRLXCLTZUJZGMJ-UHFFFAOYSA-N	6.3 × 10 ⁷ 1.8 × 10 ⁵ 2.4 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1013NO3 C ₁₀ H ₁₇ NO ₅ TWKDJCLTDHUPBZ-UHFFFAOYSA-N	3.1 5.4 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1013PAN C ₁₁ H ₁₇ NO ₇ QVQKWVAIHQGLJY-UHFFFAOYSA-N	9.8 × 10 ² 4.8 × 10 ² 1.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C1014NO3 C ₁₀ H ₁₇ NO ₆ QQZDTLQTCPSZBL-UHFFFAOYSA-N	7.8 × 10 ² 1.9 × 10 ³ 7.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C152NO3 C ₁₅ H ₂₅ NO ₇ VUWXYQDBWQZDF-UHFFFAOYSA-N	3.0 × 10 ⁶ 1.3 × 10 ⁷ 7.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NBZFUONE C ₄ H ₃ NO ₆ LXADUFLCRLLGHU-UHFFFAOYSA-N	1.9 × 10 ⁶ 4.3 × 10 ⁶ 8.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23O3CPAN C ₅ H ₅ NO ₈ BCRDXXGRUUZSU-UHFFFAOYSA-N	7.6 × 10 ⁵ 2.8 × 10 ⁵ 3.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ACBUONANO3 C ₆ H ₉ NO ₆ PDSBHIWVTCGSAN-UHFFFAOYSA-N	1.7 × 10 ³ 2.2 × 10 ³ 9.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23O3MCPAN C ₆ H ₇ NO ₈ MJYWDTPJLIMPPV-UHFFFAOYSA-N	7.1 × 10 ⁵ 6.0 × 10 ⁴ 2.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NEBFUONE C ₆ H ₇ NO ₆ LZGWKDALCOZNIJ-UHFFFAOYSA-N	1.4 × 10 ⁶ 2.3 × 10 ⁶ 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C23O3ECPAN C ₇ H ₉ NO ₈ SOMJWLUSPZTMJM-UHFFFAOYSA-N	5.5 × 10 ⁵ 3.2 × 10 ⁴ 1.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NIPBFUONE C ₇ H ₉ NO ₆ OEYHEYBMUYSQHE-UHFFFAOYSA-N	1.3 × 10 ⁶ 2.0 × 10 ⁶ 4.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPBFUONE C ₇ H ₉ NO ₆ WTNUMEKWPLNDJ-UHFFFAOYSA-N	1.3 × 10 ⁶ 1.7 × 10 ⁶ 6.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH3OCH2NO3 C ₂ H ₅ NO ₄ VHAYDBAVTGOZLW-UHFFFAOYSA-N	3.4 × 10 ⁻¹ 3.4 × 10 ⁻¹ 4.5 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMMANO3 C ₃ H ₇ NO ₅ ZKGVKOFAVUIIEY-UHFFFAOYSA-N	8.1 5.5 3.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMMBNO3 C ₃ H ₇ NO ₅ ADJOFNYUECRONI-UHFFFAOYSA-N	9.3 1.0 × 10 ⁻¹ 1.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETOMENO3 C ₃ H ₇ NO ₃ ZMUPMMOTQUHRHQ-UHFFFAOYSA-N	5.8 × 10 ⁻¹ 6.6 × 10 ⁻¹ 3.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MEMOXYPAN C ₃ H ₅ NO ₆ JBHGAGLULWBGCW-UHFFFAOYSA-N	1.1 × 10 ² 2.2 × 10 ² 1.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DIETETNO3 C ₄ H ₉ NO ₄ CAMRTYJYAQGENN-UHFFFAOYSA-N	2.8 × 10 ⁻¹ 4.2 × 10 ⁻² 7.3 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETOC2NO3 C ₄ H ₉ NO ₄ GDNQXPDYGNUKII-UHFFFAOYSA-N	2.5 × 10 ⁻¹ 2.5 4.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETOMEPAN C ₄ H ₇ NO ₆ CCYZAMBLJVQHMC-UHFFFAOYSA-N	9.3 × 10 ¹ 1.1 × 10 ² 1.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPROC21NO3 C ₅ H ₁₁ NO ₄ YQGFTPNVRZNXAP-UHFFFAOYSA-N	2.6 × 10 ⁻¹ 2.0 × 10 ⁻² 8.0 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEANO3 C ₅ H ₁₁ NO ₄ NXHUJDLNRCHXIE-UHFFFAOYSA-N	1.5 × 10 ⁻¹ 2.7 × 10 ⁻² 8.3 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEBNO3 C ₅ H ₁₁ NO ₄ HWZCMFJGZXOLOM-UHFFFAOYSA-N	1.5 × 10 ⁻¹ 6.2 × 10 ⁻¹ 4.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTBEBPAN C ₅ H ₉ NO ₆ PQCDPGWYIKXNFH-UHFFFAOYSA-N	5.4 × 10 ¹ 1.4 × 10 ¹ 5.5 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXMPAN C ₆ H ₁₁ NO ₆ CPESEOWHBGRFRT-UHFFFAOYSA-N	6.0 × 10 ¹ 5.1 × 10 ¹ 3.2 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DIIPRETNO3 C ₆ H ₁₃ NO ₄ RYKOUKPKIPKSCM-UHFFFAOYSA-N	1.4 × 10 ⁻¹ 4.9 × 10 ⁻³ 1.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBEANO3 C ₆ H ₁₃ NO ₄ WGHLTNOFPVNDHK-UHFFFAOYSA-N	1.2 × 10 ⁻¹ 3.2 × 10 ⁻¹ 4.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBEAPAN C ₆ H ₁₁ NO ₆ ZFJPSAIQYMAFAB-UHFFFAOYSA-N	4.8 × 10 ¹ 9.1 3.6 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBEBNO3 C ₆ H ₁₃ NO ₄ BIDDBAQEKWTVIC-UHFFFAOYSA-N	1.4 × 10 ⁻¹ 7.1 × 10 ⁻³ 1.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:ETBECNO3 C ₆ H ₁₃ NO ₄ MGOGEALWXAMIEO-UHFFFAOYSA-N	1.2 × 10 ⁻¹ 4.0 × 10 ⁻¹ 5.0 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ETBECPAN C ₆ H ₁₁ NO ₆ JICVHVAZXJWJCM-UHFFFAOYSA-N	4.8 × 10 ¹ 2.3 × 10 ¹ 2.1 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPROMC2NO3 C ₆ H ₁₃ NO ₄ XJQWDDGHWZGMDK-UHFFFAOYSA-N	2.0 × 10 ⁻¹ 4.6 × 10 ⁻¹ 2.9 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPROMCPAN C ₆ H ₁₁ NO ₆ SFYHCJJQTXJNUN-UHFFFAOYSA-N	8.3 × 10 ¹ 2.0 × 10 ¹ 3.9 × 10 ⁻³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MO2EOLANO3 C ₃ H ₇ NO ₅ FJVLHUAJQRZPG-UHFFFAOYSA-N	1.2 × 10 ³ 5.6 × 10 ² 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MO2EOLBNO3 C ₃ H ₇ NO ₅ QPXYMSZINTGRC-UHFFFAOYSA-N	1.0 × 10 ³ 1.3 × 10 ³ 2.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EOX2OLANO3 C ₄ H ₉ NO ₅ UVLVBVSPHNSYND-UHFFFAOYSA-N	1.0 × 10 ³ 3.6 × 10 ² 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EOX2OLBNO3 C ₄ H ₉ NO ₅ DLOZDRFLLIHYBD-UHFFFAOYSA-N	9.6 × 10 ² 3.2 × 10 ² 8.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:H2C3OCNO3 C ₄ H ₉ NO ₅ VJBSYBJCULHXOZ-UHFFFAOYSA-N	9.6 × 10 ² 9.1 × 10 ² 3.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PR2OHMONO3 C ₄ H ₉ NO ₅ YOBYTHKQRGEURN-UHFFFAOYSA-N	1.1 × 10 ³ 3.8 × 10 ² 8.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IEAPAN C ₅ H ₇ NO ₇ NFJKKZSQGXUZSI-UHFFFAOYSA-N	3.5 × 10 ⁴ 2.3 × 10 ⁵ 9.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IECPAN C ₅ H ₇ NO ₇ UMKIAKGFUATPHT-UHFFFAOYSA-N	3.5 × 10 ⁴ 9.1 × 10 ⁴ 8.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXEOHANO3 C ₆ H ₁₃ NO ₅ NBMGDPHUZHJVTA-UHFFFAOYSA-N	6.2 × 10 ² 1.4 × 10 ² 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:BOXEOHBNO3 C ₆ H ₁₃ NO ₅ YIIBDLSBOAJITL-UHFFFAOYSA-N	6.9 × 10 ² 1.4 × 10 ² 3.8 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXPOLANO3 C ₇ H ₁₅ NO ₅ QDPFCROPCZKQGS-UHFFFAOYSA-N	5.8 × 10 ² 8.3 × 10 ¹ 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXPOLBNO3 C ₇ H ₁₅ NO ₅ UNWFJVCQCSAFHA-UHFFFAOYSA-N	6.5 × 10 ² 9.1 × 10 ¹ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BCSOZNO3 C ₁₅ H ₂₅ NO ₇ HGUJSQZJFHDFKY-UHFFFAOYSA-N	1.3 × 10 ⁶ 5.3 × 10 ³ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXDLPAN C ₄ H ₃ NO ₇ VASNFLPKLUXZKF-UHFFFAOYSA-N	3.1 × 10 ⁵ 1.2 × 10 ⁵ 8.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMDLPAN C ₅ H ₅ NO ₇ KZASOTCYMWAOFU-UHFFFAOYSA-N	1.8 × 10 ⁵ 2.3 × 10 ⁴ 3.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZEMUCPAN C ₆ H ₅ NO ₇ RFFCGVCNCFANFMQ-UHFFFAOYSA-N	9.1 × 10 ⁵ 1.0 × 10 ⁵ 7.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXM2DLPAN C ₆ H ₇ NO ₇ KYBHJMDXJGYTK-UHFFFAOYSA-N	9.6 × 10 ⁴ 6.3 × 10 ³ 4.2 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMEDLPAN C ₇ H ₉ NO ₇ XUUSESMFYTYXHU-UHFFFAOYSA-N	8.0 × 10 ⁴ 3.5 × 10 ³ 4.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYMUCPAN C ₈ H ₉ NO ₇ VIRSPYOLFRMIKR-UHFFFAOYSA-N	2.5 × 10 ⁵ 7.1 × 10 ³ 1.1 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OETLMUCPAN C ₉ H ₁₁ NO ₇ PYAKBDFKVOHPHS-UHFFFAOYSA-N	2.2 × 10 ⁵ 4.3 × 10 ³ 2.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BZEMUCNO3 C ₆ H ₇ NO ₇ UGJSRYKPNYMSMJ-UHFFFAOYSA-N	1.1 × 10 ⁸ 1.7 × 10 ⁸ 1.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXYMUCNO3 C ₈ H ₁₁ NO ₇ PMXJWIAVDRSVOJ-UHFFFAOYSA-N	7.8 × 10 ⁸ 3.2 × 10 ⁷ 2.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:OETLMUCNO3 C ₉ H ₁₃ NO ₇ KUQUSIKCNRTUGT-UHFFFAOYSA-N	6.3 × 10 ⁸ 1.9 × 10 ⁷ 7.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXKTMPAN C ₆ H ₇ NO ₇ DBXZZDVA DSLSOS-UHFFFAOYSA-N	1.1 × 10 ⁵ 2.6 × 10 ⁴ 1.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXMKTPAN C ₆ H ₇ NO ₇ UTKXQAWEMGMHOV-UHFFFAOYSA-N	1.1 × 10 ⁵ 2.6 × 10 ⁴ 4.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:BOXPROANO3 C ₇ H ₁₃ NO ₅ FWQXAWHLSYKKGGA-UHFFFAOYSA-N	1.0 × 10 ² 3.3 × 10 ¹ 1.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EPXEKTPAN C ₇ H ₉ NO ₇ ZMAMXAXJQIDKIS-UHFFFAOYSA-N	9.3 × 10 ⁴ 1.6 × 10 ⁴ 3.1 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLEMUCPAN C ₇ H ₇ NO ₇ AUCFXVOKAUAJMN-UHFFFAOYSA-N	5.5 × 10 ⁵ 2.0 × 10 ⁵ 2.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZMUCPAN C ₈ H ₉ NO ₇ IJCUBYYAOSTAFY-UHFFFAOYSA-N	4.9 × 10 ⁵ 1.0 × 10 ⁵ 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYMUCPAN C ₈ H ₉ NO ₇ FZEVZMXGRRYMCK-UHFFFAOYSA-N	3.0 × 10 ⁵ 4.0 × 10 ⁴ 1.2 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYMUCPAN C ₈ H ₉ NO ₇ JEHOQLADMJYMP-UHFFFAOYSA-N	3.0 × 10 ⁵ 5.9 × 10 ⁴ 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBZMUCPAN C ₉ H ₁₁ NO ₇ JAYKUYZEOSXCLM-UHFFFAOYSA-N	4.6 × 10 ⁵ 6.2 × 10 ⁴ 3.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLMUCPAN C ₉ H ₁₁ NO ₇ ZBESLNAUTTYMKY-UHFFFAOYSA-N	2.8 × 10 ⁵ 1.9 × 10 ⁴ 5.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZMUCPAN C ₉ H ₁₁ NO ₇ BNKFVONIJIIEPHK-UHFFFAOYSA-N	4.0 × 10 ⁵ 6.0 × 10 ⁴ 6.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLMUCPAN C ₉ H ₁₁ NO ₇ ZDDBRQJYUBFFIJ-UHFFFAOYSA-N	2.8 × 10 ⁵ 2.8 × 10 ⁴ 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TM124MUPAN C ₉ H ₁₁ NO ₇ TXJRVENADFPPLH-UHFFFAOYSA-N	1.7 × 10 ⁵ 1.3 × 10 ⁴ 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135MUPAN C ₉ H ₁₁ NO ₇ APWJKVMWYCHHEO-UHFFFAOYSA-N	2.0 × 10 ⁵ 3.7 × 10 ⁴ 2.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMEBMUPAN C ₁₀ H ₁₃ NO ₇ OJIPANRKTQADST-UHFFFAOYSA-N	1.9 × 10 ⁵ 1.9 × 10 ⁴ 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DETLMUPAN C ₁₁ H ₁₅ NO ₇ WGGPAZKPBFIGY-UHFFFAOYSA-N	1.5 × 10 ⁵ 1.3 × 10 ⁴ 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123MUNO3 C ₉ H ₁₃ NO ₇ CNKHLWZBBXJTR-UHFFFAOYSA-N	2.8 × 10 ⁷ 3.0 × 10 ⁷ 5.0 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TLEMUCNO3 C ₇ H ₉ NO ₇ KLAQKLFQZHHGRD-UHFFFAOYSA-N	1.5 × 10 ⁹ 3.5 × 10 ⁸ 8.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBZMUCNO3 C ₈ H ₁₁ NO ₇ ZZJNOSBMORNYPY-UHFFFAOYSA-N	1.4 × 10 ⁹ 2.0 × 10 ⁸ 1.7 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXYMUCNO3 C ₈ H ₁₁ NO ₇ YZJRXCREGHPQLR-UHFFFAOYSA-N	8.5 × 10 ⁸ 7.8 × 10 ⁷ 6.5 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXYMUCNO3 C ₈ H ₁₁ NO ₇ GICKPQRZPMBHKH-UHFFFAOYSA-N	8.5 × 10 ⁸ 9.3 × 10 ⁷ 1.6 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPBZMUCNO3 C ₉ H ₁₃ NO ₇ UHFJHZLCCDDVXBJ-UHFFFAOYSA-N	1.3 × 10 ⁹ 1.5 × 10 ⁸ 1.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:METLMUCNO3 C ₉ H ₁₃ NO ₇ WWNOXWKNLSKIMY-UHFFFAOYSA-N	7.6 × 10 ⁸ 4.6 × 10 ⁷ 9.8 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBZMUCNO3 C ₉ H ₁₃ NO ₇ QLDJRFHCXXYTH-UHFFFAOYSA-N	1.1 × 10 ⁹ 1.4 × 10 ⁸ 9.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PETLMUCNO3 C ₉ H ₁₃ NO ₇ PIVPLJYVWKBKLM-UHFFFAOYSA-N	7.6 × 10 ⁸ 5.8 × 10 ⁷ 1.0 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.6: Nitrates (RONO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TM124MUNO3 C ₉ H ₁₃ NO ₇ NIRISDMZVMYRLC-UHFFFAOYSA-N	2.2 × 10 ⁷ 7.8 × 10 ⁶ 5.0 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM135MUNO3 C ₉ H ₁₃ NO ₇ WYJKGTDXAIWZNI-UHFFFAOYSA-N	2.2 × 10 ⁷ 1.4 × 10 ⁷ 7.3 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMEBMUNO3 C ₁₀ H ₁₅ NO ₇ KKQBKVQGVIRRAG-UHFFFAOYSA-N	1.9 × 10 ⁷ 7.1 × 10 ⁶ 2.9 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DETLMUNO3 C ₁₁ H ₁₇ NO ₇ YPPYKYPDSBIFHG-UHFFFAOYSA-N	1.4 × 10 ⁷ 4.6 × 10 ⁶ 2.8 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMCNO3 C ₃ H ₅ NO ₆ XNSIPMZBSRCICM-UHFFFAOYSA-N	2.9 × 10 ¹ 3.6 × 10 ¹ 5.4 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MMFNO3 C ₃ H ₅ NO ₆ KROMLYNKDFILIM-UHFFFAOYSA-N	1.5 × 10 ² 4.5 4.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
ISOP1N5OOH C ₅ H ₉ NO ₆ LLNBZHMZYQLAS-UHFFFAOYSA-N	2.3 × 10 ⁷	14000	Wieser et al. (2023)	Q	437
C520ONO2 C ₅ H ₉ NO ₈ ZSADVAXZKJKSG-UHFFFAOYSA-N	2.9 × 10 ⁹	21000	Wieser et al. (2023)	Q	437
ROO6R6ONO2 C ₆ H ₁₁ NO ₆ CRECMHNOVVIMCR-UHFFFAOYSA-N	6.1 × 10 ⁵	12000	Wieser et al. (2023)	Q	437
C624ONO2 C ₆ H ₁₁ NO ₇ XYBUKFJLXVIRLY-UHFFFAOYSA-N	2.0 × 10 ¹⁰	19000	Wieser et al. (2023)	Q	437
ROO6R5ONO2 C ₇ H ₁₁ NO ₇ LNWOWXJMUJHMJJ-UHFFFAOYSA-N	1.7 × 10 ⁵	15000	Wieser et al. (2023)	Q	437
ROO6R1ONO2 C ₁₀ H ₁₇ NO ₆ JOFCABYMPNXMIS-UHFFFAOYSA-N	1.4 × 10 ²	15000	Wieser et al. (2023)	Q	437
LIMAB15ONO2OOH C ₁₀ H ₁₉ NO ₇ JBKULLYZCMWERK-UHFFFAOYSA-N	5.0 × 10 ⁹	19000	Wieser et al. (2023)	Q	437



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A4.7 Nitriles with oxygen (C, H, O, N)

Table A4.7: Nitriles with oxygen (C, H, O, N)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
isocyanic acid HNCO [75-13-8] OWIKHYCFFJSOEH-UHFFFAOYSA-N	2.3×10^{-1} 2.6×10^{-1} 2.1×10^{-1}	4700 4100	Roberts and Liu (2019) Borduas et al. (2016) Roberts et al. (2011) Burkholder et al. (2019)	M M M W	590 591 592
methyl isocyanate CH ₃ NCO [624-83-9] HAMGRBXTJNITHG-UHFFFAOYSA-N	1.3×10^{-2}		Roberts and Liu (2019)	M	
hydroxyacetonitrile C ₂ H ₃ NO (glycolonitrile) [107-16-4] LTYRAPJYLUPLCI-UHFFFAOYSA-N	1.3		HSDB (2015)	Q	99
2-hydroxypropanenitrile C ₃ H ₅ NO [78-97-7] WOFDVFSGLBFAC-UHFFFAOYSA-N	1.0		HSDB (2015)	Q	99
3-hydroxypropanenitrile C ₃ H ₅ NO (ethylene cyanohydrin) [109-78-4] WSGYTJNNHPZFKR-UHFFFAOYSA-N	1.3×10^3 2.3×10^4 3.2×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
methyl cyanoacetate C ₄ H ₅ NO ₂ [105-34-0] ANGDWNBGPBMQHW-UHFFFAOYSA-N	3.5×10^1		Ebert et al. (2023)	?	316
cyanoethanoic acid, ethyl ester C ₅ H ₇ NO ₂ (ethyl cyanoacetate) [105-56-6] ZIUSEGSNTOUIPT-UHFFFAOYSA-N	3.4×10^1 3.4×10^1 1.3×10^1 7.7×10^1 4.9 7.7 3.5×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yao et al. (2002) Yaws (1999)	V V Q Q Q Q Q ?	186 67 229 21
2-hydroxybenzoic acid nitrile C ₇ H ₅ NO (2-cyanophenol) [611-20-1] CHZCERSEMVNHL-UHFFFAOYSA-N	2.8×10^1		Hilal et al. (2008)	Q	



Table A4.7: Nitriles with oxygen (C, H, O, N) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-hydroxybenzoic acid nitrile C_7H_5NO (3-cyanophenol) [873-62-1] SGHBRHKBCLLVCU-UHFFFAOYSA-N	4.0×10^4 1.6×10^3 3.6×10^3 3.3×10^5 3.8×10^3		Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Abraham et al. (1990)	Q Q Q Q ?	 67 230, 231
4-hydroxybenzoic acid nitrile C_7H_5NO (4-cyanophenol) [767-00-0] CVNOWLNPNYYEOH-UHFFFAOYSA-N	1.4×10^4 2.0×10^3 3.3×10^5 1.2×10^4		Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Abraham et al. (1990)	Q Q Q ?	 67
phenyl isocyanate C_7H_5NO [103-71-9] DGTNSSLYPYDJGL-UHFFFAOYSA-N	2.5×10^{-5} 2.5×10^{-5} 1.8×10^{-5}		Yaws (2003) Gharagheizi et al. (2010) Yaws (1999)	X Q ?	237, 12 246 21, 12
1,1',1''-nitritoltris-2-propanol $C_9H_{21}NO_3$ (triisopropanolamine) [122-20-3] SLINHMFUFWBWMU-UHFFFAOYSA-N	1.0×10^6		HSDB (2015)	Q	447
cyometrinil $C_{10}H_7N_3O$ [78370-21-5] PYKLUAIKVVVEOS-JLHYAGUSA-N	1.1×10^4		MacBean (2012a)	?	
fenpropathrin $C_{22}H_{23}NO_3$ [39515-41-8] XQUXKZZNEFRCAW-UHFFFAOYSA-N	5.5×10^{-2} 1.7×10^1		HSDB (2015) Siebers and Mattusch (1996)	V V	 12



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A4.8 Nitro compounds (RNO₂)

Table A4.8: Nitro compounds (RNO₂)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nitromethane CH ₃ NO ₂ [75-52-5] LYGJENNIWJXYER-UHFFFAOYSA-N	3.4 × 10 ⁻¹	4000	Burkholder et al. (2019)	L	
	3.4 × 10 ⁻¹	4000	Burkholder et al. (2015)	L	
	3.6 × 10 ⁻¹	3900	Brockbank (2013)	L	1
	3.4 × 10 ⁻¹	4000	Sander et al. (2011)	L	
	3.4 × 10 ⁻¹	4000	Sander et al. (2006)	L	
	3.5 × 10 ⁻¹	4000	Beneš and Dohnal (1999)	M	
	3.6 × 10 ⁻¹		Park et al. (1987)	M	
	4.5 × 10 ⁻¹		Rohrschneider (1973)	M	
	3.4 × 10 ⁻²		Yaws (2003)	X	237
	3.5 × 10 ⁻¹		Gaffney and Senum (1984)	X	389
	4.4 × 10 ⁻¹		Hayer et al. (2022)	Q	20
	2.5 × 10 ⁻¹		Keshavarz et al. (2022)	Q	
	6.2 × 10 ⁻¹		Duchowicz et al. (2020)	Q	184
	1.2 × 10 ⁻¹		Raventos-Duran et al. (2010)	Q	242, 243
	2.0 × 10 ⁻¹		Raventos-Duran et al. (2010)	Q	244
	2.5 × 10 ⁻¹		Raventos-Duran et al. (2010)	Q	245
	3.3 × 10 ⁻²		Gharagheizi et al. (2010)	Q	246
	3.4 × 10 ⁻¹		Hilal et al. (2008)	Q	
	3.3 × 10 ⁻²		Modarresi et al. (2007)	Q	67
		3700	Kühne et al. (2005)	Q	
	2.3 × 10 ⁻¹		Yaffe et al. (2003)	Q	248, 272
	6.2 × 10 ⁻¹		English and Carroll (2001)	Q	230, 231
	2.8 × 10 ⁻²		Katritzky et al. (1998)	Q	
	7.3 × 10 ⁻²		Nirmalakhandan et al. (1997)	Q	
	3.5 × 10 ⁻¹		Duchowicz et al. (2020)	?	185, 21
		3500	Kühne et al. (2005)	?	
	3.4 × 10 ⁻²		Yaws (1999)	?	21
	1.8 × 10 ⁻¹		Abraham and Weathersby (1994)	?	21
	3.6 × 10 ⁻²		Yaws and Yang (1992)	?	21
	3.6 × 10 ⁻¹		Abraham et al. (1990)	?	
nitromethane-13C CH ₃ NO ₂ [32480-00-5] LYGJENNIWJXYER-OUBTZVSYSA-N	4.8 × 10 ⁻¹	5000	Hiatt (2013)	M	
nitroethane C ₂ H ₅ NO ₂ [79-24-3] MCSAJNNLRCFZED-UHFFFAOYSA-N	2.1 × 10 ⁻¹	4400	Burkholder et al. (2019)	L	
	2.1 × 10 ⁻¹	4400	Burkholder et al. (2015)	L	
	2.1 × 10 ⁻¹	4700	Brockbank (2013)	L	1
	2.1 × 10 ⁻¹	4400	Sander et al. (2011)	L	
	2.1 × 10 ⁻¹	4400	Sander et al. (2006)	L	
	2.2 × 10 ⁻¹	4400	Beneš and Dohnal (1999)	M	
	1.4 × 10 ⁻¹		Friant and Suffet (1979)	M	38, 593
	1.9 × 10 ⁻¹		Hwang et al. (1992)	V	
	2.1 × 10 ⁻¹		Hine and Mookerjee (1975)	V	
	2.1 × 10 ⁻¹		Gaffney and Senum (1984)	X	389



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.4×10^{-1}		Keshavarz et al. (2022)	Q	
	3.7×10^{-1}		Duchowicz et al. (2020)	Q	184
	2.1×10^{-1}		Li et al. (2014)	Q	241
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	3.0×10^{-2}		Modarresi et al. (2007)	Q	67
		4100	Kühne et al. (2005)	Q	
	2.3×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	3.1×10^{-1}		English and Carroll (2001)	Q	230, 260
	2.6×10^{-2}		Katritzky et al. (1998)	Q	
	6.1×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	1.5×10^{-1}		Suzuki et al. (1992)	Q	232
	2.1×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		4200	Kühne et al. (2005)	?	
	2.5×10^{-1}		Yaws (1999)	?	21
	2.1×10^{-1}		Abraham et al. (1990)	?	
1-nitropropane C ₃ H ₇ NO ₂ [108-03-2] JSZOAYXJRCEYSX-UHFFFAOYSA-N	1.3×10^{-1}	4700	Burkholder et al. (2019)	L	
	1.3×10^{-1}	4700	Burkholder et al. (2015)	L	
	1.4×10^{-1}	5100	Brockbank (2013)	L	1
	1.3×10^{-1}	4700	Sander et al. (2011)	L	
	1.3×10^{-1}	4700	Sander et al. (2006)	L	
	1.3×10^{-1}	4700	Beneš and Dohnal (1999)	M	
	1.6×10^{-1}		Welke et al. (1998)	M	
	1.1×10^{-1}		Hine and Mookerjee (1975)	V	
	9.2×10^{-2}		Keshavarz et al. (2022)	Q	
	4.8×10^{-1}		Duchowicz et al. (2020)	Q	299
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	1.5×10^{-1}		Hilal et al. (2008)	Q	
	2.3×10^{-2}		Modarresi et al. (2007)	Q	67
		4400	Kühne et al. (2005)	Q	
	1.2×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	1.2×10^{-1}		English and Carroll (2001)	Q	230, 231
	3.1×10^{-2}		Katritzky et al. (1998)	Q	
	4.7×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	7.2×10^{-3}		Suzuki et al. (1992)	Q	232
	1.1×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		4400	Kühne et al. (2005)	?	
	1.2×10^{-1}		Yaws (1999)	?	21, 12
	1.6×10^{-1}		Yaws and Yang (1992)	?	21, 12
	1.1×10^{-1}		Abraham et al. (1990)	?	



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-nitropropane CH ₃ CH(NO ₂)CH ₃ [79-46-9] FGLBSLMDCBOPQK-UHFFFAOYSA-N	8.3 × 10 ⁻²	4500	Burkholder et al. (2019)	L	
	8.3 × 10 ⁻²	4500	Burkholder et al. (2015)	L	
	8.6 × 10 ⁻²	4800	Brockbank (2013)	L	1
	8.3 × 10 ⁻²	4500	Sander et al. (2011)	L	
	8.3 × 10 ⁻²	4500	Sander et al. (2006)	L	
	8.4 × 10 ⁻²	4500	Beneš and Dohnal (1999)	M	
	8.3 × 10 ⁻²		Duchowicz et al. (2020)	V	186
	8.3 × 10 ⁻²		HSDB (2015)	V	
	8.0 × 10 ⁻²		Hine and Mookerjee (1975)	V	
	2.2 × 10 ⁻¹		Duchowicz et al. (2020)	Q	
	7.8 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	242, 243
	6.2 × 10 ⁻²		Raventos-Duran et al. (2010)	Q	244
	1.2 × 10 ⁻¹		Raventos-Duran et al. (2010)	Q	245
	7.2 × 10 ⁻²		Hilal et al. (2008)	Q	
	2.7 × 10 ⁻²		Modarresi et al. (2007)	Q	67
		4400	Kühne et al. (2005)	Q	
	8.6 × 10 ⁻²		Yaffe et al. (2003)	Q	248, 249
	7.2 × 10 ⁻²		English and Carroll (2001)	Q	230, 274
	2.1 × 10 ⁻²		Katritzky et al. (1998)	Q	
	4.1 × 10 ⁻²		Nirmalakhandan et al. (1997)	Q	
	8.4 × 10 ⁻³		Suzuki et al. (1992)	Q	232
		4400	Kühne et al. (2005)	?	
	8.2 × 10 ⁻²		Yaws (1999)	?	21, 12
	1.1 × 10 ⁻¹		Yaws and Yang (1992)	?	21, 12
	8.0 × 10 ⁻²		Abraham et al. (1990)	?	
1-nitrobutane C ₄ H ₉ NO ₂ [627-05-4] NALZTFARIYUCBY-UHFFFAOYSA-N	7.6 × 10 ⁻²		Brockbank (2013)	L	
	8.3 × 10 ⁻²		Duchowicz et al. (2020)	V	186
	5.6 × 10 ⁻¹		Duchowicz et al. (2020)	Q	
	9.7 × 10 ⁻²		Hilal et al. (2008)	Q	
	1.8 × 10 ⁻²		Modarresi et al. (2007)	Q	67
	3.7 × 10 ⁻²		Nirmalakhandan et al. (1997)	Q	
	7.5 × 10 ⁻²		Abraham et al. (1990)	?	
<i>tert</i> -butylnitrite C ₄ H ₉ ONO [540-80-7] IOGXOCVLYRDXLW-UHFFFAOYSA-N	7.9 × 10 ⁻³		Hilal et al. (2008)	Q	
1-nitropentane C ₅ H ₁₁ NO ₂ [628-05-7] BVALZCVRLDMXOQ-UHFFFAOYSA-N	4.7 × 10 ⁻²		Amoore and Buttery (1978)	V	
	6.0 × 10 ⁻²		Hilal et al. (2008)	Q	
	1.4 × 10 ⁻²		Modarresi et al. (2007)	Q	67
	2.9 × 10 ⁻²		Nirmalakhandan et al. (1997)	Q	
	4.7 × 10 ⁻²		Abraham et al. (1990)	?	



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tris(hydroxymethyl)ethane trinitrate C ₅ H ₉ N ₃ O ₉ [3032-55-1] IPPYBNCEPZCLNI-UHFFFAOYSA-N	2.2 × 10 ³		Zhang et al. (2010)	Q	287, 288
	1.4 × 10 ²		Zhang et al. (2010)	Q	287, 289
	2.4 × 10 ³		Zhang et al. (2010)	Q	287, 290
	3.4 × 10 ¹		Zhang et al. (2010)	Q	287, 291
1-nitrohexane C ₆ H ₁₃ NO ₂ [646-14-0] FEYJIFXFOHFGCC-UHFFFAOYSA-N	4.5 × 10 ⁻²		Hilal et al. (2008)	Q	
nitrocyclohexane C ₆ H ₁₁ NO ₂ [1122-60-7] NJNQUTDUIPVROZ-UHFFFAOYSA-N	2.4 × 10 ⁻¹		Hilal et al. (2008)	Q	
2-nitroethanol C ₂ H ₅ NO ₃ [625-48-9] KIPMDPDAFINLIV-UHFFFAOYSA-N	2.0 × 10 ²		Raventos-Duran et al. (2010)	Q	242, 243
	3.1 × 10 ²		Raventos-Duran et al. (2010)	Q	244
	4.9 × 10 ³		Raventos-Duran et al. (2010)	Q	245
	1.6 × 10 ²		Hilal et al. (2008)	Q	
1-nitro-2-propanol C ₃ H ₇ NO ₃ [3156-73-8] PFNCKQIYLAVYJF-UHFFFAOYSA-N	1.2 × 10 ²		Raventos-Duran et al. (2010)	Q	242, 243
	2.5 × 10 ²		Raventos-Duran et al. (2010)	Q	244
	3.9 × 10 ³		Raventos-Duran et al. (2010)	Q	245
	7.9 × 10 ¹		Hilal et al. (2008)	Q	
2-nitro-1-propanol C ₃ H ₇ NO ₃ [2902-96-7] PCNWBUSTLGPIM-UHFFFAOYSA-N	1.2 × 10 ²		Raventos-Duran et al. (2010)	Q	242, 243
	2.5 × 10 ²		Raventos-Duran et al. (2010)	Q	244
	3.9 × 10 ³		Raventos-Duran et al. (2010)	Q	245
	9.9 × 10 ¹		Hilal et al. (2008)	Q	
1-nitro-2-butanol C ₄ H ₉ NO ₃ [3156-74-9] FMEFHKJIRIGSLB-UHFFFAOYSA-N	7.3 × 10 ¹		Hilal et al. (2008)	Q	
2-nitro-1-butanol C ₄ H ₉ NO ₃ [609-31-4] MHIHRIPETCJEMQ-UHFFFAOYSA-N	9.9 × 10 ¹		Raventos-Duran et al. (2010)	Q	271, 243
	2.0 × 10 ²		Raventos-Duran et al. (2010)	Q	244
	2.5 × 10 ³		Raventos-Duran et al. (2010)	Q	245
	7.5 × 10 ¹		Hilal et al. (2008)	Q	
3-nitro-2-butanol C ₄ H ₉ NO ₃ [6270-16-2] OJVOGABFNZDOOZ-UHFFFAOYSA-N	9.9 × 10 ¹		Raventos-Duran et al. (2010)	Q	242, 243
	2.0 × 10 ²		Raventos-Duran et al. (2010)	Q	244
	2.5 × 10 ³		Raventos-Duran et al. (2010)	Q	245
	5.7 × 10 ¹		Hilal et al. (2008)	Q	
nitroguanidine CH ₄ N ₄ O ₂ [556-88-7] IDCPFAYURAKQDZ-UHFFFAOYSA-N	2.2 × 10 ¹⁰		HSDB (2015)	V	



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetranitromethane CN ₄ O ₈ [509-14-8] NYTOUQBROMCLBJ-UHFFFAOYSA-N	4.1×10^{-3}		HSDB (2015)	V	
N-methyl-N'-nitro-N-nitrosoguanidine C ₂ H ₅ N ₅ O ₃ [70-25-7] VZUNGLZRAYYDE-UHFFFAOYSA-N	8.2×10^6		HSDB (2015)	Q	99
2-(hydroxymethyl)-2-nitro-1,3-propanediol C ₄ H ₉ NO ₅ [126-11-4] OLQJQHSAWMFDJE-UHFFFAOYSA-N	2.1×10^6		HSDB (2015)	Q	99
MCM:NC4DCO2H C ₄ H ₃ NO ₅ ODFCIXRNCCVGH-UHFFFAOYSA-N	6.9×10^6 3.5×10^6 2.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC4MDCO2H C ₅ H ₅ NO ₅ LXEJKNKBIPISQO-UHFFFAOYSA-N	4.2×10^6 4.7×10^6 6.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC4EDCO2H C ₆ H ₇ NO ₅ GVSLZEQKUBDLJE-UHFFFAOYSA-N	3.6×10^6 6.9×10^6 3.9×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNPHENO0H C ₆ H ₆ N ₂ O ₁₀ AKJGOKAIBHUAAE-UHFFFAOYSA-N	7.3×10^{16} 8.0×10^{10} 5.4×10^7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NCATECOOH C ₆ H ₇ NO ₉ UERHMILVXASDJ-UHFFFAOYSA-N	8.1×10^{17} 1.6×10^{10} 4.4×10^9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC5MDCO2H C ₆ H ₇ NO ₅ VRGZGZRSZACGSZ-UHFFFAOYSA-N	2.8×10^6 1.1×10^7 2.5×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC4IPDCO2H C ₇ H ₉ NO ₅ VOBLVGUNJWYRHD-UHFFFAOYSA-N	3.5×10^6 3.5×10^6 1.8×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NC4PDCO2H C ₇ H ₉ NO ₅ MSTRQTMGALLSFO-UHFFFAOYSA-N	3.0×10^6 4.2×10^6 2.2×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNCRESOOH C ₇ H ₈ N ₂ O ₁₀ FHWGQSKNURQKZ-UHFFFAOYSA-N	4.0×10^{16} 3.6×10^{10} 1.4×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:MNCATECOOH C ₇ H ₉ NO ₉ OCHAAZKMUDWIOE-UHFFFAOYSA-N	3.0 × 10 ¹⁷ 1.7 × 10 ¹¹ 4.4 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TL4ONO2OOH C ₇ H ₉ NO ₈ MEXRHSIIQRTIBR-UHFFFAOYSA-N	1.4 × 10 ¹⁴ 2.8 × 10 ⁹ 3.5 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNEBNZLOOH C ₈ H ₁₀ N ₂ O ₁₀ FNCRENCSRXRIPJ-UHFFFAOYSA-N	3.6 × 10 ¹⁶ 2.3 × 10 ¹⁰ 3.0 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNMXYOLOOH C ₈ H ₁₀ N ₂ O ₁₀ KSAVSEUSLRIGAB-UHFFFAOYSA-N	2.7 × 10 ¹⁶ 2.2 × 10 ¹¹ 5.9 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNOXYOLOOH C ₈ H ₁₀ N ₂ O ₁₀ PBZRLTNSYSOGL-UHFFFAOYSA-N	3.2 × 10 ¹⁶ 5.9 × 10 ¹⁰ 7.8 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNPXYOLOOH C ₈ H ₁₀ N ₂ O ₁₀ AYHFAKIJCOHXBG-UHFFFAOYSA-N	2.7 × 10 ¹⁶ 3.1 × 10 ¹⁰ 1.5 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ENCATECOOH C ₈ H ₁₁ NO ₉ QJBJEZDKVLRDGG-UHFFFAOYSA-N	2.6 × 10 ¹⁷ 8.9 × 10 ¹⁰ 1.8 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXNCATCOOH C ₈ H ₁₁ NO ₉ QYJOURKZCRGVB-UHFFFAOYSA-N	1.6 × 10 ¹⁷ 6.2 × 10 ¹⁰ 3.4 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXOHNO2OOH C ₈ H ₁₁ NO ₈ RRWTXIWIABDEOZ-UHFFFAOYSA-N	1.8 × 10 ¹⁴ 1.2 × 10 ⁹ 1.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXNCATCOOH C ₈ H ₁₁ NO ₉ GWPIPVJLOZVKC-UHFFFAOYSA-N	3.9 × 10 ¹⁷ 1.2 × 10 ¹⁰ 3.7 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXNCATCOOH C ₈ H ₁₁ NO ₉ RMUFWTRDQQMPCD-UHFFFAOYSA-N	3.0 × 10 ¹⁷ 5.5 × 10 ⁹ 1.4 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM124NOOH C ₈ H ₁₁ NO ₈ LGMZUZOXZXRQX-UHFFFAOYSA-N	1.8 × 10 ¹⁴ 1.3 × 10 ⁹ 5.1 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNIPBZLOOH C ₉ H ₁₂ N ₂ O ₁₀ YKBFACRSJWRBHR-UHFFFAOYSA-N	3.2 × 10 ¹⁶ 2.3 × 10 ¹⁰ 3.7 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DNMETOLOOH C ₉ H ₁₂ N ₂ O ₁₀ LAMZNFOUTXWEFA-UHFFFAOYSA-N	2.1 × 10 ¹⁶ 1.4 × 10 ¹¹ 1.5 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNOETOLOOH C ₉ H ₁₂ N ₂ O ₁₀ KMVIJWGCTFHDMC-UHFFFAOYSA-N	2.5 × 10 ¹⁶ 3.9 × 10 ¹⁰ 7.6 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNPNZLOOH C ₉ H ₁₂ N ₂ O ₁₀ YOHJWFUCUQBMA-UHFFFAOYSA-N	2.9 × 10 ¹⁶ 1.9 × 10 ¹⁰ 2.8 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNPETOLOOH C ₉ H ₁₂ N ₂ O ₁₀ IOZSITWJVFMIBH-UHFFFAOYSA-N	2.1 × 10 ¹⁶ 1.9 × 10 ¹⁰ 2.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNT123LOOH C ₉ H ₁₂ N ₂ O ₁₀ GBPJMJLXQYJDMC-UHFFFAOYSA-N	1.7 × 10 ¹⁶ 3.9 × 10 ¹⁰ 4.5 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNT124LOOH C ₉ H ₁₂ N ₂ O ₁₀ INCIWBVFUFSSNB-UHFFFAOYSA-N	1.4 × 10 ¹⁶ 2.0 × 10 ¹⁰ 1.6 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EMPONO2OOH C ₉ H ₁₃ NO ₈ FZXCIHOWKZJKRK-UHFFFAOYSA-N	1.4 × 10 ¹⁴ 1.5 × 10 ⁹ 6.3 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPNCATCOOH C ₉ H ₁₃ NO ₉ NYRKVILWQFQUNU-UHFFFAOYSA-N	2.5 × 10 ¹⁷ 8.3 × 10 ¹⁰ 9.3 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTNCATCOOH C ₉ H ₁₃ NO ₉ MCLPDHQAEZEULP-UHFFFAOYSA-N	1.5 × 10 ¹⁷ 3.6 × 10 ¹⁰ 1.4 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OTNCATCOOH C ₉ H ₁₃ NO ₉ MVMRAYEOTUUSG-UHFFFAOYSA-N	3.6 × 10 ¹⁷ 7.1 × 10 ⁹ 2.5 × 10 ⁵		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PNCATECOOH C ₉ H ₁₃ NO ₉ AWPUGBPLGLTYEJ-UHFFFAOYSA-N	2.1 × 10 ¹⁷ 6.6 × 10 ¹⁰ 5.9 × 10 ⁷		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PTNCATCOOH C ₉ H ₁₃ NO ₉ IJEUJFHQTRRRKP-UHFFFAOYSA-N	2.8 × 10 ¹⁷ 3.5 × 10 ⁹ 9.6 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nitrobenzene	4.7×10^{-1}	6100	Brockbank (2013)	L	1
C ₆ H ₅ NO ₂	6.7×10^{-1}		Chao et al. (2017)	M	
[98-95-3]	6.4×10^{-1}	7500	Hiatt (2013)	M	
LQNUZADURLCDLV-UHFFFAOYSA-N	1.4×10^{-1}		Zhang et al. (2013)	M	325
	2.3×10^{-2}	11000	Dewulf et al. (1999)	M	594
	1.2		Altschuh et al. (1999)	M	
	1.4×10^{-1}		Hellmann (1987)	M	87
	4.1×10^{-1}		Warner et al. (1980)	M	
	4.7×10^{-1}		Chao et al. (2017)	V	
	4.8×10^{-1}	6400	Bernauer et al. (2006)	V	1
	7.7×10^{-1}		Mackay et al. (2006d)	V	
	4.2×10^{-1}		Lide and Frederikse (1995)	V	
	7.7×10^{-1}		Mackay et al. (1995)	V	
	4.6×10^{-1}		Hwang et al. (1992)	V	
	7.8×10^{-1}		Yoshida et al. (1983)	V	
	4.3×10^{-1}		Warner et al. (1980)	V	
	4.2×10^{-1}		Hine and Mookerjee (1975)	V	
	4.7×10^{-1}	4500	Goldstein (1982)	X	298
	4.2×10^{-1}		Hilal et al. (2008)	C	
	4.1×10^{-1}		Schüürmann (2000)	C	21
	7.5×10^{-1}		Mackay et al. (1995)	C	
	7.5×10^{-1}		Ryan et al. (1988)	C	
	4.1×10^{-1}		Shen (1982)	C	
	1.1		Keshavarz et al. (2022)	Q	
	2.1		Duchowicz et al. (2020)	Q	299
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	2.7×10^{-1}		Modarresi et al. (2007)	Q	67
		4600	Kühne et al. (2005)	Q	
	4.2×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	5.1×10^{-1}		Yao et al. (2002)	Q	229
	2.9×10^{-1}		Katritzky et al. (1998)	Q	
	3.3		Nirmalakhandan et al. (1997)	Q	
	2.0×10^{-1}		Russell et al. (1992)	Q	279
	7.0×10^{-1}		Suzuki et al. (1992)	Q	232
	4.1×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		5600	Kühne et al. (2005)	?	
	4.7×10^{-1}		Yaws (1999)	?	21
	4.2×10^{-1}		Abraham et al. (1990)	?	
nitrobenzene-d5	8.5×10^{-1}	7500	Hiatt (2013)	M	
C ₆ D ₅ NO ₂					
[4165-60-0]					
LQNUZADURLCDLV-RALIUCGRSA-N					



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-nitrotoluene <chem>C6H4(NO2)CH3</chem> [88-72-2] PLAZTGDQAHEYBI-UHFFFAOYSA-N	2.4×10^{-1}	5800	Brockbank (2013)	L	1
	9.6×10^{-1}		Chao et al. (2017)	M	
	7.9×10^{-1}		Altschuh et al. (1999)	M	
	2.7×10^{-1}		Mackay et al. (2006d)	V	
	1.9×10^{-1}		Schüürmann (2000)	V	
	1.8×10^{-1}		Lide and Frederikse (1995)	V	
	2.7×10^{-1}		Mackay et al. (1995)	V	
	1.7×10^{-1}		Hine and Mookerjee (1975)	V	
	7.7×10^{-2}	2900	Goldstein (1982)	X	298
	1.5		Keshavarz et al. (2022)	Q	
	1.2		Duchowicz et al. (2020)	Q	299
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	4.2×10^{-1}		Zhang et al. (2010)	Q	287, 288
	2.4×10^{-1}		Zhang et al. (2010)	Q	287, 289
	2.5×10^{-1}		Zhang et al. (2010)	Q	287, 290
	1.8×10^{-1}		Zhang et al. (2010)	Q	287, 291
	4.2×10^{-1}		Zhang et al. (2010)	Q	287, 288
	2.4×10^{-1}		Zhang et al. (2010)	Q	287, 289
2.2×10^{-1}		Zhang et al. (2010)	Q	287, 290	
1.8×10^{-1}		Zhang et al. (2010)	Q	287, 291	
1.4×10^{-1}		Hilal et al. (2008)	Q		
2.3×10^{-1}		Modarresi et al. (2007)	Q	67	
	4900		Kühne et al. (2005)	Q	
1.4×10^{-1}			Yaffe et al. (2003)	Q	248, 272
2.3			Nirmalakhandan et al. (1997)	Q	
5.7×10^{-1}			Suzuki et al. (1992)	Q	232
7.9×10^{-1}			Duchowicz et al. (2020)	?	185, 21
	5900		Kühne et al. (2005)	?	
1.7×10^{-1}			Abraham et al. (1990)	?	
3-nitrotoluene <chem>C6H4(NO2)CH3</chem> [99-08-1] QZYHIOPPLUJF-UHFFFAOYSA-N	2.7×10^{-1}	7000	Brockbank (2013)	L	1
	1.3		Chao et al. (2017)	M	
	1.1		Altschuh et al. (1999)	M	
	2.8×10^{-1}		Li and Carr (1993)	M	
	1.3×10^{-1}		Mackay et al. (2006d)	V	
	1.3×10^{-1}		Mackay et al. (1995)	V	
	1.4×10^{-1}		Hine and Mookerjee (1975)	V	
	1.4×10^{-1}	3200	Goldstein (1982)	X	298
	1.5		Keshavarz et al. (2022)	Q	
	1.2		Duchowicz et al. (2020)	Q	299
	4.2×10^{-1}		Zhang et al. (2010)	Q	287, 288
	2.5×10^{-1}		Zhang et al. (2010)	Q	287, 289
	4.1×10^{-1}		Zhang et al. (2010)	Q	287, 290
	1.8×10^{-1}		Zhang et al. (2010)	Q	287, 291
1.8×10^{-1}		Hilal et al. (2008)	Q		
1.6×10^{-1}		Modarresi et al. (2007)	Q	67	



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		4900	Kühne et al. (2005)	Q	
	1.4×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.3		Nirmalakhandan et al. (1997)	Q	
	5.7×10^{-1}		Suzuki et al. (1992)	Q	232
	1.1		Duchowicz et al. (2020)	?	185, 21
		4900	Kühne et al. (2005)	?	
	1.3×10^{-1}		Yaws (1999)	?	21, 38
	1.4×10^{-1}		Abraham et al. (1990)	?	
4-nitrotoluene <chem>C6H4(NO2)CH3</chem> [99-99-0] ZPTVNYMJQHSSEA-UHFFFAOYSA-N	8.9×10^{-1}	7100	Brockbank (2013)	L	1
	1.8		Altschuh et al. (1999)	M	
	2.8		Mackay et al. (2006d)	V	
	2.0×10^{-1}		Lide and Frederikse (1995)	V	
	2.8		Mackay et al. (1995)	V	
	1.6×10^{-1}	3100	Goldstein (1982)	X	298
	1.5		Keshavarz et al. (2022)	Q	
	1.2		Duchowicz et al. (2020)	Q	184
	1.4×10^{-1}		Li et al. (2014)	Q	241
	4.2×10^{-1}		Zhang et al. (2010)	Q	287, 288
	2.8×10^{-1}		Zhang et al. (2010)	Q	287, 289
	9.0×10^{-1}		Zhang et al. (2010)	Q	287, 290
	1.8×10^{-1}		Zhang et al. (2010)	Q	287, 291
	2.0×10^{-1}		Hilal et al. (2008)	Q	
	2.4×10^{-1}		Modarresi et al. (2007)	Q	67
		4900	Kühne et al. (2005)	Q	
	1.8		Duchowicz et al. (2020)	?	185, 21
		3800	Kühne et al. (2005)	?	
1,2-dinitrobenzene <chem>C6H4N2O4</chem> [528-29-0] IZUKQVSCNEFMJ-UHFFFAOYSA-N	1.9×10^2		Duchowicz et al. (2020)	V	186
	1.9×10^2		HSDB (2015)	V	
	3.5×10^2		Duchowicz et al. (2020)	Q	
	1.2×10^2		Zhang et al. (2010)	Q	287, 288
	3.2×10^1		Zhang et al. (2010)	Q	287, 289
	2.6×10^1		Zhang et al. (2010)	Q	287, 290
	2.7×10^1		Zhang et al. (2010)	Q	287, 291
1,3-dinitrobenzene <chem>C6H4N2O4</chem> [99-65-0] WDCYWAQPCXBJA-UHFFFAOYSA-N	1.8×10^2		Chao et al. (2017)	M	
	2.0×10^2		Altschuh et al. (1999)	M	
			Mackay et al. (2006d)	V	558
	5.0×10^2		Mackay et al. (1995)	V	
	3.9×10^1		Smith et al. (1981a)	V	
	2.5×10^2		Keshavarz et al. (2022)	Q	
	2.1×10^2		Duchowicz et al. (2020)	Q	
	2.0×10^2		Gharagheizi et al. (2012)	Q	
	1.2×10^2		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^1		Raventos-Duran et al. (2010)	Q	244
	1.2×10^2		Raventos-Duran et al. (2010)	Q	245
	2.0×10^2		Duchowicz et al. (2020)	?	185, 21



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4-dinitrobenzene <chem>C6H4N2O4</chem> [100-25-4] FYFDQJRXFWGIBS-UHFFFAOYSA-N	2.0×10^{-1} 2.0×10^{-1} 1.2×10^2		Mackay et al. (2006d) Mackay et al. (1995) HSDB (2015)	V V Q	 99
1,3,5-trinitrobenzene <chem>C6H3N3O6</chem> [99-35-4] UATJOMSPNYCXIX-UHFFFAOYSA-N	1.5×10^3 2.7×10^2 2.8×10^2		HSDB (2015) Yaws (2003) Gharagheizi et al. (2010)	V X Q	 237, 80 246
2,4,6-trinitrophenol <chem>C6H3N3O7</chem> (picric acid) [88-89-1] OXNIZHLAWKVMX-UHFFFAOYSA-N	3.0×10^5		Ebert et al. (2023)	?	316
2-nitrobenzenamine <chem>C6H6N2O2</chem> (2-nitroaniline) [88-74-4] DPJXCXZTLWNFOH-UHFFFAOYSA-N	7.1×10^1 1.7×10^2 1.0×10^2 2.0×10^2 2.5×10^2 3.1×10^1 2.1×10^2 4.5×10^2 1.7×10^2	6800	Brockbank (2013) Altschuh et al. (1999) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	L M R Q Q Q Q Q Q ?	1 184 67 185, 21
3-nitrobenzenamine <chem>C6H6N2O2</chem> (3-nitroaniline) [99-09-2] XJCVRTZCHMZPBD-UHFFFAOYSA-N	6.9×10^2 1.2×10^3 4.2×10^3 1.5×10^3 2.7×10^3 4.0×10^2 6.0×10^2 4.4×10^2 1.3×10^3 1.2×10^3 1.2×10^3		Meylan and Howard (1991) Abraham et al. (1994a) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Meylan and Howard (1991) Duchowicz et al. (2020) HSDB (2015)	V R Q Q Q Q Q Q Q ? ?	 67 230, 231 185, 21 419
4-nitrobenzenamine <chem>C6H6N2O2</chem> (4-nitroaniline) [100-01-6] TYMLOMAGGOJONV-UHFFFAOYSA-N	8.7×10^3 8.6×10^3 1.4×10^4 1.8×10^2 4.2×10^3 1.5×10^3 8.5×10^2 1.7×10^2 2.2×10^3 1.5×10^2 4.4×10^2 7.8×10^3	8200	Brockbank (2013) Altschuh et al. (1999) Abraham et al. (1994a) Yaws (2003) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Nirmalakhandan et al. (1997) Duchowicz et al. (2020)	L M R X Q Q Q Q Q Q Q ?	1 237 246 67 185, 21



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4-dinitrobenzenamine C ₆ H ₅ N ₃ O ₄ [97-02-9] LXQQPGNCGEELI-UHFFFAOYSA-N	6.5 × 10 ⁴		HSDB (2015)	Q	545
2-methyl-6-nitroaniline C ₇ H ₈ N ₂ O ₂ [570-24-1] FCMRHMPITHLLLA-UHFFFAOYSA-N	4.6 × 10 ¹		Abraham et al. (2019)	Q	
1-methyl-2,3-dinitrobenzene C ₇ H ₆ N ₂ O ₄ (2,3-dinitrotoluene; 2,3-DNT) [602-01-7] DYSXLQBUIUOPLBB-UHFFFAOYSA-N	1.1 × 10 ² 1.1 × 10 ² 2.2 × 10 ¹ 9.5 1.5 × 10 ¹ 1.1 × 10 ² 2.3 × 10 ¹ 1.1 × 10 ¹ 1.5 × 10 ¹		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q Q Q Q Q	447 287, 288 287, 289 287, 290 287, 291 287, 288 287, 289 287, 290 287, 291
1-methyl-2,4-dinitrobenzene C ₇ H ₆ N ₂ O ₄ (2,4-dinitrotoluene; 2,4-DNT) [121-14-2] RMBFBMJGBANMMK-UHFFFAOYSA-N	4.0 × 10 ¹ 1.8 × 10 ² 1.1 × 10 ¹ 1.0 × 10 ² 1.1 × 10 ¹ 6.3 × 10 ¹ 2.1 × 10 ⁻¹ 2.2 3.1 × 10 ⁻² 3.4 × 10 ² 1.6 × 10 ² 9.9 × 10 ¹ 1.6 × 10 ¹ 9.9 × 10 ¹ 1.1 × 10 ² 1.6 × 10 ¹ 5.0 1.5 × 10 ¹ 1.8 × 10 ²	7900 2900	Brockbank (2013) Altschuh et al. (1999) Mackay et al. (2006d) Schüürmann (2000) Mackay et al. (1995) Smith et al. (1981a) Goldstein (1982) Mackay et al. (1995) Ryan et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Duchowicz et al. (2020)	L M V V V V X C C Q Q Q Q Q Q Q Q Q Q ?	1 298 242, 243 244 245 287, 288 287, 289 287, 290 287, 291 185, 21
2-methyl-1,4-dinitrobenzene C ₇ H ₆ N ₂ O ₄ (2,5-dinitrotoluene; 2,5-DNT) [619-15-8] KZBOXYKTSUUBTO-UHFFFAOYSA-N	1.8 × 10 ¹ 1.1 × 10 ² 1.8 × 10 ¹ 1.4 1.5 × 10 ¹		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-1,3-dinitrobenzene C ₇ H ₆ N ₂ O ₄ (2,6-dinitrotoluene; 2,6-DNT) [606-20-2] XTRDKALNCIHHNI-UHFFFAOYSA-N	4.8	7600	Brockbank (2013)	L	1
	1.3×10^1		Duchowicz et al. (2020)	V	186
	1.5×10^1		HSDB (2015)	V	
	1.4×10^1		Mackay et al. (2006d)	V	
	1.4×10^1		Mackay et al. (1995)	V	
	1.2		Mackay et al. (1995)	C	
	3.1×10^{-2}		Ryan et al. (1988)	C	
	1.6×10^2		Duchowicz et al. (2020)	Q	
	1.6		Li et al. (2014)	Q	241
	1.1×10^2		Zhang et al. (2010)	Q	287, 288
2.1×10^1		Zhang et al. (2010)	Q	287, 289	
4.3		Zhang et al. (2010)	Q	287, 290	
1.5×10^1		Zhang et al. (2010)	Q	287, 291	
4-methyl-1,2-dinitrobenzene C ₇ H ₆ N ₂ O ₄ (3,4-dinitrotoluene; 3,4-DNT) [610-39-9] INYDMNPNDRJQJ-UHFFFAOYSA-N	3.3×10^1	9600	Brockbank (2013)	L	1
	1.1×10^2		HSDB (2015)	Q	447
	1.1×10^2		Zhang et al. (2010)	Q	287, 288
	3.9×10^1		Zhang et al. (2010)	Q	287, 289
	3.1×10^1		Zhang et al. (2010)	Q	287, 290
	1.5×10^1		Zhang et al. (2010)	Q	287, 291
1-methyl-2,4,6-trinitrobenzene C ₇ H ₅ N ₃ O ₆ (2,4,6-trinitrotoluene; TNT) [118-96-7] SPSSULHKWOKEEL-UHFFFAOYSA-N	4.7×10^2	7700	Brockbank (2013)	L	1
	4.7×10^2		HSDB (2015)	V	
	5.4×10^2		Schüürmann (2000)	V	
		6200	Kühne et al. (2005)	Q	
		6400	Kühne et al. (2005)	?	
2,4,6-trinitro-1,3-dimethyl-5- <i>tert</i> -butylbenzene C ₁₂ H ₁₅ N ₃ O ₆ (musk xylene) [81-15-2] XMWRWTSZNLQZFN-UHFFFAOYSA-N	3.2×10^{-1}		Lee et al. (2012)	M	
	1.7×10^{-2}		Amoore and Buttery (1978)	V	
	1.3×10^3		HSDB (2015)	Q	99
	9.5×10^3		Zhang et al. (2010)	Q	287, 288
	5.6		Zhang et al. (2010)	Q	287, 289
	4.8×10^{-2}		Zhang et al. (2010)	Q	287, 290
1.5×10^2		Zhang et al. (2010)	Q	287, 291	
2-nitrophenol HOC ₆ H ₄ (NO ₂) [88-75-5] IQUPABOKLQSFVK-UHFFFAOYSA-N	9.9		Chao et al. (2017)	M	
	1.4	5700	Guo and Brimblecombe (2007)	M	
	8.3×10^{-1}	6300	Harrison et al. (2002)	M	
	8.9×10^{-1}	6300	Müller and Heal (2001)	M	
	7.7×10^{-1}		Tremp et al. (1993)	M	12
	6.1×10^{-1}		Mackay et al. (2006c)	V	
	2.9		Lide and Frederikse (1995)	V	
	7.9×10^{-1}		Riederer (1990)	V	
	7.3×10^{-1}		Schwarzenbach et al. (1988)	V	12
	2.8		Leuenberger et al. (1985)	V	416
	9.2×10^{-1}		Abraham et al. (1994a)	R	
6.9×10^{-1}	4600	Goldstein (1982)	X	298	
1.3		Ryan et al. (1988)	C		



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1		Abraham et al. (2019)	Q	
	6.6		Wang et al. (2017)	Q	80, 238
	2.0		Wang et al. (2017)	Q	80, 239
	2.1×10^{-1}		Wang et al. (2017)	Q	80, 240
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	1.6		Raventos-Duran et al. (2010)	Q	245
	5.3		Hilal et al. (2008)	Q	
		4400	Kühne et al. (2005)	Q	
	3.5×10^1		Katritzky et al. (1998)	Q	
	1.5×10^4		Nirmalakhandan et al. (1997)	Q	
		6300	Kühne et al. (2005)	?	
	7.0×10^{-1}		Abraham et al. (1990)	?	
3-nitrophenol HOC ₆ H ₄ (NO ₂) [554-84-7] RTZZCYNQPHTPPL-UHFFFAOYSA-N	1.6×10^2		Guo and Brimblecombe (2007)	M	555
	1.0		Lide and Frederikse (1995)	V	
	4.9×10^3		Gaffney and Senum (1984)	X	389
	2.1×10^4		Keshavarz et al. (2022)	Q	
	1.4×10^4		Duchowicz et al. (2020)	Q	299
	2.2×10^3		Abraham et al. (2019)	Q	
	2.0×10^3		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^4		Raventos-Duran et al. (2010)	Q	244
	4.9×10^3		Raventos-Duran et al. (2010)	Q	245
	9.5×10^3		Hilal et al. (2008)	Q	
	2.1×10^2		Modarresi et al. (2007)	Q	67
	4.8×10^3		English and Carroll (2001)	Q	230, 231
	1.5×10^4		Nirmalakhandan et al. (1997)	Q	
	4.9×10^3		Duchowicz et al. (2020)	?	185, 21
	4.6×10^3		Abraham et al. (1990)	?	
4-nitrophenol HOC ₆ H ₄ (NO ₂) [100-02-7] BTJIUGUIPKRLHP-UHFFFAOYSA-N	1.4×10^1		Chao et al. (2017)	M	
	2.1×10^2		Guo and Brimblecombe (2007)	M	555
	7.7×10^2		Tremp et al. (1993)	M	12
	3.0×10^2		Lide and Frederikse (1995)	V	
	2.0×10^4		Riederer (1990)	V	
	3.0×10^2		Schwarzenbach et al. (1988)	V	12
	9.4×10^4		Yoshida et al. (1983)	V	
	2.6×10^4	9100	Parsons et al. (1971)	T	417
	9.8	6000	Goldstein (1982)	X	298
	1.6		Ryan et al. (1988)	C	
	2.1×10^4		Keshavarz et al. (2022)	Q	
	2.2×10^4		Duchowicz et al. (2020)	Q	184
	1.4×10^4		Abraham et al. (2019)	Q	
	2.4×10^4		Li et al. (2014)	Q	241
	2.0×10^3		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^3		Raventos-Duran et al. (2010)	Q	244
	4.9×10^3		Raventos-Duran et al. (2010)	Q	245
	6.1×10^3		Hilal et al. (2008)	Q	



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^2		Modarresi et al. (2007)	Q	67
	1.5×10^4		Nirmalakhandan et al. (1997)	Q	
	2.4×10^4		Duchowicz et al. (2020)	?	185, 21
	2.6×10^4		Abraham et al. (1990)	?	
4-nitroanisole C ₇ H ₇ NO ₃ [100-17-4] BNUHAJGCKIQFGE-UHFFFAOYSA-N	5.0		Ebert et al. (2023)	?	365
3-methyl-2-nitrophenol C ₇ H ₇ NO ₃ [4920-77-8] QIORDSKCCHRSSD-UHFFFAOYSA-N	3.2 2.4 1.9×10^2		Tremp et al. (1993) Schwarzenbach et al. (1988) Modarresi et al. (2007)	M V Q	12 12 67
		4700	Kühne et al. (2005)	Q	
		4200	Kühne et al. (2005)	?	
4-methyl-2-nitrophenol C ₇ H ₇ NO ₃ [119-33-5] SYDNSSSQVSOXTN-UHFFFAOYSA-N	6.7×10^{-1} 6.1×10^{-1} 3.9 1.9 2.5×10^{-1} 3.1×10^{-1} 6.2×10^{-1} 1.2		Tremp et al. (1993) Schwarzenbach et al. (1988) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Kühne et al. (2005) Kühne et al. (2005)	M V Q Q Q Q Q Q Q Q	12 12 80, 238 80, 239 80, 240 242, 243 244 245 245 ? ?
		4700	Kühne et al. (2005)	Q	
		6800	Kühne et al. (2005)	?	
5-methyl-2-nitrophenol C ₇ H ₇ NO ₃ [700-38-9] NQXUSSVLFBRSE-UHFFFAOYSA-N	7.7×10^{-1} 6.7×10^{-1} 3.1×10^{-1} 7.8×10^{-1} 1.2		Tremp et al. (1993) Schwarzenbach et al. (1988) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Kühne et al. (2005) Kühne et al. (2005)	M V Q Q Q Q Q	12 12 271, 243 244 245 245 ?
		4700	Kühne et al. (2005)	Q	
		5600	Kühne et al. (2005)	?	
6-methyl-2-nitrophenol C ₇ H ₇ NO ₃ [13073-29-5] AQDKZPFDFOWHRDZ-UHFFFAOYSA-N	2.9×10^{-1} 3.9 2.0×10^1 1.2×10^{-1} 3.1×10^{-1} 3.9 1.2		Tremp et al. (1993) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Kühne et al. (2005) Kühne et al. (2005)	M Q Q Q Q Q Q Q Q	12 80, 238 80, 239 80, 240 242, 243 244 245 245 ? ?
		4700	Kühne et al. (2005)	Q	
		5200	Kühne et al. (2005)	?	
3-methyl-4-nitrophenol C ₇ H ₇ NO ₃ [2581-34-2] PIIZYNQECPTVEO-UHFFFAOYSA-N	6.2×10^2 1.6×10^3 3.9×10^3 3.9×10^3 2.1×10^2		Tremp et al. (1993) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Modarresi et al. (2007)	M Q Q Q Q	12 271, 243 244 245 67



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methoxy-2-nitrophenol C ₇ H ₇ NO ₄ [1568-70-3] YBUGOACXDPUIR-UHFFFAOYSA-N	5.3 2.3×10^{-1} 6.2 1.2×10^2 2.5×10^1 9.4×10^1		Tremp et al. (1993) Schwarzenbach et al. (1988) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Modarresi et al. (2007)	M V Q Q Q Q	12 12 242, 243 244 245 67
		4900 6600	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
4-amino-2,6-dinitrotoluene C ₇ H ₇ N ₃ O ₄ [19406-51-0] KQRJATLINVYHEZ-UHFFFAOYSA-N	7.3×10^3		Ebert et al. (2023)	?	365
4-hydroxy-3-nitro-benzaldehyde C ₇ H ₅ NO ₄ [3011-34-5] YTHJCZRFJGXPTL-UHFFFAOYSA-N	9.4 3.9×10^1 2.0×10^2 6.2×10^2		Schwarzenbach et al. (1988) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q	12 242, 243 244 245
2,4-dinitrophenol C ₆ H ₄ N ₂ O ₅ [51-28-5] UFBJCMHMOXMLKC-UHFFFAOYSA-N	9.7×10^2 1.1×10^2 3.5×10^1 1.5×10^4 2.0×10^2 2.6×10^3 2.1×10^3 3.0 7.8×10^1 6.2×10^2 3.9×10^2 3.6×10^2 6.2×10^2 4.7 1.3×10^3 4.7×10^1		Chao et al. (2017) Tremp et al. (1993) Schwarzenbach et al. (1988) Ryan et al. (1988) Abraham et al. (2019) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Modarresi et al. (2007)	M M V C Q Q Q Q Q Q Q Q Q Q Q Q	12 12 80, 238 80, 239 80, 240 242, 243 244 245 287, 288 287, 289 287, 290 287, 291 67
		5000 3300	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
2,5-dinitrophenol C ₆ H ₄ N ₂ O ₅ [329-71-5] UWEZBKLLMKVIPI-UHFFFAOYSA-N	1.5×10^1 1.1×10^2 7.8×10^1 4.9×10^2 3.9×10^2		Schwarzenbach et al. (1988) Abraham et al. (2019) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	V Q Q Q Q	12 271, 243 244 245
picramic acid C ₆ H ₅ N ₃ O ₅ (4,6-dinitro-2-aminophenol) [96-91-3] QXYMVUZOGFVPGH-UHFFFAOYSA-N	1.0×10^6		HSDB (2015)	Q	99



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-amino-2-nitrophenol C ₆ H ₆ N ₂ O ₃ [119-34-6] WHODQVWERNSQEO-UHFFFAOYSA-N	4.5 × 10 ⁶		HSDB (2015)	Q	99
2-amino-5-nitrophenol C ₆ H ₆ N ₂ O ₃ [121-88-0] DOPJTDJKZNLWRB-UHFFFAOYSA-N	1.3 × 10 ⁷		HSDB (2015)	Q	99
2-amino-4-nitrophenol C ₆ H ₆ N ₂ O ₃ [99-57-0] VLZVHRYRNMWPSN-UHFFFAOYSA-N	4.5 × 10 ⁶		HSDB (2015)	Q	99
4-nitro- <i>o</i> -phenylenediamine C ₆ H ₇ N ₃ O ₂ (4-nitro-1,2-diaminobenzene) [99-56-9] RAUWPXIALNKQM-UHFFFAOYSA-N	1.3 × 10 ⁶		HSDB (2015)	Q	99
4-nitrobenzene-1,3-diamine C ₆ H ₇ N ₃ O ₂ [5131-58-8] DPIZKMGXPXNXLGL-UHFFFAOYSA-N	1.7 × 10 ⁵		HSDB (2015)	Q	99
2-nitro-1,4-benzenediamine C ₆ H ₇ N ₃ O ₂ [5307-14-2] HVHNMNGARPCGGD-UHFFFAOYSA-N	1.7 × 10 ⁵		HSDB (2015)	Q	99
4-methyl-2,6-dinitrophenol C ₇ H ₆ N ₂ O ₅ (2,6-dinitro- <i>p</i> -cresol) [609-93-8] HOYRZHJJAHRMLL-UHFFFAOYSA-N	1.9 × 10 ²		Tremp et al. (1993)	M	12
	3.2 × 10 ²		Zhang et al. (2010)	Q	287, 288
	3.4 × 10 ³		Zhang et al. (2010)	Q	287, 289
	8.8 × 10 ¹		Zhang et al. (2010)	Q	287, 290
	8.0		Zhang et al. (2010)	Q	287, 291
	4.0 × 10 ¹		Modarresi et al. (2007)	Q	67
		3000	Kühne et al. (2005)	Q	
		3400	Kühne et al. (2005)	?	
2-methyl-4,6-dinitrophenol C ₇ H ₆ N ₂ O ₅ (6-methyl-2,4-dinitrophenol; 4,6-dinitro- <i>o</i> -cresol; DNOC) [534-52-1] ZXVONLUNISGICL-UHFFFAOYSA-N	4.3 × 10 ¹		Tremp et al. (1993)	M	12
	7.0		Warner et al. (1980)	M	
	9.2 × 10 ¹		Mackay et al. (2006d)	V	
	2.3 × 10 ¹		Schwarzenbach et al. (1988)	V	12
	9.1 × 10 ¹		Suntio et al. (1988)	V	12
	9.0 × 10 ⁻¹		Barcelo and Hennion (1997)	X	567
	7.0		Shen (1982)	C	
	1.7		Keshavarz et al. (2022)	Q	
1.3 × 10 ³		Duchowicz et al. (2020)	Q		
1.5 × 10 ³		Wang et al. (2017)	Q	80, 238	



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.7×10^4		Wang et al. (2017)	Q	80, 239
	3.4		Wang et al. (2017)	Q	80, 240
	3.2×10^2		Zhang et al. (2010)	Q	287, 288
	2.3×10^3		Zhang et al. (2010)	Q	287, 289
	1.9×10^1		Zhang et al. (2010)	Q	287, 290
	7.2×10^2		Zhang et al. (2010)	Q	287, 291
	4.1		Goodarzi et al. (2010)	Q	568
	3.4×10^1		Modarresi et al. (2007)	Q	67
		5400	Kühne et al. (2005)	Q	
	7.0		Duchowicz et al. (2020)	?	185, 21
		4200	Kühne et al. (2005)	?	
5-nitrobenzimidazole C ₇ H ₅ N ₃ O ₂ [94-52-0] XPAZGLFMMUODDK-UHFFFAOYSA-N	2.7×10^1		HSDB (2015)	Q	99
3-nitrobenzoic acid C ₇ H ₅ NO ₄ [121-92-6] AFPHTEQTJZKQAO-UHFFFAOYSA-N	3.4×10^3		Abraham et al. (2019)	Q	
4-nitrobenzoic acid C ₇ H ₅ NO ₄ [62-23-7] OTLNPYWUJJOZPPA-UHFFFAOYSA-N	3.2×10^3 2.6×10^4		Abraham et al. (2019) HSDB (2015)	Q Q	 99
3,5-dinitrobenzoic acid C ₇ H ₄ N ₂ O ₆ [99-34-3] VYWYYJYRVSBHJQ-UHFFFAOYSA-N	8.0×10^4		Abraham et al. (2019)	Q	
2,4,6-trinitrobenzoic acid C ₇ H ₃ N ₃ O ₈ [129-66-8] KAQBNBSMMVTKRN-UHFFFAOYSA-N	3.8×10^8		HSDB (2015)	Q	99
dinitrotoluene C ₇ H ₆ N ₂ O ₄ [25321-14-6] MOSFIJXAXDLOML-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	447
1-methyl-3,5-dinitrobenzene C ₇ H ₆ N ₂ O ₄ [618-85-9] RUIFULUFLANOCI-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	447



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methoxy-2-nitrobenzene C ₇ H ₇ NO ₃ [91-23-6] CFBYEGUGFPZCNF-UHFFFAOYSA-N	2.3 × 10 ¹ 2.3 × 10 ¹ 3.3 × 10 ¹ 1.2 × 10 ¹ 3.9 × 10 ⁻¹ 7.8 1.6 × 10 ²		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Katritzky et al. (1998)	V V Q Q Q Q Q	186 242, 243 244 245
2-methyl-5-nitrobenzenamine C ₇ H ₈ N ₂ O ₂ (5-nitro- <i>o</i> -toluidine) [99-55-8] DSBIJCMXAIIKKKI-UHFFFAOYSA-N	1.2 × 10 ³		HSDB (2015)	Q	99
2-methoxy-5-nitrobenzenamine C ₇ H ₈ N ₂ O ₃ (5-nitro- <i>o</i> -anisidine) [99-59-2] NIPDVSLAMPATP-UHFFFAOYSA-N	7.6 × 10 ²		HSDB (2015)	Q	545
(2-nitroethyl)benzene C ₈ H ₇ NO ₂ [102-96-5] PIAOLBVUVDXHHL-UHFFFAOYSA-N	2.8		HSDB (2015)	Q	447
1,2-dimethyl-3-nitrobenzene C ₈ H ₉ NO ₂ [83-41-0] FVHAWXWFBPFOS-UHFFFAOYSA-N	1.9 × 10 ⁻¹ 3.9 × 10 ⁻¹ 2.9 × 10 ⁻¹ 2.6 × 10 ⁻¹ 1.0 × 10 ⁻¹		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	447 287, 288 287, 289 287, 290 287, 291
1,2-dimethyl-4-nitrobenzene C ₈ H ₉ NO ₂ [99-51-4] HFZKOYWDLDYELC-UHFFFAOYSA-N	3.9 × 10 ⁻¹ 3.1 × 10 ⁻¹ 8.0 × 10 ⁻¹ 1.0 × 10 ⁻¹		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,4-dimethyl-2-nitrobenzene C ₈ H ₉ NO ₂ [89-58-7] BSFHJMGROOFSRA-UHFFFAOYSA-N	3.9 × 10 ⁻¹ 2.5 × 10 ⁻¹ 2.2 × 10 ⁻¹ 1.0 × 10 ⁻¹		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2,4-dimethyl-1-nitrobenzene C ₈ H ₉ NO ₂ [89-87-2] BBUPBICWUURTNP-UHFFFAOYSA-N	3.9 × 10 ⁻¹ 3.1 × 10 ⁻¹ 4.3 × 10 ⁻¹ 1.0 × 10 ⁻¹		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4-methyl-2-nitroanisole C ₈ H ₉ NO ₃ [119-10-8] LGNMURXRPLMVJI-UHFFFAOYSA-N	7.2 1.6 6.0 × 10 ¹ 2.7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-3-nitrobenzoic acid C ₈ H ₇ NO ₄ [1975-50-4] YPQAFWHSMMWWPLX-UHFFFAOYSA-N	2.2 × 10 ³		Abraham et al. (2019)	Q	
3-methyl-4-nitrobenzoic acid C ₈ H ₇ NO ₄ [3113-71-1] XDTTUTIFWDAMIX-UHFFFAOYSA-N	9.2 × 10 ²		Abraham et al. (2019)	Q	
2-methyl-3,5-dinitrobenzoic acid C ₈ H ₆ N ₂ O ₆ [28169-46-2] CDVNZMKTJIBBBV-UHFFFAOYSA-N	3.7 × 10 ⁶		Abraham et al. (2019)	Q	
1-(1-methylethyl)-4-nitrobenzene C ₉ H ₁₁ NO ₂ [1817-47-6] JXMYUMNAEKRMIP-UHFFFAOYSA-N	2.4 × 10 ⁻¹ 1.3 × 10 ⁻¹ 3.9 × 10 ⁻¹ 1.4 × 10 ⁻¹		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
5-nitro-8-hydroxyquinoline C ₉ H ₆ N ₂ O ₃ (nitroxoline) [4008-48-4] RJIWZDNTCBXHAL-UHFFFAOYSA-N	2.7 × 10 ³		Abraham et al. (2019)	Q	
2-(1-methylpropyl)-4,6-dinitrophenol C ₁₀ H ₁₂ N ₂ O ₅ (dinoseb) [88-85-7] OWZPCEFYPJAJFR-UHFFFAOYSA-N	2.2 2.0 × 10 ⁻² 1.9 × 10 ⁻⁴ 1.4 × 10 ² 5.2 × 10 ² 1.3 × 10 ² 4.3 × 10 ² 6.2 × 10 ⁻³		Tremp et al. (1993) Suntio et al. (1988) Barcelo and Hennion (1997) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Goodarzi et al. (2010)	M V X Q Q Q Q Q	12 12 567 287, 288 287, 289 287, 290 287, 291 568, 571
		6400	Kühne et al. (2005)	Q	
	1.7 × 10 ³		MacBean (2012a)	?	12
		7200	Kühne et al. (2005)	?	
			Mackay et al. (2006d)	W	595
1-nitronaphthalene C ₁₀ H ₇ NO ₂ [86-57-7] RJKGBJPXVHTNJJL-UHFFFAOYSA-N	4.6 5.6 2.9 × 10 ⁻¹ 3.8 9.8 6.4 3.5 4.7 4.2		Chao et al. (2017) Altschuh et al. (1999) Mackay et al. (2006d) Mackay et al. (1995) Keshavarz et al. (2022) Duchowicz et al. (2020) Abraham et al. (2019) Parnis et al. (2015) Zhang et al. (2010) Zhang et al. (2010)	M M V V Q Q Q Q Q Q	558 369 287, 288 287, 289



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6		Zhang et al. (2010)	Q	287, 290
	4.7		Zhang et al. (2010)	Q	287, 291
	2.1		Modarresi et al. (2007)	Q	67
	5.6		Duchowicz et al. (2020)	?	185, 21
2-nitronaphthalene C ₁₀ H ₇ NO ₂ [581-89-5] ZJYJZEAJZXVAMF-UHFFFAOYSA-N	6.8		Parnis et al. (2015)	Q	369
1,3-dinitronaphthalene C ₁₀ H ₆ N ₂ O ₄ [606-37-1] ULALSFRIGPMWRS-UHFFFAOYSA-N	1.2 × 10 ²		Parnis et al. (2015)	Q	369
1,5-dinitronaphthalene C ₁₀ H ₆ N ₂ O ₄ [605-71-0] ZUTCJXFCHHDFJS-UHFFFAOYSA-N	1.1 × 10 ²		Parnis et al. (2015)	Q	369
1,8-dinitronaphthalene C ₁₀ H ₆ N ₂ O ₄ [602-38-0] AVCSMMMOCOTIHF-UHFFFAOYSA-N	5.2 × 10 ³		Parnis et al. (2015)	Q	369
dinoterb C ₁₀ H ₁₂ N ₂ O ₅ [1420-07-1] IIPZYDQGBIWLBU-UHFFFAOYSA-N	1.7 9.1 × 10 ⁻¹ 9.3 × 10 ⁻¹		Barcelo and Hennion (1997) Goodarzi et al. (2010) MacBean (2012a)	X Q ?	567 568, 569
4-(1-methylpropyl)-2-nitrophenol C ₁₀ H ₁₃ NO ₃ (4-sec-butyl-2-nitrophenol) [3555-18-8] GCDCKEORRIGZKI-UHFFFAOYSA-N	1.0 × 10 ⁻¹ 2.4 × 10 ⁻¹ 1.2 × 10 ⁻¹ 3.9 × 10 ⁻¹ 4.9 × 10 ⁻¹		Tremp et al. (1993) Schwarzenbach et al. (1988) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	M V Q Q Q	12 12 242, 243 244 245
		5800 4300	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
1-methyl-4-nitronaphthalene C ₁₁ H ₉ NO ₂ [880-93-3] FRLVKAJKOYFHKQ-UHFFFAOYSA-N	7.7		Parnis et al. (2015)	Q	369
1-methyl-5-nitronaphthalene C ₁₁ H ₉ NO ₂ [91137-27-8] AOSRALZFDNFXFZ-UHFFFAOYSA-N	5.0		Parnis et al. (2015)	Q	369



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-methyl-6-nitronaphthalene C ₁₁ H ₉ NO ₂ [105752-67-8] SOXBGESONWKYDX-UHFFFAOYSA-N	5.0		Parnis et al. (2015)	Q	369
2-methyl-1-nitronaphthalene C ₁₁ H ₉ NO ₂ [881-03-8] IZNWACYOILBFEG-UHFFFAOYSA-N	1.5		Parnis et al. (2015)	Q	369
3-methyl-1-nitronaphthalene C ₁₁ H ₉ NO ₂ [13615-38-8] HKMFJWNUOWBRGF-UHFFFAOYSA-N	3.9		Parnis et al. (2015)	Q	369
3-nitrodibenzofuran C ₁₂ H ₇ NO ₃ [5410-97-9] UVFAHDAUVZRVCC-UHFFFAOYSA-N	2.6×10^1		Parnis et al. (2015)	Q	369
musk ambrette (artificial) C ₁₂ H ₁₆ N ₂ O ₅ [83-66-9] SUAUILGSCPYS-UHFFFAOYSA-N	1.4×10^1 7.0×10^2 2.4 2.2×10^{-1} 4.6×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
bis(<i>p</i> -nitrophenyl) ether C ₁₂ H ₈ N ₂ O ₅ [101-63-3] MWAGUKZCDDRDCS-UHFFFAOYSA-N	5.4×10^3 2.3×10^2 3.0×10^3 1.1×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4-nitroazobenzene C ₁₂ H ₉ N ₃ O ₂ [2491-52-3] TZTDJBMGPQLSLI-UHFFFAOYSA-N	1.8×10^1		Ebert et al. (2023)	?	316
4-nitro-N-phenylbenzenamine C ₁₂ H ₁₀ N ₂ O ₂ [836-30-6] XXYMSQQCBUKFHE-UHFFFAOYSA-N	2.4×10^3 1.7×10^2 2.9×10^4 2.5×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-cyclohexyl-4,6-dinitrophenol C ₁₂ H ₁₄ N ₂ O ₅ [131-89-5] QJYHUJAGJUHXJN-UHFFFAOYSA-N	1.8×10^2		HSDB (2015)	Q	99
dinoseb acetate C ₁₂ H ₁₄ N ₂ O ₆ [2813-95-8] RDJTWKSYLLHRW-UHFFFAOYSA-N	1.5×10^3		Ebert et al. (2023)	?	316



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dipicrylamine C ₁₂ H ₅ N ₇ O ₁₂ (2,2',4,4',6,6'- hexanitrodiphenylamine) [131-73-7] CBCIHIVRDWLAME-UHFFFAOYSA-N	4.3 × 10 ¹¹		HSDB (2015)	Q	99
1,2-dihydro-5-nitroacenaphthylene C ₁₂ H ₉ NO ₂ (5-nitroacenaphthene) [602-87-9] CUARLQDWYSRQDF-UHFFFAOYSA-N	9.0 9.2		HSDB (2015) Parnis et al. (2015)	Q Q	99 369
2-nitro-1,1'-biphenyl C ₁₂ H ₉ NO ₂ [86-00-0] YOJJKXRJMXIKSR-UHFFFAOYSA-N	1.6 × 10 ¹		Parnis et al. (2015)	Q	369
3-nitro-1,1'-biphenyl C ₁₂ H ₉ NO ₂ [2113-58-8] FYRPEHRWMMHQM-UHFFFAOYSA-N	9.9		Parnis et al. (2015)	Q	369
4-nitro-1,1'-biphenyl C ₁₂ H ₉ NO ₂ [92-93-3] BAJQRLZAPXASRD-UHFFFAOYSA-N	2.8 2.5 × 10 ¹		HSDB (2015) Parnis et al. (2015)	Q Q	545 369
2-nitro-9H-fluorene C ₁₃ H ₉ NO ₂ [607-57-8] XFOHWECQTFIEIX-UHFFFAOYSA-N	3.4 × 10 ¹ 9.5 × 10 ¹		HSDB (2015) Parnis et al. (2015)	Q Q	545 369
5- <i>tert</i> -butyl-4,6-dinitro-1,2,3- trimethylbenzene C ₁₃ H ₁₈ N ₂ O ₄ [145-39-1] MINYPECWZURGR-UHFFFAOYSA-N	3.4 × 10 ¹ 2.1 4.6 × 10 ⁻² 1.1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	287, 288 287, 289 287, 290 287, 291
penoxaline C ₁₃ H ₁₉ N ₃ O ₄ (pendimethalin) [40487-42-1] CHIFOSRWCNZCFN-UHFFFAOYSA-N	1.2 × 10 ¹ 2.7 × 10 ⁻¹ 2.6 × 10 ⁻³ 4.8 × 10 ⁻³ 4.8 3.4 × 10 ¹ 7.9 × 10 ⁻¹		Fendinger and Glotfelty (1990) Glotfelty et al. (1987) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Maniere et al. (2011)	M V X Q Q Q ?	 567 568 67 165
2,6-dinitro-4-octylphenol C ₁₄ H ₂₀ N ₂ O ₅ [4097-33-0] NYGISSDEOKKXOE-UHFFFAOYSA-N	1.6 × 10 ⁴		HSDB (2015)	Q	99



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
musk ketone C ₁₄ H ₁₈ N ₂ O ₅ [81-14-1] WXCMHFPAUCOJIG-UHFFFAOYSA-N	3.0 5.2 × 10 ³ 2.1 × 10 ⁴ 2.6 × 10 ²		Lee et al. (2012) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010)	M Q Q Q	 99 287, 288 287, 289
moskene C ₁₄ H ₁₈ N ₂ O ₄ [116-66-5] UHWURQRPEIFIAK-UHFFFAOYSA-N	8.4 5.0 × 10 ² 4.8 × 10 ¹ 1.4 × 10 ¹ 7.5 × 10 ⁻¹ 2.5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 290 287, 291 287, 288 287, 289 287, 290 287, 291
nitrothal-isopropyl C ₁₄ H ₁₇ NO ₆ [10552-74-6] VJAWBEFMCIIIFU-UHFFFAOYSA-N	5.7 × 10 ²		Ebert et al. (2023)	?	316
9-ethyl-3-nitrocarbazole C ₁₄ H ₁₂ N ₂ O ₂ [86-20-4] WONHLSYSHMRRGO-UHFFFAOYSA-N	3.3 × 10 ² 6.9 × 10 ² 1.1 × 10 ³ 2.5 × 10 ²		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-nitroanthracene C ₁₄ H ₉ NO ₂ [3586-69-4] NZWQBVBOKHEKLD-UHFFFAOYSA-N	1.0 × 10 ²		Parnis et al. (2015)	Q	369
9-nitroanthracene C ₁₄ H ₉ NO ₂ [602-60-8] LSIKFJXEYJIZNB-UHFFFAOYSA-N	1.6 × 10 ¹		Parnis et al. (2015)	Q	369
3-nitrophenanthrene C ₁₄ H ₉ NO ₂ [17024-19-0] CPRHWWUDRYJODK-UHFFFAOYSA-N	5.4 × 10 ¹		Parnis et al. (2015)	Q	369
9-nitrophenanthrene C ₁₄ H ₉ NO ₂ [954-46-1] QTTGNQHPKFAYEZ-UHFFFAOYSA-N	3.2 × 10 ¹		Parnis et al. (2015)	Q	369
binapacryl C ₁₅ H ₁₈ N ₂ O ₆ [485-31-4] ZRDUSMYWDRPZRM-UHFFFAOYSA-N	2.2 × 10 ²		Ebert et al. (2023)	?	316
2-nitrofluoranthene C ₁₆ H ₉ NO ₂ [13177-29-2] VBCBFNMZBHKVQN-UHFFFAOYSA-N	8.2 × 10 ¹		Parnis et al. (2015)	Q	369



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-nitrofluoranthene C ₁₆ H ₉ NO ₂ [892-21-7] PIHGQKMEAMSUNA-UHFFFAOYSA-N	1.1×10^2		Parnis et al. (2015)	Q	369
1-[(2,4-dinitrophenyl)azo]-2-naphthol C ₁₆ H ₁₀ N ₄ O ₅ (C.I. pigment orange 5) [3468-63-1] HBHZKFOUIUMKHV-UHFFFAOYSA-N	1.1×10^9		HSDB (2015)	Q	99
3,7-dinitrofluoranthene C ₁₆ H ₈ N ₂ O ₄ [105735-71-5] WAAHHGKQYVTNS-UHFFFAOYSA-N	4.9×10^4		HSDB (2015)	Q	99
1,3-dinitropyrene C ₁₆ H ₈ N ₂ O ₄ [75321-20-9] UJIPOBOHUQDIAA-UHFFFAOYSA-N	6.3×10^3		Parnis et al. (2015)	Q	369
1,6-dinitropyrene C ₁₆ H ₈ N ₂ O ₄ [42397-64-8] GUXACCKTQWVTLG-UHFFFAOYSA-N	7.6×10^4 7.3×10^3		HSDB (2015) Parnis et al. (2015)	Q Q	99 369
1,8-dinitropyrene C ₁₆ H ₈ N ₂ O ₄ [42397-65-9] BLYXNIHKOMELAP-UHFFFAOYSA-N	7.6×10^4 2.3×10^4		HSDB (2015) Parnis et al. (2015)	Q Q	99 369
1-nitropyrene C ₁₆ H ₉ NO ₂ [5522-43-0] ALRLPDGCPYIVHP-UHFFFAOYSA-N	3.9×10^2 2.0×10^2		HSDB (2015) Parnis et al. (2015)	Q Q	99 369
2-nitropyrene C ₁₆ H ₉ NO ₂ [789-07-1] MAZCGYFIOOIVHE-UHFFFAOYSA-N	9.0×10^1		Parnis et al. (2015)	Q	369
4-nitropyrene C ₁₆ H ₉ NO ₂ [57835-92-4] UISKUIWPSPSAV-UHFFFAOYSA-N	3.9×10^2		HSDB (2015)	Q	99



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N,N-diethyl-4-[(4-nitrophenyl)azo]aniline C ₁₆ H ₁₈ N ₄ O ₂ [3025-52-3] LVQIWDUSUJTZJF-ISLYRVAYSA-N	3.7 1.5 × 10 ³		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
disperse red 1 C ₁₆ H ₁₈ N ₄ O ₃ [2872-52-8] FOQABOMYTOFLPZ-ZCXUNETKSA-N	1.2 × 10 ⁸ 1.1 × 10 ⁶		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
1-[(4-methyl-2-nitrophenyl)azo]-2-naphthalenol C ₁₇ H ₁₃ N ₃ O ₃ (C.I. Pigment Red 3) [2425-85-6] ZLFVVRXUOSPRRQK-UHFFFAOYSA-N	8.2 × 10 ⁶		HSDB (2015)	Q	99
phenyl 1-hydroxy-4-nitro-2-naphthoate C ₁₇ H ₁₁ NO ₅ [65208-34-6] DMPUGHYNLCGVXPX-UHFFFAOYSA-N	1.5 × 10 ⁴ 6.7 × 10 ⁵ 1.1 × 10 ² 2.7 × 10 ⁵		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
7-nitrobenzo[<i>a</i>]anthracene C ₁₈ H ₁₁ NO ₂ [20268-51-3] KOPVBVBUIYJBG-UHFFFAOYSA-N	9.9 × 10 ¹		Parnis et al. (2015)	Q	369
6-nitrochrysene C ₁₈ H ₁₁ NO ₂ [7496-02-8] UAWLTQJFZUYROA-UHFFFAOYSA-N	6.6 × 10 ²		HSDB (2015)	Q	99
meptyldinocap C ₁₈ H ₂₄ N ₂ O ₆ [131-72-6] NIOPZPCMRQZCE-WEVVVXLNSA-N	8.6 × 10 ¹		Maniere et al. (2011)	?	241, 165
1-nitrobenzo[<i>a</i>]pyrene C ₂₀ H ₁₁ NO ₂ [70021-99-7] ICKISBPYFVBVQG-UHFFFAOYSA-N	3.1 × 10 ³		HSDB (2015)	Q	447
3-nitrobenzo[<i>a</i>]pyrene C ₂₀ H ₁₁ NO ₂ [70021-98-6] CQIJHYPCYZMIV-UHFFFAOYSA-N	3.1 × 10 ³		HSDB (2015)	Q	447



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
6-nitrobenzo[<i>a</i>]pyrene C ₂₀ H ₁₁ NO ₂ [63041-90-7] NMMAFYSZGOFZCM-UHFFFAOYSA-N	3.1 × 10 ³ 3.3 × 10 ²		HSDB (2015) Parnis et al. (2015)	Q Q	447 369
MCM:NPHEN1OOH C ₆ H ₅ NO ₄ OKMAXSKQIHICGE-UHFFFAOYSA-N	2.8 × 10 ⁴ 3.0 × 10 ⁴ 3.3 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NCATECHOL C ₆ H ₅ NO ₄ XJNPNXSISMQEX-UHFFFAOYSA-N	3.2 × 10 ⁷ 8.0 × 10 ⁷ 6.0 × 10 ⁶		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NCRES1OOH C ₇ H ₇ NO ₄ PUXUHFKGXFXGAC-UHFFFAOYSA-N	1.7 × 10 ⁴ 8.9 × 10 ³ 4.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MNCATECH C ₇ H ₇ NO ₄ DPKDSDOIOINLAG-UHFFFAOYSA-N	5.6 × 10 ³ 8.5 × 10 ⁵ 3.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NEBNZ1OOH C ₈ H ₉ NO ₄ WELXCAQABDDCET-UHFFFAOYSA-N	1.3 × 10 ⁴ 4.9 × 10 ³ 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMXYOL1OOH C ₈ H ₉ NO ₄ WHVCHTZZXIECJY-UHFFFAOYSA-N	9.6 × 10 ³ 2.2 × 10 ⁴ 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOXYOL1OOH C ₈ H ₉ NO ₄ WTJTXPQAQHBAPV-UHFFFAOYSA-N	9.6 × 10 ³ 1.2 × 10 ⁴ 8.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPXYOL1OOH C ₈ H ₉ NO ₄ MKCNKDVBLGUFV-UHFFFAOYSA-N	9.6 × 10 ³ 1.2 × 10 ⁴ 2.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DM124OHNO2 C ₈ H ₉ NO ₃ KGDYDUZVHFHMQ-UHFFFAOYSA-N	2.3 2.4 5.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMPHOHNO2 C ₈ H ₉ NO ₃ YXNYMZXPWOUJT-UHFFFAOYSA-N	2.3 1.2 × 10 ¹ 3.5 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNEBNZOL C ₈ H ₈ N ₂ O ₅ SYWMIOFIBKHTK-UHFFFAOYSA-N	1.2 × 10 ³ 9.6 × 10 ³ 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNMXYOL C ₈ H ₈ N ₂ O ₅ MHXAYMPVZDCVJX-UHFFFAOYSA-N	1.1 × 10 ³ 2.1 × 10 ⁴ 1.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:DNOXYOL C ₈ H ₈ N ₂ O ₅ JCTQXQRGEDMCSI-UHFFFAOYSA-N	8.9 × 10 ² 1.6 × 10 ⁴ 2.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNXPYOL C ₈ H ₈ N ₂ O ₅ RROXWBBJMPCPHD-UHFFFAOYSA-N	8.9 × 10 ² 6.5 × 10 ³ 1.4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:EBNZOHNO2 C ₈ H ₉ NO ₃ RSETVJMGQZKFCF-UHFFFAOYSA-N	3.5 1.3 × 10 ¹ 7.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:ENCATECH C ₈ H ₉ NO ₄ CGDBCFCRALNPBR-UHFFFAOYSA-N	4.5 × 10 ³ 5.1 × 10 ⁵ 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXNCATECH C ₈ H ₉ NO ₄ DNJZITGVNONOFW-UHFFFAOYSA-N	3.3 × 10 ³ 4.1 × 10 ⁵ 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MXY1OHNO2 C ₈ H ₉ NO ₃ KJRCHILWKQLEBC-UHFFFAOYSA-N	2.3 1.7 × 10 ¹ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXNCATECH C ₈ H ₉ NO ₄ BBBHATWMUPCFKG-UHFFFAOYSA-N	3.3 × 10 ³ 8.0 × 10 ⁵ 3.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OXY1OHNO2 C ₈ H ₉ NO ₃ KXWOAPZXQJGYPYU-UHFFFAOYSA-N	2.3 2.6 × 10 ¹ 2.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXNCATECH C ₈ H ₉ NO ₄ MAHUOFZDOBGSU-UHFFFAOYSA-N	1.1 × 10 ⁷ 2.5 × 10 ⁸ 4.7 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PXV1OHNO2 C ₈ H ₉ NO ₃ VIQHHRZADKSPIM-UHFFFAOYSA-N	2.3 8.7 1.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NIPBNZ1OOH C ₉ H ₁₁ NO ₄ IXEXRYHUTBEDFT-UHFFFAOYSA-N	1.2 × 10 ⁴ 3.6 × 10 ³ 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NMETOL1OOH C ₉ H ₁₁ NO ₄ OTBVEKBEKVMFBF-UHFFFAOYSA-N	8.0 × 10 ³ 4.4 × 10 ³ 2.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NOETOL1OOH C ₉ H ₁₁ NO ₄ ZYYASKQLLYACE-UHFFFAOYSA-N	8.0 × 10 ³ 6.5 × 10 ³ 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:NPBNZ1OOH C ₉ H ₁₁ NO ₄ CVKCTJQZVRPANA-UHFFFAOYSA-N	1.2 × 10 ⁴ 3.6 × 10 ³ 1.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NPETOL1OOH C ₉ H ₁₁ NO ₄ PGRGKGYGDUKVIK-UHFFFAOYSA-N	8.0 × 10 ³ 3.2 × 10 ³ 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NT123L1OOH C ₉ H ₁₁ NO ₄ QUQYRHULCDEZAA-UHFFFAOYSA-N	5.6 × 10 ³ 1.4 × 10 ⁴ 1.4 × 10 ¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:NT124L1OOH C ₉ H ₁₁ NO ₄ DLQITMSPXAOFG-UHFFFAOYSA-N	5.6 × 10 ³ 4.6 × 10 ⁴ 2.9 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNIPBNZOL C ₉ H ₁₀ N ₂ O ₅ [29385-11-3] HBYHYLBZPLCIEE-UHFFFAOYSA-N	1.1 × 10 ³ 3.6 × 10 ³ 1.4 2.5 × 10 ¹ 6.2 × 10 ² 1.6 × 10 ²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	Q Q Q Q Q Q	80, 238 80, 239 80, 240 271, 243 244 245
MCM:DNMETOL C ₉ H ₁₀ N ₂ O ₅ NLLBSWNZAUXBGJ-UHFFFAOYSA-N	8.7 × 10 ² 2.4 × 10 ⁴ 1.3 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNOETOL C ₉ H ₁₀ N ₂ O ₅ AGMONASRVOHMRW-UHFFFAOYSA-N	7.3 × 10 ² 1.0 × 10 ⁴ 1.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNPNZOL C ₉ H ₁₀ N ₂ O ₅ FCIYPWNHQHVEQ-UHFFFAOYSA-N	1.1 × 10 ³ 5.8 × 10 ³ 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNPETOL C ₉ H ₁₀ N ₂ O ₅ DZWALJMRDSDGJQ-UHFFFAOYSA-N	7.3 × 10 ² 3.9 × 10 ³ 8.9 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNT123BOL C ₉ H ₁₀ N ₂ O ₅ KTYJIHPJHVSEQH-UHFFFAOYSA-N	6.2 × 10 ² 1.7 × 10 ⁴ 3.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DNT124BOL C ₉ H ₁₀ N ₂ O ₅ HCZZKJMHIZGVJN-UHFFFAOYSA-N	4.0 × 10 ⁵ 1.4 × 10 ⁴ 3.9 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:HOEMPHNO2 C ₉ H ₁₁ NO ₃ YSPMBFYZTNTHGD-UHFFFAOYSA-N	2.1 1.0 × 10 ¹ 2.6 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:IPBNZOHN ₂ C ₉ H ₁₁ NO ₃ RRFSVDKJKYCCCK-UHFFFAOYSA-N	3.2 5.6 6.5 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:IPNCATECH C ₉ H ₁₁ NO ₄ MCPZUPZVJHDAPC-UHFFFAOYSA-N	4.2 × 10 ³ 2.0 × 10 ⁵ 1.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MET1OHNO ₂ C ₉ H ₁₁ NO ₃ QDGFKFKXXCYOS-UHFFFAOYSA-N	2.1 1.0 × 10 ¹ 8.7 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:MTNCATECH C ₉ H ₁₁ NO ₄ CJFAOEWQLMJWBQ-UHFFFAOYSA-N	2.6 × 10 ³ 2.6 × 10 ⁵ 1.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OET1OHNO ₂ C ₉ H ₁₁ NO ₃ MEMHWZGPMWUCR-UHFFFAOYSA-N	2.1 1.5 × 10 ¹ 1.4 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:OTNCATECH C ₉ H ₁₁ NO ₄ JWEUFFGZFSJOFB-UHFFFAOYSA-N	2.6 × 10 ³ 4.6 × 10 ⁵ 2.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PBNZOHN ₂ C ₉ H ₁₁ NO ₃ SNIBPLNVBYUZKZ-UHFFFAOYSA-N	2.8 8.5 6.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PET1OHNO ₂ C ₉ H ₁₁ NO ₃ DXOFURYTWRSOS-UHFFFAOYSA-N	2.1 5.6 6.3 × 10 ⁻²		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PNCATECH C ₉ H ₁₁ NO ₄ UWDKGIAMIWLDQZ-UHFFFAOYSA-N	3.5 × 10 ³ 2.9 × 10 ⁵ 1.7		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:PTNCATECH C ₉ H ₁₁ NO ₄ POSTUROPYARVPT-UHFFFAOYSA-N	8.9 × 10 ⁶ 1.8 × 10 ⁸ 3.7 × 10 ⁴		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:T123NCATEC C ₉ H ₁₁ NO ₄ NRIGBHNEXAXSY-UHFFFAOYSA-N	2.0 × 10 ³ 6.0 × 10 ⁵ 2.0		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:T124NCATEC C ₉ H ₁₁ NO ₄ XNILZTOSMSXQOP-UHFFFAOYSA-N	6.6 × 10 ⁶ 4.8 × 10 ⁸ 8.7 × 10 ³		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:TM123OHNO ₂ C ₉ H ₁₁ NO ₃ GRYTUHBAWMNFLL-UHFFFAOYSA-N	1.5 3.3 × 10 ¹ 3.0 × 10 ⁻¹		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A4.8: Nitro compounds (RNO₂) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:TM124OHNO2	9.6×10^2		Wang et al. (2017)	Q	80, 238
C ₉ H ₁₁ NO ₃	2.4×10^4		Wang et al. (2017)	Q	80, 239
NKOCMNXLDSIDQC-UHFFFAOYSA-N	1.0×10^3		Wang et al. (2017)	Q	80, 240



A5 Organic species with fluorine (F)

A5.1 Organic fluorine

Table A5.1: Organic fluorine

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
fluoromethane	6.1×10^{-4}	2100	Burkholder et al. (2019)	L	1
CH ₃ F	6.1×10^{-4}	2000	Burkholder et al. (2015)	L	
[593-53-3]	6.2×10^{-4}	2200	Brockbank (2013)	L	1, 596
NBVXSUQYWXRNMV-UHFFFAOYSA-N	6.1×10^{-4}	2000	Sander et al. (2011)	L	
	6.1×10^{-4}	2000	Sander et al. (2006)	L	
	5.8×10^{-4}	2200	Wilhelm et al. (1977)	L	
	5.8×10^{-4}	2100	Swain and Thornton (1962)	M	
	5.8×10^{-4}	2200	Glew and Moelwyn-Hughes (1953)	M	597
	5.8×10^{-4}		Duchowicz et al. (2020)	V	186
	5.1×10^{-4}		Mackay and Shiu (1981)	V	
	5.8×10^{-4}		Hine and Mookerjee (1975)	V	
	7.1×10^{-4}		Yaws (2003)	X	237, 80
	1.0×10^{-7}		Hayer et al. (2022)	Q	20
	2.6×10^{-3}		Duchowicz et al. (2020)	Q	
	8.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	6.7×10^{-4}		Gharagheizi et al. (2010)	Q	246
	9.2×10^{-5}		Hilal et al. (2008)	Q	
		2200	Kühne et al. (2005)	Q	
	5.1×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	7.7×10^{-4}		English and Carroll (2001)	Q	230, 231
	6.5×10^{-4}		Russell et al. (1992)	Q	279
	5.8×10^{-4}		Suzuki et al. (1992)	Q	232
	1.9×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	5.9×10^{-4}		Irmann (1965)	Q	
		2200	Kühne et al. (2005)	?	
	7.1×10^{-4}		Yaws (1999)	?	21, 80
	4.7×10^{-4}		Abraham and Weathersby (1994)	?	21
	7.0×10^{-4}		Yaws and Yang (1992)	?	21, 80
difluoromethane	6.4×10^{-4}	2100	Kutsuna (2017)	M	1
CH ₂ F ₂	6.8×10^{-4}	2500	Anderson (2011)	M	
(R32)	3.0×10^{-4}	3500	Miguel et al. (2000)	M	
[75-10-5]	6.9×10^{-4}	2400	Maaßen (1995)	M	598
RWRIWBAIIGTTQ-UHFFFAOYSA-N	6.9×10^{-4}	2300	Reichl (1995)	M	599
	7.9×10^{-4}		Hayer et al. (2022)	Q	20
	1.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	8.4×10^{-4}		Hilal et al. (2008)	Q	
		2200	Kühne et al. (2005)	Q	
	3.1×10^{-2}		Yaffe et al. (2003)	Q	248, 249
		2400	Kühne et al. (2005)	?	



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.6×10^{-4}		Yaws (1999)	?	21
	8.6×10^{-4}		Yaws and Yang (1992)	?	21
trifluoromethane CHF_3 (R23) [75-46-7] XPDWGBQVDMORPB-UHFFFAOYSA-N	1.3×10^{-4}	2500	Burkholder et al. (2019)	L	
	1.2×10^{-4}	2200	Burkholder et al. (2019)	L	70
	1.3×10^{-4}	2500	Burkholder et al. (2015)	L	
	1.2×10^{-4}	2200	Burkholder et al. (2015)	L	70
	1.3×10^{-4}	3300	Sander et al. (2011)	L	
	1.3×10^{-4}	3200	Wilhelm et al. (1977)	L	
	2.1×10^{-4}	2500	Miguel et al. (2000)	M	
	1.3×10^{-4}	2400	Zheng et al. (1997)	M	600
	1.2×10^{-4}	2400	Maaßen (1995)	M	601
	1.0×10^{-4}		Hine and Mookerjee (1975)	V	
	1.3×10^{-4}		Yaws (2003)	X	237
	1.0×10^{-4}		Irmann (1965)	C	
	1.3×10^{-4}		Hayer et al. (2022)	Q	20
	1.0×10^{-4}		Keshavarz et al. (2022)	Q	
	8.8×10^{-4}		Duchowicz et al. (2020)	Q	184
	1.3×10^{-4}	2700	Li et al. (2019)	Q	1
	4.0×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	1.3×10^{-4}		Gharagheizi et al. (2010)	Q	246
	2.0×10^{-4}		Hilal et al. (2008)	Q	
	4.0×10^{-5}		Modarresi et al. (2007)	Q	67
		2200	Kühne et al. (2005)	Q	
	1.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-4}		Irmann (1965)	Q	
	1.0×10^{-4}		Duchowicz et al. (2020)	?	185, 21
		3000	Kühne et al. (2005)	?	
	1.3×10^{-4}		Yaws (1999)	?	21
	1.3×10^{-4}		Yaws and Yang (1992)	?	21
tetrafluoromethane CF_4 (carbontetrafluoride) [75-73-0] TXEYQDLBPFQVAA-UHFFFAOYSA-N	2.1×10^{-6}	1800	Burkholder et al. (2019)	L	1
	1.7×10^{-6}	2300	Burkholder et al. (2019)	L	70
	2.1×10^{-6}	1800	Burkholder et al. (2015)	L	1
	1.7×10^{-6}	2300	Burkholder et al. (2015)	L	70
	2.1×10^{-6}	2300	Warneck and Williams (2012)	L	
	2.1×10^{-6}	1800	Sander et al. (2011)	L	1
	2.1×10^{-6}	1800	Wilhelm et al. (1977)	L	
	2.0×10^{-6}	2000	Reichl (1995)	M	602
	2.1×10^{-6}	1800	Scharlin and Battino (1995)	M	603
	2.1×10^{-6}	1800	Scharlin and Battino (1994)	M	604
	2.1×10^{-6}		Park et al. (1982)	M	
	2.1×10^{-6}	1600	Cosgrove and Walkley (1981)	M	11
	2.0×10^{-6}	1900	Wen and Muccitelli (1979)	M	605
	2.1×10^{-6}	1800	Ashton et al. (1968)	M	606



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-6}	1500	Morrison and Johnstone (1954)	M	607
	1.9×10^{-6}		Hine and Mookerjee (1975)	V	
	3.3×10^{-6}		Pierotti (1965)	T	
	1.8×10^{-6}		Yaws (2003)	X	237
	1.9×10^{-6}		Irmann (1965)	C	
	2.8×10^{-6}		Hayer et al. (2022)	Q	20
	6.9×10^{-7}		Keshavarz et al. (2022)	Q	
	1.4×10^{-5}		Duchowicz et al. (2020)	Q	
	2.1×10^{-6}	1800	Li et al. (2019)	Q	1
	5.5×10^{-6}		Gharagheizi et al. (2012)	Q	
	2.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	9.2×10^{-6}		Hilal et al. (2008)	Q	
	3.2×10^{-6}		Modarresi et al. (2007)	Q	67
		2200	Kühne et al. (2005)	Q	
	2.9×10^{-6}		Goss (2005)	Q	
	2.0×10^{-6}		Yaffe et al. (2003)	Q	248, 249
	1.0×10^{-6}	-840	Bonifácio et al. (2001)	Q	
	1.2×10^{-8}		Katritzky et al. (1998)	Q	
	5.4×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
	1.6×10^{-6}		Irmann (1965)	Q	
	1.9×10^{-6}		Duchowicz et al. (2020)	?	185, 21
		1900	Kühne et al. (2005)	?	
	1.9×10^{-6}		Yaws (1999)	?	21
	2.1×10^{-6}	1700	Yaws et al. (1999)	?	21
	1.8×10^{-6}		Yaws and Yang (1992)	?	21
fluoroethane	4.6×10^{-4}		Yaws (2003)	X	237
$\text{C}_2\text{H}_5\text{F}$	1.6×10^{-4}		Gharagheizi et al. (2012)	Q	
[353-36-6]	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
UHCBBWUQDAVSMS-UHFFFAOYSA-N	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-4}		Gharagheizi et al. (2010)	Q	246
	4.8×10^{-4}		Hilal et al. (2008)	Q	
	3.2×10^{-4}		Modarresi et al. (2007)	Q	67
	4.6×10^{-4}		Yaws (1999)	?	21
	5.0×10^{-4}		Abraham and Weathersby (1994)	?	21
	4.4×10^{-4}		Yaws and Yang (1992)	?	21
1,1-difluoroethane	4.9×10^{-4}	2600	Burkholder et al. (2019)	L	608, 70
$\text{C}_2\text{H}_4\text{F}_2$	4.9×10^{-4}	2600	Burkholder et al. (2015)	L	609, 70
(R152a)	4.9×10^{-4}	2800	Zheng et al. (1997)	M	610
[75-37-6]	5.0×10^{-4}	2800	Maaßen (1995)	M	611
NPNPZTNLOVBDOC-UHFFFAOYSA-N	4.9×10^{-4}	2700	Reichl (1995)	M	612
	4.2×10^{-4}	2300	McLinden (1989)	V	
	4.8×10^{-4}		Hine and Mookerjee (1975)	V	
	4.8×10^{-4}		Irmann (1965)	C	294
	5.7×10^{-4}		Hayer et al. (2022)	Q	20
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	1.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	2.9×10^{-4}		Hilal et al. (2008)	Q	
	1.4×10^{-4}		Modarresi et al. (2007)	Q	67
		2600	Kühne et al. (2005)	Q	
	9.0×10^{-4}		English and Carroll (2001)	Q	230, 231
	1.4×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	4.3×10^{-4}		Irmann (1965)	Q	
	4.9×10^{-4}		Duchowicz et al. (2020)	?	185, 21
		2800	Kühne et al. (2005)	?	
	3.9×10^{-4}		Yaws (1999)	?	21, 297
	3.7×10^{-4}		Yaws and Yang (1992)	?	21, 297
1,2-difluoroethane $\text{C}_2\text{H}_4\text{F}_2$ [624-72-6] AHFMSNDOYCFEPH-UHFFFAOYSA-N	2.5×10^{-5}		HSDB (2015)	Q	99
1,1,1,2-tetrafluoroethane $\text{C}_2\text{H}_2\text{F}_4$ (R134a) [811-97-2] LVGUZGTVOIAKKC-UHFFFAOYSA-N	1.6×10^{-4}	2700	Burkholder et al. (2019)	L	70
	1.6×10^{-4}	2700	Burkholder et al. (2015)	L	70
	1.5×10^{-4}	3100	Ooki and Yokouchi (2011)	M	70
	1.6×10^{-4}	2900	Zheng et al. (1997)	M	613
	1.6×10^{-4}	3000	Maaßen (1995)	M	614
	1.6×10^{-4}	2900	Reichl (1995)	M	615
	1.9×10^{-4}	1400	Chang and Criddle (1995)	M	616
	1.4×10^{-4}	2600	McLinden (1989)	V	
	2.5×10^{-4}		Hayer et al. (2022)	Q	20
	1.5×10^{-4}	3100	Li et al. (2019)	Q	1
	6.5×10^{-6}		HSDB (2015)	Q	99
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	1.2×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-6}		Raventos-Duran et al. (2010)	Q	245
	9.7×10^{-5}		Hilal et al. (2008)	Q	
	5.5×10^{-5}		Modarresi et al. (2007)	Q	67
1,1,2,2-tetrafluoroethane $\text{C}_2\text{H}_2\text{F}_4$ [359-35-3] WXGNWUVNYMJENI-UHFFFAOYSA-N	2.9×10^{-4}		Ebert et al. (2023)	?	318



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pentafluoroethane C_2HF_5 (R125) [354-33-6] GTLACDSXYULKMZ-UHFFFAOYSA-N	3.1×10^{-4}	3300	Miguel et al. (2000)	M	
	3.5×10^{-5}	3000	Reichl (1995)	M	617
	8.0×10^{-5}	4800	McLinden (1989)	V	
	1.3×10^{-4}		Hayer et al. (2022)	Q	20
	3.5×10^{-5}	3000	Li et al. (2019)	Q	1
	2.0×10^{-4}		HSDB (2015)	Q	99
	3.2×10^{-6}		Zhang et al. (2010)	Q	287, 288
	2.0×10^{-5}		Zhang et al. (2010)	Q	287, 289
	5.7×10^{-5}		Zhang et al. (2010)	Q	287, 290
	2.1×10^{-5}		Zhang et al. (2010)	Q	287, 291
	2600	Kühne et al. (2005)	Q		
	2900	Kühne et al. (2005)	?		
hexafluoroethane C_2F_6 [76-16-4] WMIYKQLTONQJES-UHFFFAOYSA-N	6.5×10^{-7}	2100	Bonifácio et al. (2001)	M	
	5.3×10^{-7}		Park et al. (1982)	M	
	5.6×10^{-7}	2300	Wen and Muccitelli (1979)	M	618
	5.8×10^{-7}		Yaws (2003)	X	237
	7.1×10^{-7}		Hayer et al. (2022)	Q	20
	9.3×10^{-7}		Keshavarz et al. (2022)	Q	
	2.2×10^{-5}		Duchowicz et al. (2020)	Q	
	5.8×10^{-7}	2600	Li et al. (2019)	Q	1
	1.5×10^{-5}		Gharagheizi et al. (2012)	Q	
	4.1×10^{-7}		Zhang et al. (2010)	Q	287, 288
	1.1×10^{-5}		Zhang et al. (2010)	Q	287, 289
	8.4×10^{-7}		Zhang et al. (2010)	Q	287, 290
	1.9×10^{-6}		Zhang et al. (2010)	Q	287, 291
	8.1×10^{-7}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-5}		Hilal et al. (2008)	Q	
	1.8×10^{-6}		Modarresi et al. (2007)	Q	67
	2600	Kühne et al. (2005)	Q		
	1700	Bonifácio et al. (2001)	Q		
		Duchowicz et al. (2020)	?	185, 21	
	2900	Kühne et al. (2005)	?		
		Yaws (1999)	?	21	
		Yaws and Yang (1992)	?	21	
1-fluoropropane $\text{C}_3\text{H}_7\text{F}$ [460-13-9] JRHNZCXXOTJCA-UHFFFAOYSA-N	6.3×10^{-4}		Yaws (2003)	X	237, 619
	7.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	5.8×10^{-4}		Gharagheizi et al. (2010)	Q	246
	5.7×10^{-4}		Hilal et al. (2008)	Q	
	6.2×10^{-4}		Yaws (1999)	?	21, 619
	3.6×10^{-4}		Abraham and Weathersby (1994)	?	21
6.1×10^{-4}		Yaws and Yang (1992)	?	21, 619	



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-fluoropropane C_3H_7F [420-26-8] PRNZBCYBKGCOFI-UHFFFAOYSA-N	6.0×10^{-4} 2.2×10^{-4} 6.0×10^{-4} 2.5×10^{-4} 5.9×10^{-4} 3.8×10^{-4} 5.8×10^{-4}		Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999) Abraham and Weathersby (1994) Yaws and Yang (1992)	X Q Q Q ? ? ?	237, 80 246 21, 80 21 21, 80
1,1,1,2,2-pentafluoropropane $C_3H_3F_5$ [1814-88-6] FDOPVENYMZRARC-UHFFFAOYSA-N	3.0×10^{-1}		Nirmalakhandan and Speece (1988)	Q	
1,1,1,3,3,3-hexafluoropropane $C_3H_2F_6$ [690-39-1] NSGXIBWMJZWTPI-UHFFFAOYSA-N	1.2×10^{-6} 3.9×10^{-5} 1.8×10^{-4} 2.7×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1,1,2,3,3,3-heptafluoropropane C_3HF_7 (R227) [431-89-0] YFMFNYKEUDLDTL-UHFFFAOYSA-N	1.4×10^{-5} 2.2×10^{-4} 6.2×10^{-7}	3300 2900 3300	Reichl (1995) Hayer et al. (2022) HSDB (2015) Kühne et al. (2005) Kühne et al. (2005)	M Q Q Q ?	620 20 99
octafluoropropane C_3F_8 (R218) [76-19-7] QYSGYZVSCZSLHT-UHFFFAOYSA-N	1.2×10^{-7} 3.0×10^{-7} 3.0×10^{-7} 3.2×10^{-7} 1.1×10^{-3} 5.1×10^{-5} 4.2×10^{-5} 7.7×10^{-8} 1.0×10^{-5} 3.8×10^{-7} 4.5×10^{-7} 3.0×10^{-7} 1.1×10^{-5} 3.1×10^{-7}	6900	Wen and Muccitelli (1979) Duchowicz et al. (2020) HSDB (2015) Yaws (2003) Hayer et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Yaws (1999)	M V V X Q Q Q Q Q Q Q Q Q Q ?	 186 237, 80 20 287, 288 287, 289 287, 290 287, 291 246 21, 80
decafluorobutane C_4F_{10} [355-25-9] KAVGMUDTWQVPDF-UHFFFAOYSA-N	1.5×10^{-8}		HSDB (2015)	Q	99



Rolf Sander: Compilation of Henry's law constants

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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexadecafluoroheptane C_7F_{16} [335-57-9] LGUZHRODIJCVOU-UHFFFAOYSA-N	3.0×10^{-9} 1.9×10^{-7}		Brockbank (2013) Hilal et al. (2008)	L Q	
1-fluorooctane $C_8H_{17}F$ [463-11-6] DHIVLKMKGKIZOHF-UHFFFAOYSA-N	1.5×10^{-4}		Hilal et al. (2008)	Q	
perfluorooctane C_8F_{18} [307-34-6] YVBBRRALBYAZBM-UHFFFAOYSA-N	8.0×10^{-10}		Brockbank (2013)	L	
eicosafuorononane C_9F_{20} [375-96-2] UVWPNDVAQBNQBG-UHFFFAOYSA-N	4.5×10^{-9}		Hilal et al. (2008)	Q	
perfluoroundecane $C_{11}F_{24}$ [307-49-3] VCIVYCHKSHULON-UHFFFAOYSA-N	1.3×10^{-13} 1.2×10^{-11} 1.2×10^{-9} 6.0×10^{-12}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosafuorododecane $C_{12}H_5F_{21}$ (perfluorodecyl ethane) [154478-87-2] HUPGRQWHZOWFPQ-UHFFFAOYSA-N	5.1×10^{-10}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluorotetradecane $C_{14}H_{17}F_{13}$ [133331-77-8] WRYIIOKQOSICTB-UHFFFAOYSA-N	6.4×10^{-7}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoroicosane $C_{20}H_{29}F_{13}$ [154628-00-9] BREOHRVZEMFOB-UHFFFAOYSA-N	2.5×10^{-7}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluorodocosane $C_{22}H_{33}F_{13}$ [133310-71-1] ZKYMFAZZFTYJH-UHFFFAOYSA-N	2.0×10^{-7}		Plassmann et al. (2010)	Q	



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8- heptadecafluorotetracosane $C_{24}H_{33}F_{17}$ [117146-18-6] FTECWULPOFDJS-UHFFFAOYSA-N	4.0×10^{-9}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9, 10,10-henicosafuorohexacosane $C_{26}H_{33}F_{21}$ LZENXKBSJNMIKY-UHFFFAOYSA-N	3.2×10^{-11}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9, 10,10,11,11,12,12- pentacosafuorohexacosane $C_{26}H_{29}F_{25}$ [93454-73-0] OUASUHCMZXPCH-UHFFFAOYSA-N	1.6×10^{-13}		Plassmann et al. (2010)	Q	
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9, 10,10,11,11,12,12- pentacosafuorooctacosane $C_{28}H_{33}F_{25}$ [93454-74-1] CZCMNCOQMXNFTL-UHFFFAOYSA-N	8.0×10^{-14}		Plassmann et al. (2010)	Q	
fluoroethene C_2H_3F (vinyl fluoride) [75-02-5] XUCNUKMRBVNAPB-UHFFFAOYSA-N	8.2×10^{-5}		HSDB (2015)	Q	99
1,1-difluoroethene $C_2H_2F_2$ [75-38-7] BQCIDUSAKPWEOX-UHFFFAOYSA-N	2.5×10^{-5} 2.6×10^{-5} 2.8×10^{-5} 2.8×10^{-5} 5.1×10^{-5} 2.9×10^{-5} 1.6×10^{-5} 2.6×10^{-5} 2.5×10^{-5}		HSDB (2015) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yaffe et al. (2003) Katritzky et al. (1998) Yaws (1999) Yaws and Yang (1992)	V X Q Q Q Q Q ? ?	 237 246 248, 249 21 21
trifluoroethene C_2HF_3 [359-11-5] MIZLGWKEZAPEFJ-UHFFFAOYSA-N	2.3×10^{-5}		HSDB (2015)	Q	99



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetrafluoroethene C_2F_4 [116-14-3] BFKJFAAPBSQJPD-UHFFFAOYSA-N	1.6×10^{-5} 1.6×10^{-5} 1.6×10^{-5} 9.8×10^{-6} 1.4×10^{-5} 2.8×10^{-5} 1.6×10^{-5} 1.9×10^{-5}	2100 2400 2100	Wilhelm et al. (1977) HSDB (2015) Yaws (2003) Irmann (1965) Hayer et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Kühne et al. (2005) Yao et al. (2002) Kühne et al. (2005) Yaws (1999) Yaws and Yang (1992)	L V X C Q Q Q Q Q Q ? ? ?	 237 38 20 246 229 21 21
3,3,3-trifluoropropene $C_3H_3F_3$ [677-21-4] FDMFUZHCHIRHGRG-UHFFFAOYSA-N	1.3×10^{-5}		HSDB (2015)	Q	99
hexafluoropropene C_3F_6 [116-15-4] HCDGVLDPFQMKDK-UHFFFAOYSA-N	2.9×10^{-6} 6.8×10^{-6} 7.3×10^{-6} 1.8×10^{-6} 3.6×10^{-5}	2400 2600 2800 2400	Wilhelm et al. (1977) Maaßen (1995) Hayer et al. (2022) HSDB (2015) Hilal et al. (2008) Kühne et al. (2005) Kühne et al. (2005)	L M Q Q Q Q ?	 625 20 99
1,1,3,3,3-pentafluoro-2-(trifluoromethyl)-1-propene C_4F_8 (perfluoroisobutylene) [382-21-8] DAFIBNSJXIGBQB-UHFFFAOYSA-N	2.9×10^{-7}		HSDB (2015)	Q	99
(perfluorobutyl)ethene $C_6H_3F_9$ (4:2 FTO) [19430-93-4] GVEUEBXMTMZVSD-UHFFFAOYSA-N	9.0×10^{-8} 8.8×10^{-8} 3.3×10^{-6} 8.6×10^{-6} 3.6×10^{-7} 2.5×10^{-6}	 4100	HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Goss et al. (2006)	Q Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
(<i>E</i>)-perfluoro(4-methyl-2-pentene) C_6F_{12} [3709-71-5] SAPOZTRFWJZUFT-OWOJBTEDSA-N	6.4×10^{-8}		Ebert et al. (2023)	?	365



Rolf Sander: Compilation of Henry's law constants

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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.0×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	1.6×10^{-3}	3800	Duchowicz et al. (2020)	?	185, 21
			Kühne et al. (2005)	?	
	1.6×10^{-3}		Yaws (1999)	?	21
	1.2×10^{-3}		Hoff et al. (1993)	?	21
	1.6×10^{-3}		Yaws and Yang (1992)	?	21
	1.5×10^{-3}		Abraham et al. (1990)	?	
1,2-difluorobenzene $C_6H_4F_2$ (<i>o</i> -difluorobenzene) [367-11-3] GOYDNIKZWGIXJT-UHFFFAOYSA-N	1.3×10^{-3}	3700	Brockbank (2013)	L	1
	1.2×10^{-3}	3500	Brockbank et al. (2013)	M	
	1.4×10^{-3}		Yaws (2003)	X	237
	3.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-3}		Hilal et al. (2008)	Q	
	6.4×10^{-4}		Modarresi et al. (2007)	Q	67
	5.1×10^{-3}		Yao et al. (2002)	Q	229
	1.4×10^{-3}		Yaws (1999)	?	21
	1.4×10^{-3}		Yaws and Yang (1992)	?	21
1,3-difluorobenzene $C_6H_4F_2$ (<i>m</i> -difluorobenzene) [372-18-9] UEMGWPRHOOEKTA-UHFFFAOYSA-N	3.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.3×10^{-3}		Hilal et al. (2008)	Q	
	5.2×10^{-4}		Modarresi et al. (2007)	Q	67
	1.3×10^{-4}		Yaws (1999)	?	21
	1.3×10^{-4}		Yaws and Yang (1992)	?	21
1,4-difluorobenzene $C_6H_4F_2$ (<i>p</i> -difluorobenzene) [540-36-3] QUGUFLJIAFISSW-UHFFFAOYSA-N	1.6×10^{-3}	3900	Hiatt (2013)	M	
	1.3×10^{-3}		Yaws (2003)	X	237
	4.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.8×10^{-3}		Hilal et al. (2008)	Q	
	3.5×10^{-4}		Modarresi et al. (2007)	Q	67
	9.5×10^{-4}		Yao et al. (2002)	Q	229
	1.3×10^{-3}		Yaws (1999)	?	21
	1.3×10^{-3}		Yaws and Yang (1992)	?	21
1,2,3,5-tetrafluorobenzene $C_6H_2F_4$ [2367-82-0] UHHYOKRQTQBKSB-UHFFFAOYSA-N	5.1×10^{-4}		Duchowicz et al. (2020)	V	186
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	5.0×10^{-4}		Hilal et al. (2008)	Q	
	9.4×10^{-5}		Modarresi et al. (2007)	Q	67
1,2,4,5-tetrafluorobenzene $C_6H_2F_4$ [327-54-8] SDXUIOOHCIXRP-UHFFFAOYSA-N	5.6×10^{-4}		Duchowicz et al. (2020)	V	186
	1.1×10^{-2}		Duchowicz et al. (2020)	Q	
	7.0×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-4}		Modarresi et al. (2007)	Q	67
pentafluorobenzene C_6HF_5 [363-72-4] WACNXHCZHTVBJM-UHFFFAOYSA-N	7.5×10^{-4}	4800	Hiatt (2013)	M	



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexafluorobenzene C_6F_6 [392-56-3] ZQBFAOFFOQMSGJ-UHFFFAOYSA-N	3.0×10^{-4} 5.5×10^{-4} 2.9×10^{-4} 1.1×10^{-4}	5100 5200	Brockbank (2013) Hiatt (2013) Schröder et al. (2011) Schröder et al. (2011)	L M M Q	1 626
(trifluoromethyl)-benzene $C_6H_5CF_3$ (α, α, α -trifluorotoluene; benzotrifluoride) [98-08-8] GETTZEONDQJALK-UHFFFAOYSA-N	6.0×10^{-4} 5.8×10^{-4} 6.1×10^{-4} 6.2×10^{-4} 5.9×10^{-4} 3.5×10^{-3} 3.2×10^{-3} 7.8×10^{-3} 1.2×10^{-3} 2.0×10^{-4} 5.7×10^{-4} 1.3×10^{-3} 2.7×10^{-4} 6.2×10^{-3} 6.1×10^{-4} 1.9×10^{-2} 6.0×10^{-4} 6.0×10^{-4}		Duchowicz et al. (2020) HSDB (2015) Abraham et al. (1994a) Mackay and Shiu (1981) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yaffe et al. (2003) Nirmalakhandan et al. (1997) Yaws (1999) Yaws and Yang (1992)	V V V V X Q Q Q Q Q Q Q Q Q Q Q Q Q ?	186 237 242, 243 244 245 246 67 248, 249 248, 249 21 21
decafluorobiphenyl $C_{10}F_{10}$ [434-90-2] ONUFSRWQCKNVSL-UHFFFAOYSA-N	6.7×10^{-3}	3600	Hiatt (2013)	M	
carbonyl fluoride COF_2 [353-50-4] IYRWEQXVUNLMAY-UHFFFAOYSA-N	3.5×10^{-1} 9.9×10^{-3} 2.0×10^{-1}		Mirabel et al. (1996) De Bruyn et al. (1995a) George et al. (1993)	M M X	449 627
formyl fluoride FCHO [1493-02-3] NHGVZTMBVDFPHJ-UHFFFAOYSA-N	3.0×10^{-2}		Kanakidou et al. (1995)	E	
2-fluoroethanol C_2H_5FO [371-62-0] GGDYAKVUZMKRV-UHFFFAOYSA-N	4.6×10^{-1} 4.6×10^{-1} 4.6×10^{-1} 5.5 1.9 1.4 2.5 5.6		Burkholder et al. (2019) Burkholder et al. (2015) O'Farrell and Waghorne (2010) Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007)	L L M V Q Q Q Q	186 99 67



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,3-tetrafluoro-1-propanol <chem>CHF2CF2CH2OH</chem> [76-37-9] NBUKAOOFKZFCGD-UHFFFAOYSA-N	1.4	7000	Burkholder et al. (2019)	L	
	1.4	7000	Burkholder et al. (2015)	L	
	1.4	7000	Sander et al. (2011)	L	
	1.4	7000	Chen et al. (2003)	M	
	7.5×10^{-1}		Eger et al. (1999)	M	14
	1.6	6700	Rochester and Symonds (1973)	M	
	4.6×10^{-1}		Keshavarz et al. (2022)	Q	
	8.3×10^{-1}		Duchowicz et al. (2020)	Q	
	1.2		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	6.0×10^{-1}		Hilal et al. (2008)	Q	
	1.0		Modarresi et al. (2007)	Q	67
	6900	Kühne et al. (2005)	Q		
	3.7×10^{-1}	Nirmalakhandan and Speece (1988)	Q		
	1.6	Duchowicz et al. (2020)	?	185, 21	
	6600	Kühne et al. (2005)	?		
2,2,3,3,3-pentafluoro-1-propanol <chem>CF3CF2CH2OH</chem> [422-05-9] PSQZJKGXGDNDFF-UHFFFAOYSA-N	1.4×10^{-1}	4300	Burkholder et al. (2019)	L	
	1.4×10^{-1}	4300	Burkholder et al. (2015)	L	
	1.4×10^{-1}	4300	Sander et al. (2011)	L	
	1.4×10^{-1}	4300	Chen et al. (2003)	M	
	6.9×10^{-2}		Eger et al. (1999)	M	14
	4.5×10^{-1}	6000	Rochester and Symonds (1973)	M	
	4.6×10^{-1}		Keshavarz et al. (2022)	Q	
	1.8×10^{-1}		Duchowicz et al. (2020)	Q	184
	2.0×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	2.5×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	4.8×10^{-1}		Modarresi et al. (2007)	Q	67
	6800	Kühne et al. (2005)	Q		
	4.4×10^{-1}	Duchowicz et al. (2020)	?	185, 21	
	6000	Kühne et al. (2005)	?		
1,1,1,3,3,3-hexafluoro-2-propanol <chem>CF3CHOHCF3</chem> [920-66-1] BYEAHWXPCBROCE-UHFFFAOYSA-N	1.0×10^{-1}		Eger et al. (1999)	M	14
	2.4×10^{-1}	6700	Rochester and Symonds (1973)	M	
	4.6×10^{-1}		Keshavarz et al. (2022)	Q	
	2.2		Duchowicz et al. (2020)	Q	
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	242, 243
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	2.5×10^{-2}		Hilal et al. (2008)	Q	
	2.6×10^{-1}		Modarresi et al. (2007)	Q	67
		6800	Kühne et al. (2005)	Q	
	2.4×10^{-1}	Goss (2005)	Q	629	
	2.3×10^{-1}	Nirmalakhandan and Speece (1988)	Q		
	2.3×10^{-1}	Duchowicz et al. (2020)	?	185, 21	



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.3×10^{-1}	6700	Kühne et al. (2005) Abraham et al. (1990)	? ?	
trifluoroacetylfluoride CF_3COF [354-34-7] DCEPGADSNJKOJK-UHFFFAOYSA-N	3.0×10^{-2} 9.5×10^{-3} 3.0×10^{-2} 1.2×10^{-2} 4.3×10^{-3} 3.0×10^{-2}		Mirabel et al. (1996) De Bruyn et al. (1995a) George et al. (1994b) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	M M M Q Q ?	449 630 185, 21
1-fluoro-2-propanone $\text{CH}_2\text{FCOCH}_3$ (fluoroacetone) [430-51-3] MSWVMWGCNZQPIA-UHFFFAOYSA-N	4.6×10^{-1} 4.6×10^{-1} 4.6×10^{-1}		Burkholder et al. (2019) Burkholder et al. (2015) O'Farrell and Waghorne (2010)	L L M	
1,1,1-trifluoro-2-propanone CF_3COCH_3 (1,1,1-trifluoroacetone) [421-50-1] FHUAMLDXFJHJE-UHFFFAOYSA-N	1.4 1.4 1.4 1.4 1.8×10^{-2} 4.9 9.9×10^{-2} 2.5×10^{-2} 4.4×10^{-2} 1.3	8900 8900 8900 8900	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Betterton (1991) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Modarresi et al. (2007) Duchowicz et al. (2020)	L L L M Q Q Q Q Q Q ?	242, 243 244 245 67 185, 21
1,1-difluoro-2-methoxyethane $\text{C}_3\text{H}_6\text{F}_2\text{O}$ [461-57-4] CRGZRXUKXVTRNO-UHFFFAOYSA-N	1.3×10^{-2} 2.2×10^{-2}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
fluoroethanoic acid CH_2FCOOH (fluoroacetic acid) [144-49-0] QEWYKACRFQMRMB-UHFFFAOYSA-N	8.0×10^2 8.0×10^2 8.0×10^2 8.0×10^2 5.6×10^2 6.7×10^1 6.2×10^2 9.9×10^2 9.9 5.4×10^2 8.0×10^2		Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Bowden et al. (1998a) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Duchowicz et al. (2020)	L L L M Q Q Q Q Q Q ?	184 271, 243 244 245



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
difluoroethanoic acid CHF_2COOH (difluoroacetic acid) [381-73-7] PBWZKZYHONABLH-UHFFFAOYSA-N	3.0×10^2	6900	Burkholder et al. (2019)	L	
	3.0×10^2	6900	Burkholder et al. (2015)	L	
	3.0×10^2	6900	Sander et al. (2011)	L	
	3.0×10^2	6900	Bowden et al. (1998a)	M	
	5.6×10^2		Keshavarz et al. (2022)	Q	
	8.5×10^1		Duchowicz et al. (2020)	Q	299
	4.9×10^2		Raventos-Duran et al. (2010)	Q	242, 243
	9.9×10^1		Raventos-Duran et al. (2010)	Q	244
	4.9		Raventos-Duran et al. (2010)	Q	245
	7.2×10^1		Hilal et al. (2008)	Q	
		7700	Kühne et al. (2005)	Q	
	3.0×10^2		Duchowicz et al. (2020)	?	185, 21
		6900	Kühne et al. (2005)	?	
trifluoroethanoic acid CF_3COOH (trifluoroacetic acid) [76-05-1] DTQVDTLACAAQTR-UHFFFAOYSA-N	5.7×10^1	4100	Burkholder et al. (2019)	L	
	5.7×10^1	4100	Burkholder et al. (2015)	L	
	8.9×10^1	9300	Sander et al. (2011)	L	
	5.7×10^1	4100	Kutsuna and Horia (2008)	M	
	8.3×10^1		Kwan (2001)	M	631
	8.8×10^1	9300	Bowden et al. (1996)	M	
	5.6×10^2		Keshavarz et al. (2022)	Q	
	2.3		Abusallout et al. (2022)	Q	632
	1.9×10^1		Duchowicz et al. (2020)	Q	184
	6.2×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	2.5		Raventos-Duran et al. (2010)	Q	245
	2.3		Zhang et al. (2010)	Q	287, 288
	1.6×10^{-1}		Zhang et al. (2010)	Q	287, 289
	8.0		Zhang et al. (2010)	Q	287, 290
	3.9		Zhang et al. (2010)	Q	287, 291
	4.0×10^{-1}		Hilal et al. (2008)	Q	
	6.3×10^1		Modarresi et al. (2007)	Q	67
		7700	Kühne et al. (2005)	Q	
	8.9×10^1		Duchowicz et al. (2020)	?	185, 21
		9400	Kühne et al. (2005)	?	
perfluoropropanoic acid $\text{C}_3\text{HF}_5\text{O}_2$ [422-64-0] LRMSQVBRUNSOJL-UHFFFAOYSA-N	8.8		Kwan (2001)	M	631
	4.3×10^{-1}		Abusallout et al. (2022)	Q	632
perfluorobutanoic acid $\text{C}_4\text{HF}_7\text{O}_2$ [375-22-4] YPJUNDFVDDCYIH-UHFFFAOYSA-N	8.1×10^{-1}		Kwan (2001)	M	631
	8.2×10^{-2}		Abusallout et al. (2022)	Q	632
	8.2×10^{-2}		Zhang et al. (2010)	Q	287, 288
	7.2×10^{-1}		Zhang et al. (2010)	Q	287, 289
	2.5×10^{-1}		Zhang et al. (2010)	Q	287, 290
	6.4×10^{-1}		Zhang et al. (2010)	Q	287, 291



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
perfluoropentanoic acid $C_5HF_9O_2$ [2706-90-3] CXZGQIAOTKWCDDB-UHFFFAOYSA-N	6.7×10^{-1}		Kwan (2001)	M	631
	1.6×10^{-2}		Abusallout et al. (2022)	Q	632
perfluorohexanoic acid $C_6HF_{11}O_2$ [307-24-4] PXUULQAPEKKVAH-UHFFFAOYSA-N	1.1		Kwan (2001)	M	631
	3.0×10^{-3}		Abusallout et al. (2022)	Q	632
	4.4×10^{-1}		Arp et al. (2006)	Q	633
	1.2×10^{-1}		Arp et al. (2006)	Q	634
perfluoroheptanoic acid $C_7HF_{13}O_2$ [375-85-9] ZWBAMYVPMDSJGQ-UHFFFAOYSA-N	1.7		Kwan (2001)	M	631
	5.8×10^{-4}		Abusallout et al. (2022)	Q	632
	5.7×10^{-4}		Zhang et al. (2010)	Q	287, 288
	5.0×10^{-2}		Zhang et al. (2010)	Q	287, 289
	2.2×10^{-2}		Zhang et al. (2010)	Q	287, 290
	5.6×10^{-3}		Zhang et al. (2010)	Q	287, 291
	1.8×10^{-1}		Arp et al. (2006)	Q	633
5.7×10^{-2}		Arp et al. (2006)	Q	634	
pentadecafluorooctanoic acid $C_8HF_{15}O_2$ (perfluorooctanoic acid; PFOA) [335-67-1] SNGREZUHAYWORS-UHFFFAOYSA-N	4.9×10^{-2}		Kutsuna and Hori (2008)	M	
	4.0×10^{-1}		Li et al. (2007)	M	
	2.8		Kwan (2001)	M	631
	1.1×10^{-4}		Abusallout et al. (2022)	Q	632
	1.1×10^{-4}		Zhang et al. (2010)	Q	287, 288
	1.0×10^{-2}		Zhang et al. (2010)	Q	287, 289
	1.2×10^{-2}		Zhang et al. (2010)	Q	287, 290
	1.1×10^{-3}		Zhang et al. (2010)	Q	287, 291
	1.1×10^{-4}		Zhang et al. (2010)	Q	287, 288
	1.0×10^{-2}		Zhang et al. (2010)	Q	287, 289
	2.1×10^{-2}		Zhang et al. (2010)	Q	287, 290
	1.1×10^{-3}		Zhang et al. (2010)	Q	287, 291
9.5×10^{-2}		Arp et al. (2006)	Q	633	
2.0×10^{-2}		Arp et al. (2006)	Q	634	
perfluorononanoic acid $C_9HF_{17}O_2$ [375-95-1] UZUFPBIDKMEQEQ-UHFFFAOYSA-N	4.3×10^{-2}		Arp et al. (2006)	Q	633
	5.3×10^{-3}		Arp et al. (2006)	Q	634
2H,2H-perfluorodecanoic acid $C_{10}H_3F_{17}O_2$ (8:2 FTCA) [27854-31-5] XTBXSCIWOVSSGB-UHFFFAOYSA-N	5.8×10^{-4}		Abusallout et al. (2022)	M	
perfluorodecanoic acid $C_{10}HF_{19}O_2$ [335-76-2] PCIUQPBYFRTEM-UHFFFAOYSA-N	2.5×10^{-2}		Arp et al. (2006)	Q	633
	1.1×10^{-3}		Arp et al. (2006)	Q	634



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
perfluoroundecanoic acid $C_{11}HF_{21}O_2$ [2058-94-8] SIDINRCMMRXXGQ-UHFFFAOYSA-N	1.3×10^{-2} 1.9×10^{-4}		Arp et al. (2006) Arp et al. (2006)	Q Q	633 634
perfluorododecanoic acid $C_{12}HF_{23}O_2$ [307-55-1] CXGONMQFMIYUJR-UHFFFAOYSA-N	6.4×10^{-3}		Plassmann et al. (2011)	E	
perfluorotetradecanoic acid $C_{14}HF_{27}O_2$ [376-06-7] RUDINRUXCKIXAJ-UHFFFAOYSA-N	1.6×10^{-3}		Plassmann et al. (2011)	E	
1,1,1,3,3,3-hexafluoro-2-propanone C_3F_6O [684-16-2] VBZWSGALLODQNC-UHFFFAOYSA-N	3.2×10^{-3}		HSDB (2015)	Q	99
desflurane $C_3H_2F_6O$ [57041-67-5] DPYMFVXJLLWWEU-UHFFFAOYSA-N	1.4×10^{-4} 9.0×10^{-5}		HSDB (2015) Abraham and Weathersby (1994)	Q ?	99 21
sevoflurane $C_4H_3F_7O$ [28523-86-6] DFEYRMXOJXZRJ-UHFFFAOYSA-N	5.2×10^{-5} 1.5×10^{-4}		HSDB (2015) Abraham and Weathersby (1994)	Q ?	99 21
ethyl 2,2,2-trifluoroethyl ether $C_4H_7F_3O$ [461-24-5] ZKNHDJMXIUHLX-UHFFFAOYSA-N	7.2×10^{-4}		Hilal et al. (2008)	Q	
iso-indoklon $C_4H_4F_6O$ (1,1,1,3,3,3-hexafluoro-2-methoxypropane) [13171-18-1] VNXYDFNVQBICRO-UHFFFAOYSA-N	5.6×10^{-5}		Abraham and Weathersby (1994)	?	21
di(2,2,2-trifluoroethyl) ether $C_4H_4F_6O$ (flurothyl) [333-36-8] KGPPDNUWZNPISI-UHFFFAOYSA-N	9.2×10^{-3} 3.0×10^{-4}	-390	Fukuchi et al. (2002) Abraham and Weathersby (1994)	V ?	33 21



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(2,2,2-trifluoroethoxy)-ethene $\text{CF}_3\text{CH}_2\text{OCHCH}_2$ (fluoroxene; fluoxene) [406-90-6] DLEGDLSLRSOURL-UHFFFAOYSA-N	5.4×10^{-4} 3.3×10^{-4} 5.5×10^{-4} 5.5×10^{-4} 3.2×10^{-4} 3.3×10^{-4} 9.5×10^{-5} 3.6×10^{-4} 5.1×10^{-4}	4000 4000 4300	Fogg and Sangster (2003) Steward et al. (1973) Allott et al. (1973) Smith et al. (1981b) Stoelting and Longshore (1972) Munson et al. (1964) Hilal et al. (2008) Abraham and Weathersby (1994) Abraham et al. (1990)	L L L M M M Q ? ?	14 14 21
2,2,2-trifluoroethyl methanoate $\text{HCOOCH}_2\text{CF}_3$ [32042-38-9] CAFROQYMUICGNO-UHFFFAOYSA-N	5.4×10^{-3} 5.4×10^{-3} 5.4×10^{-3} 5.4×10^{-3}	4700 4700 4700 4700	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Kutsuna et al. (2005)	L L L M	
2,2,2-trifluoroethyl ethanoate $\text{CH}_3\text{COOCH}_2\text{CF}_3$ [406-95-1] ZOWSJJBOQDKOHI-UHFFFAOYSA-N	5.5×10^{-3} 5.5×10^{-3} 5.5×10^{-3} 5.7×10^{-3}	5200 5200 5200 5300 6400 5500	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Kutsuna et al. (2004) Kühne et al. (2005) Kühne et al. (2005)	L L L M Q ?	635 636
trifluoroethanoic acid, methyl ester $\text{CF}_3\text{COOCH}_3$ (methyl trifluoroacetate) [431-47-0] VMVNZXAVJHNDJ-UHFFFAOYSA-N	1.1×10^{-3} 1.1×10^{-3} 1.1×10^{-3} 1.2×10^{-3}	5300 5300 5300 4900 6100 5800	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Kutsuna et al. (2004) Kühne et al. (2005) Kühne et al. (2005)	L L L M Q ?	637, 638 639, 640 641
trifluoroethanoic acid, ethyl ester $\text{CF}_3\text{COOC}_2\text{H}_5$ (ethyl trifluoroacetate) [383-63-1] STSCVKRWJPWALQ-UHFFFAOYSA-N	8.9×10^{-4} 8.9×10^{-4} 8.9×10^{-4} 7.1×10^{-4} 8.9×10^{-4}	4900 4900 4900 4900 4900	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Kutsuna and Kaneyasu (2021) Kutsuna et al. (2005)	L L L M M	
trifluoro(trifluoromethyl)-oxirane $\text{C}_3\text{F}_6\text{O}$ [428-59-1] PGFXOWRDDHCDTE-UHFFFAOYSA-N	9.3×10^{-6}	2400	Clever et al. (2005)	C	642, 643
3,3,4,4,4-pentafluorobutan-1-ol $\text{C}_4\text{H}_5\text{OF}_5$ [54949-74-5] JPMHUBOKDBBLG-UHFFFAOYSA-N	5.1×10^{-2} 3.7×10^{-1} 4.0×10^{-2} 1.5×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1,1,3,3,3-hexafluoro-2-methyl-2-propanol $\text{C}_4\text{H}_4\text{F}_6\text{O}$ [1515-14-6] FQDXJYBXPOMIBX-UHFFFAOYSA-N	1.8×10^{-2}		Eger et al. (1999)	M	14



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,4,4,4-hexafluoro-1-butanol $C_4H_4F_6O$ [382-31-0] LVFXLZRISXUAIL-UHFFFAOYSA-N	3.2×10^{-1}		Eger et al. (1999)	M	14
2,2,3,3,4,4,4-heptafluoro-1-butanol $C_4H_3F_7O$ [375-01-9] WXJFKAZDSQLPBX-UHFFFAOYSA-N	2.1×10^{-2}		Eger et al. (1999)	M	14
3,3,4,4,5,5,5-heptafluoro-2-pentanol $C_5H_5F_7O$ [375-14-4] RBPBIMHZSTIDT-UHFFFAOYSA-N	9.0×10^{-3}		Eger et al. (1999)	M	14
2,2,3,3,4,4,5,5-octafluoro-1-pentanol $C_5H_4F_8O$ [355-80-6] JUGSKHLZINSXPQ-UHFFFAOYSA-N	2.5×10^{-1}		Eger et al. (1999)	M	14
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane $C_5H_3F_9O$ [163702-07-6] OKIYQFLILPKULA-UHFFFAOYSA-N	9.9×10^{-6}		Zhang et al. (2010)	Q	287, 288
	1.3×10^{-5}		Zhang et al. (2010)	Q	287, 289
	8.4×10^{-6}		Zhang et al. (2010)	Q	287, 290
	3.9×10^{-6}		Zhang et al. (2010)	Q	287, 291
1-ethoxy-1,1,2,3,3,3-hexafluoro-2-(trifluoromethyl)propane $C_6H_5F_9O$ [163702-06-5] SQEGLLMNIBLLNQ-UHFFFAOYSA-N	7.5×10^{-6}		Zhang et al. (2010)	Q	287, 288
	4.7×10^{-5}		Zhang et al. (2010)	Q	287, 289
	8.0×10^{-6}		Zhang et al. (2010)	Q	287, 290
	3.3×10^{-6}		Zhang et al. (2010)	Q	287, 291
1H,1H,2H,2H-perfluorohexan-1-ol $C_6H_5F_9O$ (4:2 FTOH) [2043-47-2] JCMNMOBHVPNOLD-UHFFFAOYSA-N	1.3×10^{-3}		Abusallout et al. (2022)	M	
	6.6×10^{-3}	4500	Wu and Chang (2011)	M	11
	1.3×10^{-2}		Goss et al. (2006)	M	
	6.1×10^{-5}	5400	Lei et al. (2004)	M	327
	5.6×10^{-1}		Wu and Chang (2011)	V	
	1.8×10^{-3}		Abusallout et al. (2022)	Q	632
	1.8×10^{-3}		Zhang et al. (2010)	Q	287, 288
	1.3×10^{-1}		Zhang et al. (2010)	Q	287, 289
	8.2×10^{-3}		Zhang et al. (2010)	Q	287, 290
	2.4×10^{-4}		Zhang et al. (2010)	Q	287, 291
	4.3×10^{-4}		Arp et al. (2006)	Q	633
	3.1×10^{-5}		Arp et al. (2006)	Q	634
	7.2×10^{-3}	7200	Goss et al. (2006)	Q	



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2,3,3,4,4,5,5,6,6,6-undecafluoro-1-hexanol $C_6H_3F_{11}O$ [423-46-1] QZFPVVDGQXQB-UHFFFAOYSA-N	1.7×10^{-3}		Eger et al. (1999)	M	14
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane $C_6H_5F_9O$ [163702-05-4] DFUYAWQUODQGF-UHFFFAOYSA-N	7.5×10^{-6}		Zhang et al. (2010)	Q	287, 288
	1.2×10^{-5}		Zhang et al. (2010)	Q	287, 289
	7.5×10^{-6}		Zhang et al. (2010)	Q	287, 290
	3.0×10^{-6}		Zhang et al. (2010)	Q	287, 291
2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoro-1-heptanol $C_7H_4F_{12}O$ [335-99-9] BYKNGMLDSIEFFG-UHFFFAOYSA-N	6.4×10^{-2}		Eger et al. (1999)	M	14
2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-1-heptanol $C_7H_3F_{13}O$ [375-82-6] STLNAVFCIRZLL-UHFFFAOYSA-N	6.0×10^{-4}		Eger et al. (1999)	M	14
1H,1H,2H,2H-perfluoro-1-octanol $C_8H_5F_{13}O$ (6:2 FTOH) [647-42-7] GRJRKPMIRMSBNK-UHFFFAOYSA-N	3.3×10^{-4}	4700	Abusallout et al. (2022)	M	
	1.7×10^{-4}	2600	Wu and Chang (2011)	M	11
	1.5×10^{-3}		Goss et al. (2006)	M	
	8.5×10^{-5}	7000	Lei et al. (2004)	M	327
	9.4×10^{-4}		Eger et al. (1999)	M	14
	3.9×10^{-1}		Wu and Chang (2011)	V	
	6.6×10^{-5}		Abusallout et al. (2022)	Q	632
	6.5×10^{-5}		Zhang et al. (2010)	Q	287, 288
	9.5×10^{-3}		Zhang et al. (2010)	Q	287, 289
	3.4×10^{-3}		Zhang et al. (2010)	Q	287, 290
	9.9×10^{-6}		Zhang et al. (2010)	Q	287, 291
	2.8×10^{-4}		Arp et al. (2006)	Q	633
	1.8×10^{-5}		Arp et al. (2006)	Q	634
	1.8×10^{-3}	8000	Goss et al. (2006)	Q	
2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-octanol $C_8H_3F_{15}O$ [307-30-2] PJDOLCGOTSNFJM-UHFFFAOYSA-N	2.3×10^{-4}		Eger et al. (1999)	M	14
3-ethoxyperfluoro(2-methylhexane) $C_9H_5F_{15}O$ [297730-93-9] HHBBIOLJRWIGU-UHFFFAOYSA-N	1.9×10^{-8}		Ebert et al. (2023)	?	365



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl perfluoro(8-(fluoroformyl)-5-methyl-4,7-dioxanonanoate) $C_{10}H_3F_{15}O_5$ [69116-73-0] JOMJXRТУQWIHQD-UHFFFAOYSA-N	5.8×10^{-2} 5.1×10^{-4} 2.6×10^{-4} 1.3×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,3,4,4,5,5,6,6,6-nonafluorohexyl methacrylate $C_{10}H_9F_9O_2$ [1799-84-4] TYNRPOFACABVSI-UHFFFAOYSA-N	3.4×10^{-5} 1.6×10^{-3} 6.5×10^{-4} 3.4×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1H,1H,2H,2H-perfluorodecan-1-ol $C_{10}H_5F_{17}O$ (8:2 FTOH) [678-39-7] JJUBFBTUBACDHW-UHFFFAOYSA-N	2.0×10^{-4} 2.0×10^{-4} 1.7×10^{-4} 2.4×10^{-1} 1.1×10^{-4} 2.4×10^{-6} 2.4×10^{-6} 2.6×10^{-4} 7.3×10^{-4} 4.3×10^{-7} 5.7×10^{-5} 1.6×10^{-5} 3.8×10^{-4}	3100 8800	Abusallout et al. (2022) Wu and Chang (2011) Lei et al. (2004) Wu and Chang (2011) Goss et al. (2006) Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006) Goss et al. (2006)	M M M V V Q Q Q Q Q Q Q Q	11 327 632 287, 288 287, 289 287, 290 287, 291 633 634
2-methoxyperfluoro(2,5-di(propan-2-yl)oxolane) $C_{11}H_3F_{19}O_2$ [957209-18-6] YRGYOFYTTFLPQM-UHFFFAOYSA-N	1.0×10^{-8}		Ebert et al. (2023)	?	365
3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl acrylate $C_{11}H_7F_{13}O_2$ [17527-29-6] VPKQPPJQTZJZDB-UHFFFAOYSA-N	1.9×10^{-6} 1.9×10^{-4} 2.9×10^{-4} 2.4×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-(perfluorohexyl)ethyl methacrylate $C_{12}H_9F_{13}O_2$ [2144-53-8] CDXFIRXEAJABAZ-UHFFFAOYSA-N	1.2×10^{-6} 1.8×10^{-4} 1.3×10^{-4} 1.5×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,2,2-tetrahydroperfluoro dodecanol $C_{12}H_5F_{21}O$ (10:2 FTOH) [865-86-1] FLXYIZWPNQYPIT-UHFFFAOYSA-N	1.4×10^{-4} 1.3×10^{-4} 2.5×10^{-1} 9.0×10^{-8} 8.6×10^{-8} 2.7×10^{-6} 1.5×10^{-4} 1.6×10^{-8} 4.6×10^{-5} 5.2×10^{-5} 1.0×10^{-4} 1.0×10^{-5}	2700 9600	Abusallout et al. (2022) Wu and Chang (2011) Wu and Chang (2011) Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006) Goss et al. (2006) Arp et al. (2006)	M M V Q Q Q Q Q Q Q Q Q E	11 632 287, 288 287, 289 287, 290 287, 291 633 634 644
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10- heptadecafluorodecyl acrylate $C_{13}H_7F_{17}O_2$ [27905-45-9] OUKRIOLKOHUUBM-UHFFFAOYSA-N	1.3×10^{-3} 7.0×10^{-8} 1.1×10^{-5} 1.1×10^{-4} 9.9×10^{-8}		Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10- heptadecafluorodecyl methacrylate $C_{14}H_9F_{17}O_2$ [1996-88-9] HBZFBSFGXQBQTB-UHFFFAOYSA-N	4.4×10^{-8} 1.0×10^{-5} 5.4×10^{-5} 6.4×10^{-8}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,3,4,4,5,5,6,6,7,7,8,8,9,9, 10,10,11,11,12,12,13,13,14,14,14- pentacosfluorotetradecan-1-ol $C_{14}H_5F_{25}O$ [39239-77-5] QBBJBWVKVSJWYQK-UHFFFAOYSA-N	3.1×10^{-9} 1.1×10^{-8} 3.1×10^{-5} 6.9×10^{-10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-(perfluorodecyl)ethyl acrylate $C_{15}H_7F_{21}O_2$ [17741-60-5] FIAHOPQKBASOY-UHFFFAOYSA-N	2.5×10^{-9} 3.1×10^{-7} 2.4×10^{-5} 3.7×10^{-9}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1,2,2-tetrahydroperfluoro-1- hexadecanol $C_{16}H_5OF_{29}$ [60699-51-6] ZDUOTHMDEVYXZBS-UHFFFAOYSA-N	1.1×10^{-10} 1.4×10^{-11} 6.1×10^{-6} 2.9×10^{-11}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-(perfluorodecyl)ethyl methacrylate $C_{16}H_9F_{21}O_2$ [2144-54-9] FQHLOOXLDQLPF-UHFFFAOYSA-N	1.6×10^{-9} 3.1×10^{-7} 1.1×10^{-5} 2.4×10^{-9}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosfluorotetradecyl prop-2-enoate $C_{17}H_7F_{25}O_2$ [34395-24-9] SWTZSHBOMGAQKX-UHFFFAOYSA-N	9.0×10^{-11} 5.0×10^{-9} 2.7×10^{-3} 1.6×10^{-10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
profluthrin $C_{17}H_{18}F_4O_2$ [223419-20-3] AGMMRUPNXPWLGf-AATRIKPKSA-N	2.5×10^{-2}		Ebert et al. (2023)	?	318
2-perfluorododecylethyl methacrylate $C_{18}H_9F_{25}O_2$ [6014-75-1] LFEGLDRNIDJMKB-UHFFFAOYSA-N	5.8×10^{-11} 5.0×10^{-9} 2.3×10^{-6} 9.9×10^{-11}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1,2,2-tetrahydroperfluoro-1-octadecanol $C_{18}H_5OF_{33}$ [65104-67-8] UYSGWTCETIRUHO-UHFFFAOYSA-N	4.1×10^{-12} 6.7×10^{-15} 1.2×10^{-6} 1.1×10^{-12}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
metofluthrin $C_{18}H_{20}F_4O_3$ [240494-70-6] KVIZNNVXXNFLMU-AATRIKPKSA-N	1.0		HSDB (2015)	V	
1,1,2,2-tetrahydroperfluorohexadecyl acrylate $C_{19}H_7F_{29}O_2$ [34362-49-7] KLOHTAIHCCMZIL-UHFFFAOYSA-N	3.3×10^{-12} 4.1×10^{-11} 6.5×10^{-4} 6.9×10^{-12}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
fluoxymesterone $C_{20}H_{29}FO_3$ [76-43-7] YLRFCQOZQXIBAB-YXVJBPKESA-N	1.6×10^4		HSDB (2015)	Q	99



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dexamethasone $C_{22}H_{29}FO_5$ [50-02-2] UREBDLICKHMUKA-GCMAGEFQSA-N	1.4×10^2		HSDB (2015)	Q	99
1,1,2,2-tetrahydroperfluoroicosyl alcohol $C_{20}H_5OF_{37}$ [65104-65-6] FDCQNVKWMNRQN-UHFFFAOYSA-N	1.5×10^{-13}		Zhang et al. (2010)	Q	287, 288
2-hydroxyfluorobenzene C_6H_5FO (<i>o</i> -fluorophenol) [367-12-4] HFHFGHLXUCOHLN-UHFFFAOYSA-N	3.1		Abraham et al. (1994a)	R	
	4.3		Keshavarz et al. (2022)	Q	
	5.1×10^1		Duchowicz et al. (2020)	Q	299
	2.3		Hilal et al. (2008)	Q	
4-hydroxyfluorobenzene C_6H_5FO (<i>p</i> -fluorophenol) [371-41-5] RHMPDJJXGPMEX-UHFFFAOYSA-N	2.9		Modarresi et al. (2007)	Q	67
	3.1		Yaffe et al. (2003)	Q	248, 249
	2.1×10^2		Nirmalakhandan et al. (1997)	Q	
	3.1		Duchowicz et al. (2020)	?	185, 21
3-fluorophenol C_6H_5FO [372-20-3] SJTBRFBXDZMPS-UHFFFAOYSA-N	1.4×10^1		Abraham et al. (1994a)	R	
	4.3		Keshavarz et al. (2022)	Q	
	1.3×10^2		Duchowicz et al. (2020)	Q	
	7.9		Hilal et al. (2008)	Q	
	3.3		Modarresi et al. (2007)	Q	67
	1.4×10^1		Yaffe et al. (2003)	Q	248, 249
2,6-difluorophenol $C_6H_4F_2O$ [28177-48-2] CKKOVFGIBXCEIJ-UHFFFAOYSA-N	2.1×10^1		English and Carroll (2001)	Q	230, 231
	2.1×10^2		Nirmalakhandan et al. (1997)	Q	
	1.4×10^1		Duchowicz et al. (2020)	?	185, 21
	9.0		Hilal et al. (2008)	Q	
4,4'- (hexafluoroisopropylidene)diphenol $C_{15}H_{10}F_6O_2$ [1478-61-1] ZFVMWEVVKGLCIJ-UHFFFAOYSA-N	7.0×10^{-1}		Hilal et al. (2008)	Q	
4,4'- (hexafluoroisopropylidene)diphenol $C_{15}H_{10}F_6O_2$ [1478-61-1] ZFVMWEVVKGLCIJ-UHFFFAOYSA-N	1.7×10^4		HSDB (2015)	Q	447
4,4'- (hexafluoroisopropylidene)diphenol $C_{15}H_{10}F_6O_2$ [1478-61-1] ZFVMWEVVKGLCIJ-UHFFFAOYSA-N	1.7×10^4		Zhang et al. (2010)	Q	287, 288
	1.4×10^6		Zhang et al. (2010)	Q	287, 289
	2.1×10^5		Zhang et al. (2010)	Q	287, 290
	5.3×10^3		Zhang et al. (2010)	Q	287, 291



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
flocoumafen $C_{33}H_{25}F_3O_4$ [90035-08-8] KKBGNHYHHEIAGOH-UHFFFAOYSA-N	1.4×10^7		HSDB (2015)	Q	99
2,3,3,3-tetrafluoro-2- (trifluoromethyl)propanenitrile C_4F_7N [42532-60-5] AASDJASZOGYMM-UHFFFAOYSA-N	1.6×10^{-8}		Ebert et al. (2023)	?	365
2-fluoroaniline C_6H_6FN [348-54-9] FTZQXOJYPFINKJ-UHFFFAOYSA-N	1.4		Ebert et al. (2023)	?	318
4-fluoroaniline C_6H_6FN [371-40-4] KRZCOLNOCZKSDU-UHFFFAOYSA-N	1.6		HSDB (2015)	Q	447
3-(trifluoromethyl)aniline $C_7H_6F_3N$ [98-16-8] VIUDTWATMPPKEL-UHFFFAOYSA-N	3.9×10^{-1}		Ebert et al. (2023)	?	316
perfluorotriethylamine $C_{12}F_{27}N$ [311-89-7] RVZRBWKZFJCCIB-UHFFFAOYSA-N	1.8×10^{-10} 1.8×10^{-10} 3.4×10^{-10} 1.8×10^{-9} 2.7×10^{-10}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
N-ethyl-1-[3- (trifluoromethyl)phenyl]-2- propanamine (fenfluramine) $C_{12}H_{16}F_3N$ [458-24-2] DBGIVFWFUFKIQN-UHFFFAOYSA-N	3.7×10^{-1}		HSDB (2015)	Q	99
tris(undecafluoropentyl)amine $C_{15}F_{33}N$ [338-84-1] AQZYBQIAUSKCCS-UHFFFAOYSA-N	1.2×10^{-12} 1.0×10^{-12} 3.4×10^{-10} 2.1×10^{-12}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
indaziflam A $C_{16}H_{20}FN_5$ [730979-19-8] YFONKFDEZLYQDH-OPQQBVKSSA-N	1.8×10^5		Ebert et al. (2023)	?	318



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
indaziflam B $C_{16}H_{20}FN_5$ [730979-32-5] YFONKFDEZLYQDH-OUJBWJOFSA-N	5.3×10^5		Ebert et al. (2023)	?	318
cinacalcet $C_{22}H_{22}F_3N$ [226256-56-0] VDHAWDNDOKGFTD-MRXNPFEDSA-N	4.5×10^1		HSDB (2015)	Q	99
hydramethylnon $C_{25}H_{24}F_6N_4$ [67485-29-4] IQVNEKKDSLOHHK-FNCQZNRSA-N	4.5 4.5 2.7×10^6		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
2-fluoroacetamide C_2H_4FNO [640-19-7] FVTWJXMFYOXOKK-UHFFFAOYSA-N	4.4×10^2		HSDB (2015)	Q	99
5-fluorouracil $C_4H_3FN_2O_2$ [51-21-8] GHASVSINZRGABV-UHFFFAOYSA-N	5.8×10^4		HSDB (2015)	Q	99
perfluoro-N-methylmorpholine $C_5F_{11}NO$ [382-28-5] PQMAKJUXOOVROI-UHFFFAOYSA-N	6.4×10^{-8}		Ebert et al. (2023)	?	365
1-fluoro-2,4-dinitrobenzene $C_6H_3FN_2O_4$ [70-34-8] LOTKRQAVGJMPNV-UHFFFAOYSA-N	1.0×10^2		HSDB (2015)	Q	447
5-fluoro-2-nitrophenol $C_6H_4FNO_3$ [446-36-6] QQURWFRNETXFTN-UHFFFAOYSA-N	5.0×10^{-1} 5.8	4100 6200	Tremp et al. (1993) Schwarzenbach et al. (1988) Kühne et al. (2005) Kühne et al. (2005)	M V Q ?	12 12
4-nitro-3-(trifluoromethyl)phenol $C_7H_4F_3NO_3$ [88-30-2] ZEFMBAFMCSYJOO-UHFFFAOYSA-N	5.2×10^2 5.2×10^2 6.7×10^3 3.9×10^4 1.2×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
1-nitro-3-(trifluoromethyl)benzene $C_7H_4F_3NO_2$ [98-46-4] WHNAMGUAXHGCHH-UHFFFAOYSA-N	5.3×10^{-2} 2.0×10^{-1} 5.7×10^{-2} 8.2×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-isocyanato-3-(trifluoromethyl)-benzene $\text{C}_8\text{H}_4\text{F}_3\text{NO}$ [329-01-1] SXJYSIBLFGQAND-UHFFFAOYSA-N	4.8×10^{-3}		Zhang et al. (2010)	Q	287, 288
flonicamid $\text{C}_9\text{H}_6\text{F}_3\text{N}_3\text{O}$ [158062-67-0] RLQJEEJISHYWON-UHFFFAOYSA-N	2.5		Zhang et al. (2010)	Q	287, 289
	1.3×10^{-3}		Zhang et al. (2010)	Q	287, 290
	6.4×10^{-2}		Zhang et al. (2010)	Q	287, 291
trifluridine $\text{C}_{10}\text{H}_{11}\text{F}_3\text{N}_2\text{O}_5$ [70-00-8] VSQQLOSPVPRAZ-RRKCRQDMSA-N	1.0×10^{11}		HSDB (2015)	Q	99
N-(4-amino-2-hydroxyphenyl)-2,2,3,3,4,4,4-heptafluorobutanamide $\text{C}_{10}\text{H}_7\text{F}_7\text{N}_2\text{O}_2$ [847-51-8] STPOJASQXPVMS-UHFFFAOYSA-N	2.0×10^8		Zhang et al. (2010)	Q	287, 288
	2.3×10^7		Zhang et al. (2010)	Q	287, 289
	1.5×10^5		Zhang et al. (2010)	Q	287, 290
fluometuron $\text{C}_{10}\text{H}_{11}\text{F}_3\text{N}_2\text{O}$ [2164-17-2] RZILCCPWPTYDO-UHFFFAOYSA-N	5.8×10^3		Mackay et al. (2006d)	V	
	3.8×10^3		HSDB (2015)	C	
dinitramine $\text{C}_{11}\text{H}_{13}\text{F}_3\text{N}_4\text{O}_4$ [29091-05-2] OFDYMKSJGFSLLM-UHFFFAOYSA-N	7.1		HSDB (2015)	V	
	6.5		Mackay et al. (2006d)	V	
	6.2		Suntio et al. (1988)	V	12
5-methyl-N-[4-(trifluoromethyl)phenyl]-4-isoxazolecarboxamide (leflunomide) $\text{C}_{12}\text{H}_9\text{F}_3\text{N}_2\text{O}_2$ [75706-12-6] VHOGYURTWQBHIL-UHFFFAOYSA-N	8.0×10^4		HSDB (2015)	Q	99
fludioxonil $\text{C}_{12}\text{H}_6\text{F}_2\text{N}_2\text{O}_2$ [131341-86-1] MUJOIMFVNIBMKC-UHFFFAOYSA-N	1.9×10^4		Duchowicz et al. (2020)	V	186
	1.6×10^4		Duchowicz et al. (2020)	Q	
	1.9×10^4		Maniere et al. (2011)	?	241, 165
fluconazole $\text{C}_{13}\text{H}_{12}\text{F}_2\text{N}_6\text{O}$ [86386-73-4] RFHAOTPXVQNOHP-UHFFFAOYSA-N	9.9×10^7		HSDB (2015)	Q	99



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethalfuralin $C_{13}H_{14}F_3N_3O_4$ [55283-68-6] PTFJKYUEPWBS-UHFFFAOYSA-N	7.6×10^{-2}		HSDB (2015)	V	
benfluralin $C_{13}H_{16}F_3N_3O_4$ (benefin) [1861-40-1] SMDHCQAYESWHAU-UHFFFAOYSA-N	3.4×10^{-2}		HSDB (2015)	V	
			Mackay et al. (2006d)	V	558
	7.5×10^{-1}		Suntio et al. (1988)	V	12
	1.1×10^{-1}		Maniere et al. (2011)	?	12, 165
trifluralin $C_{13}H_{16}F_3N_3O_4$ [1582-09-8] ZSDSQXJNSMTJDA-UHFFFAOYSA-N	9.5×10^{-2}		Rice et al. (1997b)	M	12
	9.1×10^{-1}		Watanabe (1993)	M	
	1.9×10^{-1}		Fendinger et al. (1989)	M	72
	1.7×10^{-1}		Fendinger et al. (1989)	M	645
			Mackay et al. (2006d)	V	558
	2.5×10^{-1}		Suntio et al. (1988)	V	12
	3.8		Sanders and Seiber (1983)	V	87
	2.5×10^{-3}		Barcelo and Hennion (1997)	X	567
	9.6×10^{-2}		HSDB (2015)	C	
	8.3×10^{-4}		Goodarzi et al. (2010)	Q	568
	1.7		Hilal et al. (2008)	Q	
2.6×10^{-1}		Modarresi et al. (2007)	Q	67	
		5000	Kühne et al. (2005)	Q	
		2100	Kühne et al. (2005)	?	
prodiamine $C_{13}H_{17}F_3N_4O_4$ [29091-21-2] RSVPPPHXAASNOL-UHFFFAOYSA-N	1.3		Ebert et al. (2023)	?	316
fluorodifen $C_{13}H_7F_3N_2O_5$ [15457-05-3] HHMCAJWVGYGUEF-UHFFFAOYSA-N			Mackay et al. (2006d)	V	558
	6.5×10^2		MacBean (2012a)	?	
profluralin $C_{14}H_{16}F_3N_3O_4$ [26399-36-0] ITVQAKZNYJEWKS-UHFFFAOYSA-N	3.4×10^{-2}		HSDB (2015)	V	
	3.2×10^{-2}		Mackay et al. (2006d)	V	
	2.6×10^{-2}		Suntio et al. (1988)	V	12
	3.4×10^{-2}		MacBean (2012a)	?	
flumequine $C_{14}H_{12}FNO_3$ [42835-25-6] DPSPPJIUMHPXMA-UHFFFAOYSA-N	3.7×10^7		HSDB (2015)	Q	99
fluazifop $C_{15}H_{12}F_3NO_4$ [69335-91-7] YUVKUEAFVAVKILW-UHFFFAOYSA-N	3.4×10^7		Ebert et al. (2023)	?	316



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fluazifop-p $C_{15}H_{12}F_3NO_4$ [83066-88-0] YUVKUEAFVKILW-SECBINFHSA-N	1.0×10^6		Ebert et al. (2023)	?	316
prosulfuron $C_{15}H_{16}F_3N_5O_4S$ [94125-34-5] LTUNNEGNEKBSEH-UHFFFAOYSA-N	$>3.3 \times 10^3$		Maniere et al. (2011)	?	165
flurprimidol $C_{15}H_{15}N_2O_2F_3$ [56425-91-3] VEVZCONIUDBCDC-UHFFFAOYSA-N	7.5×10^3 2.5×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
flutriafol $C_{16}H_{13}F_2N_3O$ [76674-21-0] JWUCHKBSVLQOCO-UHFFFAOYSA-N	6.1×10^7 7.6×10^4 7.9×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 12, 165
flunitrazepam $C_{16}H_{12}FN_3O_3$ [1622-62-4] PPTYJKAXVCCBDU-UHFFFAOYSA-N	4.3×10^5		HSDB (2015)	Q	99
cyhalofop $C_{16}H_{12}FNO_4$ [122008-78-0] ROBSGBGTWRRYSK-SNVBAGLBSA-N	1.7×10^5		Ebert et al. (2023)	?	318
benzpyrimoxan $C_{16}H_{15}F_3N_2O_3$ [1449021-97-9] ZYXYTGQFPZEUFX-UHFFFAOYSA-N	1.1×10^3		Ebert et al. (2023)	?	318
tolprocarb $C_{16}H_{21}F_3N_2O_3$ [911499-62-2] RSOJBVBYZCMJOS-CYBMUJFWSA-N	6.5×10^4		Ebert et al. (2023)	?	318
flutolanil $C_{17}H_{16}F_3NO_2$ [66332-96-5] PTCGDEVVHXTMP-UHFFFAOYSA-N	3.1×10^3 2.5 6.1×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 241, 165
beflubutamid $C_{18}H_{17}F_4NO_2$ [113614-08-7] FFQPZWRNKKPNPX-UHFFFAOYSA-N	9.1×10^3		Maniere et al. (2011)	?	241, 165



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fluxapyroxad $C_{18}H_{12}F_5N_3O$ [907204-31-3] SXSGXWCSHVPGB-UHFFFAOYSA-N	3.3×10^6		Maniere et al. (2011)	?	12, 165
flurtamone $C_{18}H_{14}F_3NO_2$ [96525-23-4] NYRMIUKDBAQCHC-UHFFFAOYSA-N	1.6×10^8		Ebert et al. (2023)	?	318
picoxystrobin $C_{18}H_{16}F_3NO_4$ [117428-22-5] IBSNKSODLGJUMQ-SDNWHVQSQA-N	1.4×10^3		Ebert et al. (2023)	?	316
sedaxane $C_{18}H_{19}F_2N_3O$ [874967-67-6] XQJQCBDIXRIYRP-UHFFFAOYSA-N	2.5×10^5		Maniere et al. (2011)	?	165
penflufen $C_{18}H_{24}FN_3O$ [494793-67-8] GOFJDXZZHFNFLV-UHFFFAOYSA-N	3.2×10^4		Ebert et al. (2023)	?	318
fluazifop-p-butyl $C_{19}H_{20}F_3NO_4$ [79241-46-6] VAITNZGPYBOGF-CYBMUJFWSA-N	2.0×10^1		Maniere et al. (2011)	?	12, 165
picolinafen $C_{19}H_{12}F_4N_2O_2$ [137641-05-5] CWKFPEBMTGKLLX-UHFFFAOYSA-N	6.2×10^2		Maniere et al. (2011)	?	12, 165
diflufenican $C_{19}H_{11}F_5N_2O_2$ [83164-33-4] WYEHFWKAOXOVJD-UHFFFAOYSA-N	6.4×10^1 1.1×10^3 3.0×10^1 $< 8.5 \times 10^1$		Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	Q Q ? ?	185, 21 241, 165
fluazifop-butyl $C_{19}H_{20}F_3NO_4$ [69806-50-4] VAITNZGPYBOGF-UHFFFAOYSA-N	4.7×10^1		HSDB (2015)	V	
flumioxazin $C_{19}H_{15}FN_2O_4$ [103361-09-7] FOUWCSDKDDHKQP-UHFFFAOYSA-N	1.6×10^1 1.6×10^1		HSDB (2015) Maniere et al. (2011)	V ?	12, 165



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fluridone $C_{19}H_{14}F_3NO$ [59756-60-4] YWBVHLJPRPCRSU-UHFFFAOYSA-N	1.2×10^3 2.8×10^3 1.9×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186 558
cyhalofop-butyl $C_{20}H_{20}FN_4O_4$ [122008-85-9] TYIYMOAHACZAMQ-CQSZACIVSA-N	1.0×10^3 1.1×10^3		MacBean (2012b) Maniere et al. (2011)	X ?	350 241, 165
raltegravir $C_{20}H_{21}FN_6O_5$ [518048-05-0] CZFFBEXEKNGXKS-UHFFFAOYSA-N	1.1×10^{17}		HSDB (2015)	Q	99
fluacrypyrim $C_{20}H_{21}N_2O_5F_3$ [229977-93-9] MXWAGQASUDSFBG-RVDMUPIBSA-N	3.0×10^2		MacBean (2012a)	?	12
trifloxystrobin $C_{20}H_{19}F_3N_2O_4$ [141517-21-7] ONCZDRURRATYFI-UHFFFAOYSA-N	4.3×10^2 4.3×10^2		MacBean (2012b) Maniere et al. (2011)	X ?	350 165
isopyrazam $C_{20}H_{23}F_2N_3O$ [881685-58-1] XTDZGXBTXBEZDN-UHFFFAOYSA-N	5.3×10^3 2.7×10^4		Maniere et al. (2011) Maniere et al. (2011)	? ?	241, 165 241, 165
syn-isopyrazam $C_{20}H_{23}F_2N_3O$ [683777-13-1] XTDZGXBTXBEZDN-HEHGZKQESA-N	5.2×10^6		Ebert et al. (2023)	?	318
anti-isopyrazam $C_{20}H_{23}F_2N_3O$ [683777-14-2] XTDZGXBTXBEZDN-XEZPLFJOSA-N	2.6×10^6		Ebert et al. (2023)	?	318
etoxazole $C_{21}H_{23}F_2NO_2$ [153233-91-1] IXSZQYVWNJNRL-UHFFFAOYSA-N	9.6×10^1 9.9×10^1 1.7×10^2 2.8×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 165
droperidol $C_{22}H_{22}FN_3O_2$ [548-73-2] RMEDXOLNCUSCGS-UHFFFAOYSA-N	3.7×10^{11}		HSDB (2015)	Q	99



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
paliperidone $C_{23}H_{27}FN_4O_3$ [144598-75-4] PMXMIIMHBWHSKN-UHFFFAOYSA-N	1.2×10^{15}		HSDB (2015)	Q	99
risperidone $C_{23}H_{27}FN_4O_2$ [106266-06-2] RAPZEAPATHNIPO-UHFFFAOYSA-N	4.5×10^{10}		HSDB (2015)	Q	99
ezetimibe $C_{24}H_{21}F_2NO_3$ [163222-33-1] OLNTVTPDXPETLC-XPWALMASSA-N	2.2×10^{12}		HSDB (2015)	Q	99
cyflumetofen $C_{24}H_{24}F_3NO_4$ [400882-07-7] AWSZRJQNBMEZOI-UHFFFAOYSA-N	$>1.1 \times 10^1$		Maniere et al. (2011)	?	241, 165
acrinathrin $C_{26}H_{21}F_6NO_5$ [101007-06-1] YLFSVIMMRPNPFK-WEQBUNFVSA-N	9.3×10^1		Maniere et al. (2011)	?	12, 165
cerivastatin $C_{26}H_{34}FNO_5$ [145599-86-6] SEERZIQQUAZTOL-ANMDKAQQSA-N	1.7×10^{13}		HSDB (2015)	Q	99
flucythrinate, isomer 1 $C_{26}H_{23}F_2NO_4$ [70124-77-5] GBIHOLCMZGAKNG-UHFFFAOYSA-N	1.1×10^2 9.3×10^2		HSDB (2015) Mackay et al. (2006d)	V V	
PFBHA-methanal $H_2C=NOCH_2C_6F_5$ [86356-73-2] SRTQFRQWTUMMTC-UHFFFAOYSA-N	1.6×10^{-2}	7200	Destaillets and Charles (2002)	M	
PFBHA-ethanal $CH_3CH=NOCH_2C_6F_5$ [114611-59-5] AKDRYEADQPNLOH-UHFFFAOYSA-N	1.9×10^{-2}	5400	Destaillets and Charles (2002)	M	
PFBHA-propanone $(CH_3)_2C=NOCH_2C_6F_5$ [899828-53-6] DLIFNTQMBOCKTL-UHFFFAOYSA-N	1.1×10^{-2}	3800	Destaillets and Charles (2002)	M	



Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
PFBHA-butanone $(\text{C}_2\text{H}_5)(\text{CH}_3)\text{C}=\text{NOCH}_2\text{C}_6\text{F}_5$ LNDQFOSWZJYEIC-UHFFFAOYSA-N	4.7×10^{-3}	6000	Destailats and Charles (2002)	M	
PFBHA-2-pentanone $(\text{C}_3\text{H}_7)(\text{CH}_3)\text{C}=\text{NOCH}_2\text{C}_6\text{F}_5$ YKQOTQPNOJSJFA-UHFFFAOYSA-N	3.7×10^{-3}	2200	Destailats and Charles (2002)	M	
PFBHA-hexanal $\text{C}_5\text{H}_{11}\text{CH}=\text{NOCH}_2\text{C}_6\text{F}_5$ GPAVMFOMYSGJDM-UHFFFAOYSA-N	5.8×10^{-3}		Destailats and Charles (2002)	M	
PFBHA-octanal $\text{C}_7\text{H}_{15}\text{CH}=\text{NOCH}_2\text{C}_6\text{F}_5$ RLSQIXNUITTKXZ-UHFFFAOYSA-N	7.9×10^{-3}		Destailats and Charles (2002)	M	
PFBHA-decanal $\text{C}_9\text{H}_{19}\text{CH}=\text{NOCH}_2\text{C}_6\text{F}_5$ NUGDFCWVLOJWOP-UHFFFAOYSA-N	2.4×10^{-2}		Destailats and Charles (2002)	M	
PFBHA-propenal $\text{CH}_2\text{CHCH}=\text{NOCH}_2\text{C}_6\text{F}_5$ ICDUEGOPUWNJNF-UHFFFAOYSA-N	9.5×10^{-3}	5400	Destailats and Charles (2002)	M	
(<i>E</i>)-PFBHA-propenal $\text{C}_{10}\text{H}_6\text{F}_5\text{NO}$ [932710-55-9] ICDUEGOPUWNJNF-HQYXKAPLSA-N	9.5×10^{-3}		Ebert et al. (2023)	?	579
PFBHA-crotonaldehyde $\text{CH}_3\text{CHCHCH}=\text{NOCH}_2\text{C}_6\text{F}_5$ [932710-52-6] QNPFFCQTVXPCLD-UHFFFAOYSA-N	6.8×10^{-3}	3400	Destailats and Charles (2002)	M	
PFBHA-benzaldehyde $\text{C}_6\text{H}_5\text{CH}=\text{NOCH}_2\text{C}_6\text{F}_5$ UKSAZCDAGVHMRU-UHFFFAOYSA-N	5.0×10^{-3}	2000	Destailats and Charles (2002)	M	
PFBHA-4-methyl-benzaldehyde $\text{C}_8\text{H}_8=\text{NOCH}_2\text{C}_6\text{F}_5$ UCASBURGYXMQLW-UHFFFAOYSA-N	6.6×10^{-3}		Destailats and Charles (2002)	M	
PFBHA-9-fluorenone $\text{C}_{13}\text{H}_8=\text{NOCH}_2\text{C}_6\text{F}_5$ UABDVZDYKDIZFO-UHFFFAOYSA-N	1.1×10^{-2}		Destailats and Charles (2002)	M	
PFBHA-ethanedial $(\text{HC}=\text{NOCH}_2\text{C}_6\text{F}_5)_2$ [618858-54-1] VNVBOBJSRGZDCW-UHFFFAOYSA-N	1.6×10^{-2}		Destailats and Charles (2002)	M	



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Table A5.1: Organic fluorine (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
PFBHA-1-hydroxypropanone (CH ₂ OH)(CH ₃)C=NOCH ₂ C ₆ F ₅ BCTASVPUYLXFBW-UHFFFAOYSA-N	2.7×10^{-2}		Destailats and Charles (2002)	M	
PFBHA-3-hydroxy-3-methyl-2- butanone (HOC ₃ H ₆)(CH ₃)C=NOCH ₂ C ₆ F ₅ VNWJPJWLGZUDTBZ-UHFFFAOYSA-N	1.2×10^{-2}		Destailats and Charles (2002)	M	



A6 Organic species with chlorine (Cl)

A6.1 Chlorocarbons (C, H, Cl)

Table A6.1: Chlorocarbons (C, H, Cl)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
chloromethane	1.0×10^{-3}	2900	Schwardt et al. (2021)	L	1
CH ₃ Cl	1.0×10^{-3}	2900	Burkholder et al. (2019)	L	1
(methyl chloride)	8.7×10^{-4}	3400	Burkholder et al. (2019)	L	70
[74-87-3]	1.1×10^{-3}	3300	Burkholder et al. (2015)	L	
NEHMKBQYUWJMIP-UHFFFAOYSA-N	8.7×10^{-4}	3400	Burkholder et al. (2015)	L	70
	1.0×10^{-3}	2800	Brockbank (2013)	L	1
	1.3×10^{-3}	3300	Sander et al. (2011)	L	646
	1.1×10^{-3}	3300	Warneck (2007)	L	
	1.3×10^{-3}	3300	Sander et al. (2006)	L	647
	1.1×10^{-3}	3300	Staudinger and Roberts (2001)	L	
	1.1×10^{-3}		Mackay and Shiu (1981)	L	
	1.0×10^{-3}	2800	Wilhelm et al. (1977)	L	
	7.9×10^{-4}	2400	Hiatt (2013)	M	
	9.1×10^{-4}	2000	Chen et al. (2012)	M	
	8.8×10^{-4}	3200	Moore (2000)	M	70
	9.3×10^{-4}	3300	Moore et al. (1995)	M	70
	8.5×10^{-4}	2800	Reichl (1995)	M	648
	1.1×10^{-3}	3000	Elliott and Rowland (1993)	M	
	1.2×10^{-3}	4200	Gossett (1987)	M	
	1.4×10^{-3}		Pearson and McConnell (1975)	M	649, 12
	1.1×10^{-3}	2600	Swain and Thornton (1962)	M	
	9.9×10^{-4}	2500	Boggs and Buck (1958)	M	
	1.0×10^{-3}	2900	Glew and Moelwyn-Hughes (1953)	M	650
	1.0×10^{-3}		Mackay et al. (2006b)	V	
	4.2×10^{-4}		Lide and Frederikse (1995)	V	
	1.0×10^{-3}		Mackay et al. (1993)	V	
	1.1×10^{-3}		Dilling (1977)	V	651
	1.2×10^{-3}		Dilling (1977)	V	12
	9.9×10^{-4}		Hine and Mookerjee (1975)	V	
	1.2×10^{-3}		Yaws (2003)	X	237
	2.9×10^{-4}	-630	Goldstein (1982)	X	298
	2.5×10^{-5}		Ryan et al. (1988)	C	
	1.1×10^{-3}		Hayer et al. (2022)	Q	20
	2.7×10^{-4}		Wang et al. (2017)	Q	80, 238
	1.4×10^{-3}		Wang et al. (2017)	Q	80, 239
	1.8×10^{-3}		Wang et al. (2017)	Q	80, 240
	9.9×10^{-4}		Li et al. (2014)	Q	241
	6.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.0×10^{-3}		Hilal et al. (2008)	Q	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.9×10^{-3}	2600	Modarresi et al. (2007)	Q	67
	1.1×10^{-3}		Kühne et al. (2005)	Q	
	8.6×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	1.0×10^{-3}		Yao et al. (2002)	Q	229
	3.7×10^{-4}		English and Carroll (2001)	Q	230, 231
	8.6×10^{-4}		Katritzky et al. (1998)	Q	
	8.6×10^{-4}		Suzuki et al. (1992)	Q	232
	3.9×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	8.6×10^{-4}		Irmann (1965)	Q	
	1.1×10^{-3}		Mackay et al. (2006b)	?	
	1.2×10^{-3}	2700	Kühne et al. (2005)	?	
	6.9×10^{-4}		Yaws (1999)	?	21
	1.2×10^{-3}		Abraham and Weathersby (1994)	?	21
	1.0×10^{-3}		Yaws and Yang (1992)	?	21
	1.0×10^{-3}		Abraham et al. (1990)	?	
dichloromethane <chem>CH2Cl2</chem> (methylene chloride) [75-09-2] YMWUJEATGCHHMB-UHFFFAOYSA-N	3.9×10^{-3}	3500	Schwardt et al. (2021)	L	1
	3.9×10^{-3}	3700	Burkholder et al. (2019)	L	
	3.5×10^{-3}	3900	Burkholder et al. (2019)	L	70
	3.9×10^{-3}	3700	Burkholder et al. (2015)	L	
	3.5×10^{-3}	3900	Burkholder et al. (2015)	L	70
	3.7×10^{-3}	3300	Brockbank (2013)	L	1
	3.6×10^{-3}	4100	Sander et al. (2011)	L	
	3.9×10^{-3}	3700	Warneck (2007)	L	
	3.6×10^{-3}	4100	Sander et al. (2006)	L	
	3.6×10^{-3}	4100	Staudinger and Roberts (2001)	L	
	3.6×10^{-3}	4100	Staudinger and Roberts (1996)	L	
	3.8×10^{-3}		Mackay and Shiu (1981)	L	
	4.0×10^{-3}	3900	Hiatt (2013)	M	
	3.5×10^{-3}	2300	Chen et al. (2012)	M	
	3.6×10^{-3}	3700	Ooki and Yokouchi (2011)	M	70
	3.2×10^{-3}		Helburn et al. (2008)	M	
	4.3×10^{-3}	3500	Lutsyk et al. (2005)	M	
	3.3×10^{-3}	4200	Moore (2000)	M	70
	3.9×10^{-3}		David et al. (2000)	M	72
	3.4×10^{-3}		McIntosh and Heffron (2000)	M	14
	4.1×10^{-3}		Ryu and Park (1999)	M	
	3.4×10^{-3}		Chiang et al. (1998)	M	652, 12
	3.7		Welke et al. (1998)	M	
	5.1×10^{-3}		Hovorka and Dohnal (1997)	M	12
	3.7×10^{-3}	3200	Kondoh and Nakajima (1997)	M	
	4.3×10^{-3}	3500	Park et al. (1997)	M	
	4.1×10^{-3}		Hoff et al. (1993)	M	
	3.8×10^{-3}		Li et al. (1993)	M	
	3.9×10^{-3}	3400	Wright et al. (1992)	M	653
	3.9×10^{-3}	3500	Tse et al. (1992)	M	
	4.4×10^{-3}		Yu (1992)	M	12
	3.4×10^{-3}		Guitart et al. (1989)	M	14



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.4×10^{-3}	4200	Ashworth et al. (1988)	M	278
	4.6×10^{-3}	3800	Gossett (1987)	M	
	5.7×10^{-3}		Hellmann (1987)	M	87
	5.2×10^{-3}		Yurteri et al. (1987)	M	12
	3.8×10^{-3}	4500	Gossett et al. (1985)	M	
	3.4×10^{-3}	4200	Lincoff and Gossett (1984)	M	
	3.0×10^{-3}	3600	Leighton and Calo (1981)	M	
	3.1×10^{-3}		Warner et al. (1980)	M	
	2.8×10^{-3}		Sato and Nakajima (1979b)	M	14
	3.3×10^{-3}		Pearson and McConnell (1975)	M	649, 12
	4.2×10^{-3}	4400	Hartkopf and Karger (1973)	M	
	4.1×10^{-3}	4000	Rex (1906)	M	
	2.7×10^{-3}		Mackay et al. (2006b)	V	
	3.5×10^{-3}	4100	Fogg and Sangster (2003)	V	
	4.0×10^{-3}		Park et al. (1997)	V	
	5.9×10^{-3}		Mackay et al. (1993)	V	
	2.9×10^{-3}		Hwang et al. (1992)	V	
	3.2×10^{-3}		Warner et al. (1980)	V	
	4.0×10^{-3}		Dilling (1977)	V	651
	1.2×10^{-2}		Dilling (1977)	V	153
	4.3×10^{-3}		Hine and Mookerjee (1975)	V	
	4.0×10^{-3}		Dilling et al. (1975)	V	
	4.0×10^{-3}		Yaws (2003)	X	237
	3.1×10^{-3}	3600	Goldstein (1982)	X	298
	4.2×10^{-3}		Harrison et al. (1993)	C	
	3.4×10^{-3}		Harrison et al. (1993)	C	
	4.7×10^{-3}		Ryan et al. (1988)	C	
	3.1×10^{-3}		Shen (1982)	C	
	3.7×10^{-3}		Dilling (1977)	C	
	3.7×10^{-3}		Dilling et al. (1975)	C	
	5.6×10^{-3}		Hayer et al. (2022)	Q	20
	8.8×10^{-3}		Keshavarz et al. (2022)	Q	
	2.6×10^{-3}		Duchowicz et al. (2020)	Q	
	6.2×10^{-4}		Wang et al. (2017)	Q	80, 238
	1.4×10^{-2}		Wang et al. (2017)	Q	80, 239
	9.3×10^{-3}		Wang et al. (2017)	Q	80, 240
	2.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
	9.0×10^{-3}		Hilal et al. (2008)	Q	
	1.8×10^{-3}		Modarresi et al. (2007)	Q	67
		3000	Kühne et al. (2005)	Q	
	3.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	3.0×10^{-3}		Yao et al. (2002)	Q	229
	1.8×10^{-3}		English and Carroll (2001)	Q	230, 260



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.4×10^{-4}		Katritzky et al. (1998)	Q	
	2.2×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	3.0×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	3.3×10^{-3}		Mackay et al. (2006b)	?	
		3900	Kühne et al. (2005)	?	
	4.0×10^{-3}		Yaws (1999)	?	21
	2.9×10^{-3}		Abraham and Weathersby (1994)	?	21
	3.3×10^{-3}		Mackay et al. (1993)	?	
	4.0×10^{-3}		Yaws and Yang (1992)	?	21
	3.7×10^{-3}		Abraham et al. (1990)	?	
dichloromethane-d2 CD ₂ Cl ₂ (methylene chloride-d2) [1665-00-5] YMWUJEATGCHMB-DICFDUPASA-N	3.8×10^{-3}	4600	Hiatt (2013)	M	
trichloromethane CHCl ₃ (chloroform) [67-66-3] HEDRZPFGACZZDS-UHFFFAOYSA-N	2.7×10^{-3}	4200	Schwardt et al. (2021)	L	1
	2.6×10^{-3}	4300	Burkholder et al. (2019)	L	
	2.0×10^{-3}	4400	Burkholder et al. (2019)	L	70
	2.6×10^{-3}	4300	Burkholder et al. (2015)	L	
	2.0×10^{-3}	4400	Burkholder et al. (2015)	L	70
	2.3×10^{-3}	4200	Brockbank (2013)	L	1, 654
	2.5×10^{-3}	4500	Sander et al. (2011)	L	
	2.6×10^{-3}	4300	Warneck (2007)	L	
	2.5×10^{-3}	4500	Sander et al. (2006)	L	
	2.5×10^{-3}	4500	Staudinger and Roberts (2001)	L	
	2.5×10^{-3}	4500	Staudinger and Roberts (1996)	L	
	2.6×10^{-3}		Mackay and Shiu (1981)	L	
	1.6×10^{-3}		Steward et al. (1973)	L	14
	2.6×10^{-3}	3900	Allott et al. (1973)	L	
	2.8×10^{-3}	4500	Hiatt (2013)	M	
	2.5×10^{-3}	3900	Chen et al. (2012)	M	
	3.1×10^{-3}		Ruiz-Bevia and Fernandez-Torres (2010)	M	
	2.7×10^{-3}	4500	Lutsyk et al. (2005)	M	
	1.4×10^{-3}		Zhang et al. (2002)	M	14
	2.3×10^{-3}	4200	Görgényi et al. (2002)	M	655
	2.0×10^{-3}	4600	Moore (2000)	M	70
	2.4×10^{-3}		David et al. (2000)	M	72
	2.7×10^{-3}		Ryu and Park (1999)	M	
	3.0×10^{-3}		Dohnal and Hovorka (1999)	M	12
	3.0×10^{-3}		Chiang et al. (1998)	M	12
	3.4×10^{-3}		Welke et al. (1998)	M	
	3.2×10^{-3}		Hovorka and Dohnal (1997)	M	12
	2.7×10^{-3}	3400	Kondoh and Nakajima (1997)	M	
	2.6×10^{-3}	3400	Park et al. (1997)	M	
	2.2×10^{-3}	4700	Turner et al. (1996)	M	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-3}	4200	Moore et al. (1995)	M	656, 70
	2.6×10^{-3}	4400	Dewulf et al. (1995)	M	
	2.5×10^{-3}		Hoff et al. (1993)	M	
	2.4×10^{-3}		Li et al. (1993)	M	
	2.6×10^{-3}	4000	Wright et al. (1992)	M	657
	4.8×10^{-3}	7300	Tancrède and Yanagisawa (1990)	M	
	2.4×10^{-3}	2000	Lamarche and Droste (1989)	M	345
	2.1×10^{-3}		Guitart et al. (1989)	M	14
	2.3×10^{-3}	5000	Ashworth et al. (1988)	M	278
	2.7×10^{-3}	4600	Gossett (1987)	M	
	2.6×10^{-3}	4300	Munz and Roberts (1987)	M	
	2.9×10^{-3}		Hellmann (1987)	M	87
	3.3×10^{-3}		Munz and Roberts (1986)	M	
	2.5×10^{-3}	4300	Gossett et al. (1985)	M	
	2.5×10^{-3}	5200	Nicholson et al. (1984)	M	
	2.3×10^{-3}	4200	Lincoff and Gossett (1984)	M	
	2.0×10^{-3}	3900	Hunter-Smith et al. (1983)	M	70, 658
	2.5×10^{-3}	4000	Leighton and Calo (1981)	M	
	1.5×10^{-3}	5600	Ervin et al. (1980)	M	
	2.9×10^{-3}		Warner et al. (1980)	M	
	2.4×10^{-3}	7200	Balls (1980)	M	
	1.4×10^{-3}		Sato and Nakajima (1979b)	M	14
	3.5×10^{-3}		Pearson and McConnell (1975)	M	649, 12
	2.8×10^{-3}	5100	Hartkopf and Karger (1973)	M	
	1.6×10^{-3}		Bachofen and Farhi (1971)	M	14
	2.6×10^{-3}	4600	Rex (1906)	M	
	2.6×10^{-3}		Mackay et al. (2006b)	V	
	2.6×10^{-3}	4400	Fogg and Sangster (2003)	V	
	2.5×10^{-3}		Park et al. (1997)	V	
	2.6×10^{-3}		Mackay et al. (1993)	V	
	2.6×10^{-3}		Hwang et al. (1992)	V	
	5.5×10^{-3}		McLachlan et al. (1990)	V	373
	3.1×10^{-3}		Warner et al. (1980)	V	
	2.8×10^{-3}		Smith and Bomberger (1980)	V	24
	2.5×10^{-3}		Dilling (1977)	V	651
	9.0×10^{-3}		Dilling (1977)	V	153
	2.3×10^{-3}		Hine and Mookerjee (1975)	V	
	2.5×10^{-3}		Dilling et al. (1975)	V	
	2.2×10^{-3}	4700	Winkler (1906)	V	
	2.5×10^{-3}	4100	Barr and Newsham (1987)	X	298
	3.0×10^{-3}	4400	Goldstein (1982)	X	298
	2.4×10^{-3}		Harrison et al. (1993)	C	
	3.4×10^{-3}		Harrison et al. (1993)	C	
	3.4×10^{-3}		Ryan et al. (1988)	C	
	2.7×10^{-3}		Nicholson et al. (1984)	C	
	2.1×10^{-3}		Nicholson et al. (1984)	C	12
	2.9×10^{-3}		Shen (1982)	C	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.1×10^{-3}		Dilling (1977)	C	
	3.1×10^{-3}		Dilling et al. (1975)	C	
	2.6×10^{-3}		Hayer et al. (2022)	Q	20
	1.1×10^{-3}		Wang et al. (2017)	Q	80, 238
	4.3×10^{-3}		Wang et al. (2017)	Q	80, 239
	4.5×10^{-3}		Wang et al. (2017)	Q	80, 240
	3.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.2×10^{-3}		Hilal et al. (2008)	Q	
	1.3×10^{-3}		Modarresi et al. (2007)	Q	67
		3300	Kühne et al. (2005)	Q	
	4.1×10^{-3}		Yao et al. (2002)	Q	229
	1.0×10^{-3}		English and Carroll (2001)	Q	230, 274
	2.6×10^{-4}		Katritzky et al. (1998)	Q	
	3.9×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.3×10^{-3}		Arbuckle (1983)	Q	
	2.3×10^{-3}		Mackay et al. (2006b)	?	
		4300	Kühne et al. (2005)	?	
	2.4×10^{-3}		Yaws (1999)	?	21
	1.6×10^{-3}		Abraham and Weathersby (1994)	?	21
	2.3×10^{-3}		Mackay et al. (1993)	?	
	2.4×10^{-3}		Yaws and Yang (1992)	?	21
	2.5×10^{-3}		Abraham et al. (1990)	?	
tetrachloromethane	3.4×10^{-4}	4200	Schwardt et al. (2021)	L	1
CCl ₄	3.6×10^{-4}	4300	Burkholder et al. (2019)	L	
(carbontetrachloride)	2.6×10^{-4}	4200	Burkholder et al. (2019)	L	70
[56-23-5]	3.6×10^{-4}	4300	Burkholder et al. (2015)	L	
VZGDMQKNWNREIO-UHFFFAOYSA-N	2.6×10^{-4}	4200	Burkholder et al. (2015)	L	70
	3.5×10^{-4}	4200	Brockbank (2013)	L	1, 659
	3.4×10^{-4}	4200	Sander et al. (2011)	L	
	3.6×10^{-4}	4300	Warneck (2007)	L	
	3.4×10^{-4}	4200	Sander et al. (2006)	L	
	3.4×10^{-4}	4200	Staudinger and Roberts (2001)	L	
	3.4×10^{-4}	4200	Staudinger and Roberts (1996)	L	
	5.0×10^{-4}		Mackay and Shiu (1981)	L	
	5.0×10^{-4}	4500	Hiatt (2013)	M	
	3.0×10^{-4}	4400	Chen et al. (2012)	M	
	3.4×10^{-4}	3800	Lutsyk et al. (2005)	M	
	3.8×10^{-4}		Ryu and Park (1999)	M	
	4.0×10^{-4}		Chiang et al. (1998)	M	12
	2.9×10^{-4}	3700	Bullister and Wisegarver (1998)	M	660
	4.4×10^{-4}	1900	Kondoh and Nakajima (1997)	M	
	3.9×10^{-4}	2600	Park et al. (1997)	M	
	3.8×10^{-4}	4400	Dewulf et al. (1995)	M	
	3.6×10^{-4}		Hoff et al. (1993)	M	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.3×10^{-4}	3600	Hansen et al. (1993)	M	281
	2.3×10^{-4}		Li and Carr (1993)	M	
	2.9×10^{-4}	4500	Wright et al. (1992)	M	661
	3.8×10^{-4}	3600	Tse et al. (1992)	M	
	3.4×10^{-4}	4100	Tancrède and Yanagisawa (1990)	M	
	2.8×10^{-4}	5600	Bissonette et al. (1990)	M	
	3.3×10^{-4}	4000	Ashworth et al. (1988)	M	278
	3.3×10^{-4}	4400	Gossett (1987)	M	
	3.3×10^{-4}	4300	Munz and Roberts (1987)	M	
	3.3×10^{-4}		Hellmann (1987)	M	87
	4.3×10^{-4}		Yurteri et al. (1987)	M	12
	4.2×10^{-4}		Munz and Roberts (1986)	M	
	4.1×10^{-4}	3200	Hunter-Smith et al. (1983)	M	658
	3.6×10^{-4}	4400	Leighton and Calo (1981)	M	
	3.3×10^{-4}		Warner et al. (1980)	M	
	3.2×10^{-4}	3300	Balls (1980)	M	
	9.7×10^{-5}		Sato and Nakajima (1979b)	M	14
	4.5×10^{-4}		Pearson and McConnell (1975)	M	649, 12
	3.7×10^{-4}	5200	Hartkopf and Karger (1973)	M	
	3.5×10^{-4}	4400	Rex (1906)	M	
	3.4×10^{-4}		Mackay et al. (2006b)	V	
	3.6×10^{-4}	4200	Fogg and Sangster (2003)	V	
	4.3×10^{-4}		Park et al. (1997)	V	
	3.4×10^{-4}		Mackay et al. (1993)	V	
	3.4×10^{-4}		Hwang et al. (1992)	V	
	6.7×10^{-5}		Ballschmiter and Wittlinger (1991)	V	
	3.5×10^{-4}		Warner et al. (1980)	V	
	4.6×10^{-4}		Smith and Bomberger (1980)	V	24
	3.4×10^{-4}		Dilling (1977)	V	
	3.4×10^{-4}		Hine and Mookerjee (1975)	V	
	2.0×10^{-4}		Pierotti (1965)	T	
	3.4×10^{-4}		Yaws (2003)	X	237
	3.3×10^{-4}	1100	Goldstein (1982)	X	298
	3.8×10^{-4}		Harrison et al. (1993)	C	
	2.1×10^{-4}		Harrison et al. (1993)	C	
	4.5×10^{-4}		Ryan et al. (1988)	C	
	3.3×10^{-4}		Shen (1982)	C	
	4.6×10^{-4}		Dilling (1977)	C	
	3.7×10^{-4}		Liss and Slater (1974)	C	
	4.9×10^{-4}		Hayer et al. (2022)	Q	20
	5.4×10^{-4}		Keshavarz et al. (2022)	Q	
	6.3×10^{-4}		Duchowicz et al. (2020)	Q	
	3.4×10^{-4}		Li et al. (2014)	Q	241
	3.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-4}		Gharagheizi et al. (2010)	Q	246
	5.4×10^{-4}		Hilal et al. (2008)	Q	
	2.3×10^{-4}		Modarresi et al. (2007)	Q	67



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		3700	Kühne et al. (2005)	Q	
	3.5×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	2.1×10^{-4}		English and Carroll (2001)	Q	230, 231
	3.4×10^{-5}		Katritzky et al. (1998)	Q	
	3.5×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	4.1×10^{-4}		Arbuckle (1983)	Q	
	3.6×10^{-4}		Duchowicz et al. (2020)	?	185, 21
	1.2×10^{-4}		MacBean (2012a)	?	
	3.3×10^{-4}		Mackay et al. (2006b)	?	
		4300	Kühne et al. (2005)	?	
	3.4×10^{-4}		Yaws (1999)	?	21
	1.0×10^{-4}		Abraham and Weathersby (1994)	?	21
	3.3×10^{-4}		Mackay et al. (1993)	?	
	3.3×10^{-4}		Yaws and Yang (1992)	?	21
	3.5×10^{-4}		Abraham et al. (1990)	?	
	4.3×10^{-4}		Mackay and Yeun (1983)	?	
	1.1×10^{-3}		Chiou et al. (1980)	?	79
chloroethane	8.1×10^{-4}	3000	Schwardt et al. (2021)	L	1
C ₂ H ₅ Cl	8.1×10^{-4}	2900	Burkholder et al. (2019)	L	1
[75-00-3]	8.3×10^{-4}	2800	Burkholder et al. (2015)	L	
HRYZWHZPQKTIU-UHFFFAOYSA-N	8.1×10^{-4}	2900	Brockbank (2013)	L	1
	8.3×10^{-4}	2800	Warneck (2007)	L	
	8.4×10^{-4}	2900	Staudinger and Roberts (2001)	L	
	8.3×10^{-4}	2900	Staudinger and Roberts (1996)	L	
	5.0×10^{-3}		Mackay and Shiu (1981)	L	
	4.7×10^{-4}		Steward et al. (1973)	L	14
	7.3×10^{-4}	3500	Allott et al. (1973)	L	
	8.5×10^{-4}	3200	Hiatt (2013)	M	
	7.6×10^{-4}	3100	Chen et al. (2012)	M	
	8.9×10^{-4}	3200	Maaßen (1995)	M	662
	9.3×10^{-4}	3300	Reichl (1995)	M	663
	7.9×10^{-4}	2600	Ashworth et al. (1988)	M	278
	8.8×10^{-4}	3100	Gossett (1987)	M	
	5.5×10^{-3}		Mackay et al. (2006b)	V	
	5.5×10^{-3}		Mackay et al. (1993)	V	
	5.6×10^{-4}		Hwang et al. (1992)	V	
	8.8×10^{-4}		Dilling (1977)	V	
	1.2×10^{-3}		Hine and Mookerjee (1975)	V	
	1.4×10^{-3}		Yaws (2003)	X	237, 12
	6.8×10^{-4}	750	Goldstein (1982)	X	298
	6.6×10^{-4}		Ryan et al. (1988)	C	
	6.3×10^{-4}		Irmann (1965)	C	
	8.0×10^{-4}		Hayer et al. (2022)	Q	20
	2.2×10^{-4}		Wang et al. (2017)	Q	80, 238
	1.4×10^{-3}		Wang et al. (2017)	Q	80, 239
	1.7×10^{-3}		Wang et al. (2017)	Q	80, 240
	7.9×10^{-4}		Gharagheizi et al. (2012)	Q	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	9.3×10^{-4}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-3}		Hilal et al. (2008)	Q	
	1.0×10^{-3}		Modarresi et al. (2007)	Q	67
		3000	Kühne et al. (2005)	Q	
	1.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	4.8×10^{-4}		Yao et al. (2002)	Q	229
	9.7×10^{-4}		English and Carroll (2001)	Q	230, 231
	9.0×10^{-4}		Katritzky et al. (1998)	Q	
	6.1×10^{-4}		Suzuki et al. (1992)	Q	232
	7.9×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	7.6×10^{-4}		Irmann (1965)	Q	
	9.8×10^{-4}		Mackay et al. (2006b)	?	
		2900	Kühne et al. (2005)	?	
	1.4×10^{-3}		Yaws (1999)	?	21, 12
	4.8×10^{-4}		Abraham and Weathersby (1994)	?	21
	9.8×10^{-4}		Mackay et al. (1993)	?	
	1.4×10^{-3}		Yaws and Yang (1992)	?	21, 12
	1.2×10^{-3}		Abraham et al. (1990)	?	
1,1-dichloroethane	1.7×10^{-3}	3900	Schwardt et al. (2021)	L	1
CHCl ₂ CH ₃	1.7×10^{-3}	4000	Burkholder et al. (2019)	L	1
[75-34-3]	1.5×10^{-3}	3900	Burkholder et al. (2019)	L	70
SCYULBFZEHDVBN-UHFFFAOYSA-N	1.7×10^{-3}	4100	Burkholder et al. (2015)	L	
	1.5×10^{-3}	3900	Burkholder et al. (2015)	L	70
	1.7×10^{-3}	4000	Brockbank (2013)	L	1
	1.7×10^{-3}	4100	Warneck (2007)	L	
	1.8×10^{-3}	4100	Fogg and Sangster (2003)	L	
	1.6×10^{-3}	3700	Staudinger and Roberts (2001)	L	
	1.5×10^{-3}	3600	Staudinger and Roberts (1996)	L	
	1.7×10^{-3}		Mackay and Shiu (1981)	L	
	2.0×10^{-3}	3900	Hiatt (2013)	M	
	1.9×10^{-3}	3300	Chen et al. (2012)	M	
	2.0×10^{-3}		Bobadilla et al. (2003)	M	
	1.6×10^{-3}	3900	Görgényi et al. (2002)	M	664
	2.2×10^{-3}		Hovorka and Dohnal (1997)	M	12
	1.8×10^{-3}	2600	Kondoh and Nakajima (1997)	M	
	2.0×10^{-3}	4300	Dewulf et al. (1995)	M	
	1.5×10^{-3}	4900	Wright et al. (1992)	M	665
	1.7×10^{-3}	3700	Tse et al. (1992)	M	
	1.7×10^{-3}	2100	Lamarche and Droste (1989)	M	345
	1.5×10^{-3}	3100	Ashworth et al. (1988)	M	278
	1.8×10^{-3}	4100	Gossett (1987)	M	
	1.3×10^{-3}	4900	Ervin et al. (1980)	M	
	1.8×10^{-3}		Warner et al. (1980)	M	
	1.0×10^{-3}		Sato and Nakajima (1979b)	M	14



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8×10^{-3}	4400	Rex (1906)	M	
	1.7×10^{-3}		Mackay et al. (2006b)	V	
	1.6×10^{-3}		Mackay et al. (1993)	V	
	1.8×10^{-3}		Warner et al. (1980)	V	
	1.7×10^{-3}		Smith and Bomberger (1980)	V	24
	1.7×10^{-3}		Dilling (1977)	V	
	1.7×10^{-3}		Hine and Mookerjee (1975)	V	
	1.7×10^{-3}		Yaws (2003)	X	237
	1.7×10^{-3}	3800	Barr and Newsham (1987)	X	298
	1.8×10^{-3}	1700	Goldstein (1982)	X	298
	2.4×10^{-3}		Ryan et al. (1988)	C	
	1.8×10^{-3}		Shen (1982)	C	
	5.1×10^{-4}		Wang et al. (2017)	Q	80, 238
	4.2×10^{-3}		Wang et al. (2017)	Q	80, 239
	6.5×10^{-3}		Wang et al. (2017)	Q	80, 240
	2.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.2×10^{-3}		Hilal et al. (2008)	Q	
	1.4×10^{-3}		Modarresi et al. (2007)	Q	67
		3300	Kühne et al. (2005)	Q	
	1.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	5.0×10^{-4}		English and Carroll (2001)	Q	230, 274
	1.1×10^{-3}		Katritzky et al. (1998)	Q	
	1.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.8×10^{-3}		Mackay et al. (2006b)	?	
		3900	Kühne et al. (2005)	?	
	1.7×10^{-3}		Yaws (1999)	?	21
	1.1×10^{-3}		Abraham and Weathersby (1994)	?	21
	1.6×10^{-3}		Mackay et al. (1993)	?	
	1.7×10^{-3}		Yaws and Yang (1992)	?	21
	1.7×10^{-3}		Abraham et al. (1990)	?	
1,2-dichloroethane	7.5×10^{-3}	4400	Schwardt et al. (2021)	L	1
CH ₂ ClCH ₂ Cl	8.9×10^{-3}	4300	Burkholder et al. (2019)	L	
[107-06-2]	7.6×10^{-3}	3700	Burkholder et al. (2019)	L	70
WSLDOOZREJYCGB-UHFFFAOYSA-N	8.9×10^{-3}	4300	Burkholder et al. (2015)	L	
	7.6×10^{-3}	3700	Burkholder et al. (2015)	L	70
	8.4×10^{-3}	4200	Brockbank (2013)	L	1
	8.9×10^{-3}	4300	Warneck (2007)	L	
	9.1×10^{-3}	4300	Fogg and Sangster (2003)	L	
	7.8×10^{-3}	4200	Staudinger and Roberts (2001)	L	
	7.1×10^{-3}	4200	Staudinger and Roberts (1996)	L	
	9.1×10^{-3}		Mackay and Shiu (1981)	L	
	8.2×10^{-3}	4400	Hiatt (2013)	M	
	9.1×10^{-3}	6100	Chen et al. (2012)	M	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.4×10^{-3}		Ayuttaya et al. (2001)	M	340
	5.7×10^{-4}		Ayuttaya et al. (2001)	M	341
	4.2×10^{-3}		Ayuttaya et al. (2001)	M	342
	8.1×10^{-3}		Ayuttaya et al. (2001)	M	343
	7.5×10^{-3}		Welke et al. (1998)	M	
	1.1×10^{-2}		Hovorka and Dohnal (1997)	M	12
	6.2×10^{-3}	3700	Kondoh and Nakajima (1997)	M	
	9.3×10^{-3}	4600	Dewulf et al. (1995)	M	
	8.3×10^{-3}		Hoff et al. (1993)	M	
	8.2×10^{-3}		Li et al. (1993)	M	
	8.4×10^{-3}	4300	Wright et al. (1992)	M	666
	8.0×10^{-3}	3600	Tse et al. (1992)	M	
	6.4×10^{-3}	4500	Bissonette et al. (1990)	M	
	5.8×10^{-3}	3000	Lamarche and Droste (1989)	M	345
	7.6×10^{-3}		Guitart et al. (1989)	M	14
	6.4×10^{-3}	1500	Ashworth et al. (1988)	M	33, 278
	8.4×10^{-3}	3500	Leighton and Calo (1981)	M	
	9.0×10^{-3}		Warner et al. (1980)	M	
	4.4×10^{-3}		Sato and Nakajima (1979b)	M	14
	1.1×10^{-2}		Pearson and McConnell (1975)	M	649, 12
	7.9×10^{-3}	4400	Hartkopf and Karger (1973)	M	
	7.2×10^{-3}		Saylor et al. (1938)	M	38
	8.6×10^{-3}	4400	Rex (1906)	M	
	8.2×10^{-3}		Mackay et al. (2006b)	V	
	8.3×10^{-3}		Mackay et al. (1993)	V	
	7.3×10^{-3}		Warner et al. (1980)	V	
	8.1×10^{-3}		Dilling (1977)	V	
	7.5×10^{-3}		Hine and Mookerjee (1975)	V	
	8.3×10^{-3}		Yaws (2003)	X	237
	8.5×10^{-3}	3700	Barr and Newsham (1987)	X	298
	9.0×10^{-3}	2400	Goldstein (1982)	X	298
	8.6×10^{-3}		Harrison et al. (1993)	C	
	9.0×10^{-3}		Harrison et al. (1993)	C	
	1.1×10^{-2}		Ryan et al. (1988)	C	
	9.0×10^{-3}		Shen (1982)	C	
	1.0×10^{-2}		Dilling (1977)	C	
	1.1×10^{-2}		Hayer et al. (2022)	Q	20
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	3.8×10^{-3}		Duchowicz et al. (2020)	Q	184
	1.5×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.2×10^{-2}		Wang et al. (2017)	Q	80, 239
	2.0×10^{-2}		Wang et al. (2017)	Q	80, 240
	7.5×10^{-3}		Li et al. (2014)	Q	241
	6.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.0×10^{-2}		Hilal et al. (2008)	Q	
	5.1×10^{-3}	3300	Modarresi et al. (2007)	Q	67
			Kühne et al. (2005)	Q	
	8.2×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	3.4×10^{-3}		English and Carroll (2001)	Q	230, 231
	2.2×10^{-3}		Katritzky et al. (1998)	Q	
	7.7×10^{-3}		Russell et al. (1992)	Q	279
	1.8×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	8.4×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	4.2×10^{-3}		MacBean (2012a)	?	
	7.0×10^{-3}		Mackay et al. (2006b)	?	
		3600	Kühne et al. (2005)	?	
	8.4×10^{-3}		Yaws (1999)	?	21
	4.5×10^{-3}		Abraham and Weathersby (1994)	?	21
	7.0×10^{-3}		Mackay et al. (1993)	?	
	8.3×10^{-3}		Yaws and Yang (1992)	?	21
	8.2×10^{-3}		Abraham et al. (1990)	?	
	1.2×10^{-2}		Chiou et al. (1980)	?	79
1,2-dichloroethane-d4 CD ₂ ClCD ₂ Cl [17060-07-0] WSLDOOZREJYCGB-LNLMKGTHSA-N	8.7×10^{-3}	4300	Hiatt (2013)	M	
1,1,1-trichloroethane CH ₃ CCl ₃ (methylchloroform; MCF) [71-55-6] UOCLXMDMGBRAIB-UHFFFAOYSA-N	6.0×10^{-4}	3800	Schwardt et al. (2021)	L	1
	6.0×10^{-4}	3700	Burkholder et al. (2019)	L	
	4.2×10^{-4}	4200	Burkholder et al. (2019)	L	70
	6.0×10^{-4}	3700	Burkholder et al. (2015)	L	
	4.2×10^{-4}	4200	Burkholder et al. (2015)	L	70
	5.8×10^{-4}	4100	Brockbank (2013)	L	1
	6.0×10^{-4}	3700	Warneck (2007)	L	
	6.2×10^{-4}	3900	Fogg and Sangster (2003)	L	
	5.9×10^{-4}	4000	Staudinger and Roberts (2001)	L	
	5.8×10^{-4}	3900	Staudinger and Roberts (1996)	L	
	3.6×10^{-4}		Mackay and Shiu (1981)	L	
	6.9×10^{-4}	4000	Hiatt (2013)	M	
	5.4×10^{-4}	4100	Chen et al. (2012)	M	
	6.2×10^{-4}	3500	Vane and Giroux (2000)	M	
	7.1×10^{-4}		Chiang et al. (1998)	M	12
	7.9×10^{-4}		Hovorka and Dohnal (1997)	M	12
	6.7×10^{-4}	1900	Kondoh and Nakajima (1997)	M	
	4.8×10^{-4}		Turner et al. (1996)	M	
	6.7×10^{-4}	4100	Dewulf et al. (1995)	M	
	5.5×10^{-4}	2500	Robbins et al. (1993)	M	667
	5.3×10^{-4}		Hoff et al. (1993)	M	
	5.9×10^{-4}	3100	Hansen et al. (1993)	M	281
	5.7×10^{-4}		Li et al. (1993)	M	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.0×10^{-4}	3300	Wright et al. (1992)	M	668
	6.3×10^{-4}	3700	Tse et al. (1992)	M	
	7.9×10^{-4}	1300	Kolb et al. (1992)	M	277
	5.1×10^{-4}	5200	Bissonette et al. (1990)	M	
	3.2×10^{-4}		Guitart et al. (1989)	M	14
	5.7×10^{-4}	3400	Ashworth et al. (1988)	M	278
	5.9×10^{-4}	4100	Gossett (1987)	M	
	5.8×10^{-4}	4100	Munz and Roberts (1987)	M	
	6.3×10^{-4}		Yurteri et al. (1987)	M	12
	5.7×10^{-4}	4200	Gossett et al. (1985)	M	
	5.9×10^{-4}	4300	Lincoff and Gossett (1984)	M	
	7.6×10^{-4}	3200	Hunter-Smith et al. (1983)	M	658
	4.9×10^{-4}	4400	Leighton and Calo (1981)	M	
	2.7×10^{-4}	7000	Ervin et al. (1980)	M	
	2.0×10^{-3}		Warner et al. (1980)	M	
	3.6×10^{-4}		Sato and Nakajima (1979b)	M	14
	2.9×10^{-4}		Pearson and McConnell (1975)	M	649, 12
	5.9×10^{-4}		Mackay et al. (2006b)	V	
	6.8×10^{-4}		Mackay et al. (1993)	V	
	7.0×10^{-4}	4700	McLinden (1989)	V	
	2.4×10^{-3}		Warner et al. (1980)	V	
	3.4×10^{-4}		Dilling (1977)	V	651
	4.0×10^{-4}		Dilling (1977)	V	12
	1.1×10^{-3}		Dilling (1977)	V	153
	6.1×10^{-4}		Hine and Mookerjee (1975)	V	
	5.9×10^{-4}		Dilling et al. (1975)	V	
	4.5×10^{-4}		Yaws (2003)	X	237
	5.8×10^{-4}	4000	Barr and Newsham (1987)	X	298
	2.2×10^{-3}	1700	Goldstein (1982)	X	298
	3.1×10^{-4}		Ryan et al. (1988)	C	
	2.0×10^{-3}		Shen (1982)	C	
	2.3×10^{-4}		Wang et al. (2017)	Q	80, 238
	7.6×10^{-4}		Wang et al. (2017)	Q	80, 239
	2.0×10^{-3}		Wang et al. (2017)	Q	80, 240
	2.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	4.9×10^{-4}		Gharagheizi et al. (2010)	Q	246
	9.0×10^{-4}		Hilal et al. (2008)	Q	
	1.3×10^{-3}		Modarresi et al. (2007)	Q	67
		3700	Kühne et al. (2005)	Q	
	6.1×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	7.9×10^{-4}		English and Carroll (2001)	Q	230, 260
	5.4×10^{-4}		Katritzky et al. (1998)	Q	
	2.3×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.6×10^{-3}		Arbuckle (1983)	Q	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) [$\frac{\text{mol}}{\text{m}^3 \text{ Pa}}$]	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.7×10^{-4}	3700	Mackay et al. (2006b)	?	
	4.6×10^{-4}		Kühne et al. (2005)	?	
	3.8×10^{-4}		Yaws (1999)	?	21
	5.7×10^{-4}		Abraham and Weathersby (1994)	?	21
	5.6×10^{-4}		Mackay et al. (1993)	?	
	1.6×10^{-3}		Abraham et al. (1990)	?	
			Chiou et al. (1980)	?	79
1,1,2-trichloroethane <chem>CHCl2CH2Cl</chem> [79-00-5] UBOXGVDOUJQMTN-UHFFFAOYSA-N	1.1×10^{-2}	4400	Schwardt et al. (2021)	L	1
	1.1×10^{-2}	4100	Burkholder et al. (2019)	L	
	1.1×10^{-2}	4100	Burkholder et al. (2015)	L	
	1.1×10^{-2}	4400	Brockbank (2013)	L	1, 669
	1.1×10^{-2}	4100	Warneck (2007)	L	
	1.2×10^{-2}	4200	Fogg and Sangster (2003)	L	
	1.1×10^{-2}	4900	Staudinger and Roberts (2001)	L	
	1.1×10^{-2}	4900	Staudinger and Roberts (1996)	L	
	8.3×10^{-3}		Mackay and Shiu (1981)	L	
	7.3×10^{-3}	2400	Schwardt et al. (2021)	M	670, 11
	1.4×10^{-2}	5400	Hiatt (2013)	M	
	1.2×10^{-2}		Bobadilla et al. (2003)	M	
	1.1×10^{-2}	4700	Dewulf et al. (1999)	M	
	1.5×10^{-2}		Dohnal and Hovorka (1999)	M	12
	1.5×10^{-2}		Hovorka and Dohnal (1997)	M	12
	1.1×10^{-2}	5100	Kondoh and Nakajima (1997)	M	
	1.2×10^{-2}	5900	Hansen et al. (1993)	M	281
	1.1×10^{-2}	4300	Wright et al. (1992)	M	671
	1.1×10^{-2}	4100	Tse et al. (1992)	M	
	1.0×10^{-2}	4800	Ashworth et al. (1988)	M	278
	1.2×10^{-2}	3700	Leighton and Calo (1981)	M	
	6.6×10^{-3}		Sato and Nakajima (1979b)	M	14
	1.1×10^{-2}		Mackay et al. (2006b)	V	
	1.0×10^{-2}		Mackay et al. (1993)	V	
	1.1×10^{-2}		Dilling (1977)	V	
	1.1×10^{-2}		Hine and Mookerjee (1975)	V	
	1.1×10^{-2}		Yaws (2003)	X	237
	1.1×10^{-2}	4300	Barr and Newsham (1987)	X	298
	1.2×10^{-2}	2700	Goldstein (1982)	X	298
	1.3×10^{-3}		Ryan et al. (1988)	C	
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	7.7×10^{-3}		Duchowicz et al. (2020)	Q	
	4.9×10^{-3}		Wang et al. (2017)	Q	80, 238
	2.1×10^{-2}		Wang et al. (2017)	Q	80, 239
	4.1×10^{-2}		Wang et al. (2017)	Q	80, 240
	1.1×10^{-2}		Li et al. (2014)	Q	241
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	1.6×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.0×10^{-2}		Gharagheizi et al. (2010)	Q	246



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-2}		Hilal et al. (2008)	Q	
	6.7×10^{-3}	3700	Modarresi et al. (2007)	Q	67
	8.6×10^{-3}		Kühne et al. (2005)	Q	
	1.9×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	3.3×10^{-3}		Katritzky et al. (1998)	Q	
	7.6×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.2×10^{-2}		Arbuckle (1983)	Q	
	1.1×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	1.1×10^{-2}	4200	Mackay et al. (2006b)	?	
	1.1×10^{-2}		Kühne et al. (2005)	?	
	1.1×10^{-2}		Yaws (1999)	?	21
	6.9×10^{-3}		Abraham and Weathersby (1994)	?	21
	1.1×10^{-2}		Mackay et al. (1993)	?	
	1.0×10^{-2}		Yaws and Yang (1992)	?	21
	1.2×10^{-2}		Abraham et al. (1990)	?	
1,1,2-trichloroethane-d3 CDCl ₂ CD ₂ Cl [171086-93-4] UBOXGVDOUJQMTN-FUDHJZNOSA-N	1.3×10^{-2}	5100	Hiatt (2013)	M	
1,1,1,2-tetrachloroethane CCl ₃ CH ₂ Cl [630-20-6] QVLAWKAXOMEXPM-UHFFFAOYSA-N	5.0×10^{-3}	6700	Schwardt et al. (2021)	L	1
	4.2×10^{-3}	4600	Burkholder et al. (2019)	L	
	4.2×10^{-3}	4600	Burkholder et al. (2015)	L	
	4.2×10^{-3}	4900	Brockbank (2013)	L	1
	4.2×10^{-3}	4600	Warneck (2007)	L	
	2.4×10^{-2}	3200	Staudinger and Roberts (2001)	L	
	3.6×10^{-3}		Mackay and Shiu (1981)	L	
	4.5×10^{-3}	11000	Schwardt et al. (2021)	M	672
	4.8×10^{-3}	4800	Hiatt (2013)	M	
	4.3×10^{-3}	4100	Kondoh and Nakajima (1997)	M	
	4.0×10^{-3}	4400	Wright et al. (1992)	M	673
	4.5×10^{-3}	4600	Tse et al. (1992)	M	
	2.1×10^{-3}		Sato and Nakajima (1979b)	M	14
	4.0×10^{-3}		Mackay et al. (2006b)	V	
	4.2×10^{-3}	5000	Fogg and Sangster (2003)	V	
	4.1×10^{-3}		Mackay et al. (1993)	V	
	3.7×10^{-3}		Dilling (1977)	V	
	4.1×10^{-3}		Yaws (2003)	X	237
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	184
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.9×10^{-3}		Hilal et al. (2008)	Q	
	6.0×10^{-3}		Modarresi et al. (2007)	Q	67



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		4100	Kühne et al. (2005)	Q	
	3.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	4.5×10^{-3}		English and Carroll (2001)	Q	230, 231
	1.2×10^{-3}		Katritzky et al. (1998)	Q	
	5.4×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	3.9×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4600	Kühne et al. (2005)	?	
	4.1×10^{-3}		Yaws (1999)	?	21
	2.2×10^{-3}		Abraham and Weathersby (1994)	?	21
	3.5×10^{-3}		Abraham et al. (1990)	?	
1,1,2,2-tetrachloroethane CHCl ₂ CHCl ₂ [79-34-5] QPFBZIOSGYJDE-UHFFFAOYSA-N	2.3×10^{-2}	3700	Schwardt et al. (2021)	L	1
	2.3×10^{-2}	4800	Burkholder et al. (2019)	L	
	2.3×10^{-2}	4800	Burkholder et al. (2015)	L	
	2.4×10^{-2}	5000	Brockbank (2013)	L	1
	2.4×10^{-2}	4800	Warneck (2007)	L	
	2.4×10^{-2}	3200	Staudinger and Roberts (1996)	L	
	2.1×10^{-2}		Mackay and Shiu (1981)	L	
	3.3×10^{-2}	7200	Hiatt (2013)	M	
	3.0×10^{-2}		Hovorka and Dohnal (1997)	M	12
	2.3×10^{-2}	6800	Kondoh and Nakajima (1997)	M	674
	2.9×10^{-2}		Li and Carr (1993)	M	
	2.2×10^{-2}	3100	Wright et al. (1992)	M	675
	2.6×10^{-2}	4800	Tse et al. (1992)	M	
	2.2×10^{-2}	2900	Ashworth et al. (1988)	M	42, 278
	2.7×10^{-2}	3500	Leighton and Calo (1981)	M	
	1.4×10^{-2}		Sato and Nakajima (1979b)	M	14
	2.1×10^{-2}		Mackay et al. (2006b)	V	
	2.2×10^{-2}		Mackay et al. (1993)	V	
	2.1×10^{-2}		Dilling (1977)	V	
	2.2×10^{-2}		Hine and Mookerjee (1975)	V	
	2.8×10^{-2}		Yaws (2003)	X	237
	1.8×10^{-2}	4200	Barr and Newsham (1987)	X	298
	2.3×10^{-2}	3000	Goldstein (1982)	X	298
	2.5×10^{-2}		Ryan et al. (1988)	C	
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	1.5×10^{-2}		Duchowicz et al. (2020)	Q	299
	1.6×10^{-2}		Wang et al. (2017)	Q	80, 238
	2.7×10^{-2}		Wang et al. (2017)	Q	80, 239
	9.3×10^{-2}		Wang et al. (2017)	Q	80, 240
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	2.8×10^{-2}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-2}		Hilal et al. (2008)	Q	
	5.5×10^{-3}		Modarresi et al. (2007)	Q	67
		4100	Kühne et al. (2005)	Q	
	2.7×10^{-2}		Yaffe et al. (2003)	Q	248, 249



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-3}		Katritzky et al. (1998)	Q	
	6.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	3.9×10^{-2}		Mackay et al. (2006b)	?	
		4500	Kühne et al. (2005)	?	
	2.8×10^{-2}		Yaws (1999)	?	21
	1.4×10^{-2}		Abraham and Weathersby (1994)	?	21
	3.9×10^{-2}		Mackay et al. (1993)	?	
	3.0×10^{-2}		Yaws and Yang (1992)	?	21
	2.6×10^{-2}		Abraham et al. (1990)	?	
	3.0×10^{-2}		Chiou et al. (1980)	?	79
pentachloroethane CHCl ₂ CCl ₃ [76-01-7] BNIXVQGCGZULYKV-UHFFFAOYSA-N	4.1×10^{-3}	7700	Burkholder et al. (2019)	L	676
	4.2×10^{-3}	7700	Brockbank (2013)	L	1
	4.5×10^{-3}		Mackay and Shiu (1981)	L	
	5.9×10^{-3}	5400	Hiatt (2013)	M	
	5.1×10^{-3}		Duchowicz et al. (2020)	V	186
	5.2×10^{-3}		HSDB (2015)	V	
	4.1×10^{-3}		Mackay et al. (2006b)	V	
	4.0×10^{-3}		Mackay et al. (1993)	V	
	5.3×10^{-3}		Meylan and Howard (1991)	V	
	4.0×10^{-3}		Dilling (1977)	V	
	4.0×10^{-3}		Hine and Mookerjee (1975)	V	
	6.2×10^{-3}		Duchowicz et al. (2020)	Q	
	4.0×10^{-3}		Li et al. (2014)	Q	241
	2.0×10^{-2}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	6.1×10^{-3}		Hilal et al. (2008)	Q	
	3.6×10^{-3}		Modarresi et al. (2007)	Q	67
	4.0×10^{-4}		Katritzky et al. (1998)	Q	
	1.9×10^{-2}		Meylan and Howard (1991)	Q	
	1.0×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	5.1×10^{-3}		Yaws (1999)	?	21
	5.4×10^{-3}		Yaws and Yang (1992)	?	21
	4.2×10^{-3}		Abraham et al. (1990)	?	
hexachloroethane C ₂ Cl ₆ [67-72-1] VHHHONWQHHLTI-UHFFFAOYSA-N	2.7×10^{-3}	5700	Burkholder et al. (2019)	L	
	2.6×10^{-3}	5600	Burkholder et al. (2015)	L	
	2.8×10^{-3}	6100	Brockbank (2013)	L	1
	2.5×10^{-3}	5600	Staudinger and Roberts (1996)	L	
	1.2×10^{-3}	2600	Ashworth et al. (1988)	M	33, 278
	2.5×10^{-3}	5600	Munz and Roberts (1987)	M	
	3.4×10^{-3}		Munz and Roberts (1986)	M	
	1.0×10^{-3}		Warner et al. (1980)	M	
	4.2×10^{-3}		Mackay et al. (2006b)	V	
	3.6×10^{-3}		Lide and Frederikse (1995)	V	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-2}		Hwang et al. (1992)	V	
	2.2×10^{-4}		Ballschmiter and Wittlinger (1991)	V	
	7.7×10^{-4}		Mackay and Shiu (1981)	V	
	8.1×10^{-3}		Dilling (1977)	V	
	4.3×10^{-3}		Hine and Mookerjee (1975)	V	
	3.9×10^{-4}		Yaws (2003)	X	237
	1.0×10^{-3}	2100	Goldstein (1982)	X	298
	9.8×10^{-4}		Ryan et al. (1988)	C	
	1.0×10^{-3}		Shen (1982)	C	
	7.3×10^{-4}		Keshavarz et al. (2022)	Q	
	2.5×10^{-3}		Duchowicz et al. (2020)	Q	
	2.4×10^{-3}		Zhang et al. (2010)	Q	287, 288
	1.8×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.9×10^{-3}		Zhang et al. (2010)	Q	287, 290
	3.9×10^{-3}		Zhang et al. (2010)	Q	287, 291
	3.7×10^{-4}		Gharagheizi et al. (2010)	Q	246
	3.9×10^{-3}		Hilal et al. (2008)	Q	
	9.3×10^{-4}		Modarresi et al. (2007)	Q	67
	8.0×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	2.4×10^{-4}		Yao et al. (2002)	Q	229
	1.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.5×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	1.2×10^{-3}		Mackay et al. (2006b)	?	
	3.9×10^{-4}		Yaws (1999)	?	21
	1.2×10^{-3}		Mackay et al. (1993)	?	
	4.4×10^{-4}		Yaws and Yang (1992)	?	21
1-chloropropane C_3H_7Cl [540-54-5] SNMVRZFUUCLYTO-UHFFFAOYSA-N	7.6×10^{-4}	4500	Brockbank (2013)	L	1
	6.9×10^{-4}		Li et al. (1993)	M	
	4.3×10^{-4}		Sato and Nakajima (1979b)	M	14
	7.7×10^{-4}	4400	Rex (1906)	M	
	7.5×10^{-4}		Duchowicz et al. (2020)	V	186
	7.6×10^{-4}		HSDB (2015)	V	
	6.9×10^{-4}		Mackay et al. (2006b)	V	
	7.1×10^{-4}		Mackay et al. (1993)	V	
	7.1×10^{-4}		Abraham (1984)	V	
	7.3×10^{-4}		Hine and Mookerjee (1975)	V	
	9.2×10^{-4}		Yaws (2003)	X	237, 12
	1.3×10^{-3}		Duchowicz et al. (2020)	Q	
	7.3×10^{-4}		Li et al. (2014)	Q	241
	4.3×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	6.8×10^{-4}		Gharagheizi et al. (2010)	Q	246
	1.1×10^{-3}		Hilal et al. (2008)	Q	
	1.0×10^{-3}		Modarresi et al. (2007)	Q	67
		3300	Kühne et al. (2005)	Q	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.8×10^{-4}		Yaffe et al. (2003)	Q	356
	7.3×10^{-4}		Yao et al. (2002)	Q	229
	1.2×10^{-3}		English and Carroll (2001)	Q	230, 231
	4.7×10^{-4}		Katritzky et al. (1998)	Q	
	6.2×10^{-4}		Suzuki et al. (1992)	Q	232
		3500	Nirmalakhandan and Speece (1988)	Q	
	7.5×10^{-4}		Kühne et al. (2005)	?	
	4.4×10^{-4}		Yaws (1999)	?	21, 12
	9.1×10^{-4}		Abraham and Weathersby (1994)	?	21
	7.0×10^{-4}		Yaws and Yang (1992)	?	21, 12
			Abraham et al. (1990)	?	
2-chloropropane $\text{C}_3\text{H}_7\text{Cl}$ [75-29-6] ULYZAYCEDJDHCC-UHFFFAOYSA-N	5.7×10^{-4}	4400	Brockbank (2013)	L	1
	5.4×10^{-4}		Li et al. (1993)	M	
	5.6×10^{-4}	4300	Rex (1906)	M	
	5.6×10^{-4}		Duchowicz et al. (2020)	V	186
	5.5×10^{-4}		HSDB (2015)	V	
	5.6×10^{-4}		Mackay et al. (2006b)	V	
	5.5×10^{-4}		Mackay et al. (1993)	V	
	6.1×10^{-4}		Hine and Mookerjee (1975)	V	
	6.8×10^{-4}		Yaws (2003)	X	237, 12
	5.9×10^{-4}		Duchowicz et al. (2020)	Q	
	9.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.8×10^{-4}		Gharagheizi et al. (2010)	Q	246
	6.0×10^{-4}		Hilal et al. (2008)	Q	
	8.1×10^{-4}		Modarresi et al. (2007)	Q	67
	6.1×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	6.2×10^{-4}		English and Carroll (2001)	Q	230, 260
	1.5×10^{-3}		Katritzky et al. (1998)	Q	
	9.5×10^{-4}		Russell et al. (1992)	Q	279
	4.1×10^{-4}		Suzuki et al. (1992)	Q	232
	5.1×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	5.6×10^{-4}		Yaws (1999)	?	21, 12
	6.8×10^{-4}		Yaws and Yang (1992)	?	21, 12
	6.1×10^{-4}		Abraham et al. (1990)	?	
1,1-dichloropropane $\text{C}_3\text{H}_6\text{Cl}_2$ [78-99-9] WIHMGGWNMISDNJ-UHFFFAOYSA-N	2.6×10^{-3}		Duchowicz et al. (2020)	V	186
	3.3×10^{-3}		Duchowicz et al. (2020)	V	186
	2.6×10^{-3}		HSDB (2015)	V	
	2.7×10^{-3}		Duchowicz et al. (2020)	Q	
	2.7×10^{-3}		Duchowicz et al. (2020)	Q	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-dichloropropane	3.7×10^{-3}	4100	Schwardt et al. (2021)	L	1
$\text{C}_3\text{H}_6\text{Cl}_2$	3.4×10^{-3}	4300	Burkholder et al. (2019)	L	
[78-87-5]	3.4×10^{-3}	4300	Burkholder et al. (2015)	L	
KNKRKFALVUDBJE-UHFFFAOYSA-N	3.4×10^{-3}	4000	Brockbank (2013)	L	1
	3.4×10^{-3}	4300	Staudinger and Roberts (2001)	L	
	3.4×10^{-3}	4300	Staudinger and Roberts (1996)	L	
	4.3×10^{-3}	4400	Hiatt (2013)	M	
	4.2×10^{-3}		Bobadilla et al. (2003)	M	
	3.5×10^{-3}	4300	Dewulf et al. (1999)	M	
	4.4×10^{-3}		Dohnal and Hovorka (1999)	M	12
	5.5×10^{-3}		Welke et al. (1998)	M	
	4.6×10^{-3}		Hovorka and Dohnal (1997)	M	12
	4.3×10^{-3}	3700	Kondoh and Nakajima (1997)	M	
	3.6×10^{-3}	4200	Wright et al. (1992)	M	677
	3.8×10^{-3}	3800	Tse et al. (1992)	M	
	3.0×10^{-3}	3800	Bissonette et al. (1990)	M	
	3.8×10^{-3}	4700	Ashworth et al. (1988)	M	33, 278
	4.9×10^{-3}		Albanese et al. (1987)	M	
	3.4×10^{-3}	4300	Leighton and Calo (1981)	M	
	3.5×10^{-3}		Warner et al. (1980)	M	
	2.1×10^{-3}		Sato and Nakajima (1979b)	M	14
	3.7×10^{-3}		Mackay et al. (2006b)	V	
	3.7×10^{-3}		Mackay et al. (1993)	V	
	3.6×10^{-3}		Warner et al. (1980)	V	
	3.4×10^{-3}		Hine and Mookerjee (1975)	V	
	3.5×10^{-3}		Yaws (2003)	X	237
	3.4×10^{-3}	2100	Goldstein (1982)	X	298
	3.5×10^{-3}		Horvath and Getzen (1999)	C	
	3.4×10^{-3}		Ryan et al. (1988)	C	
	3.5×10^{-3}		Shen (1982)	C	
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	1.8×10^{-3}		Duchowicz et al. (2020)	Q	184
	1.4×10^{-3}		Wang et al. (2017)	Q	80, 238
	6.2×10^{-3}		Wang et al. (2017)	Q	80, 239
	8.9×10^{-3}		Wang et al. (2017)	Q	80, 240
	4.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	4.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
	5.4×10^{-3}		Hilal et al. (2008)	Q	
	3.6×10^{-3}		Modarresi et al. (2007)	Q	67
		3700	Kühne et al. (2005)	Q	
	3.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	2.1×10^{-3}		English and Carroll (2001)	Q	230, 231
	2.8×10^{-3}		Katritzky et al. (1998)	Q	
	1.2×10^{-3}		Nirmalakhandan and Speece (1988)	Q	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.5×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	8.5×10^{-4}		MacBean (2012a)	?	
	3.5×10^{-3}	4000	Mackay et al. (2006b)	?	
			Kühne et al. (2005)	?	
	3.5×10^{-3}		Yaws (1999)	?	21
	2.2×10^{-3}		Abraham and Weathersby (1994)	?	21
	3.5×10^{-3}		Mackay et al. (1993)	?	
	3.7×10^{-3}		Yaws and Yang (1992)	?	21
	3.4×10^{-3}		Abraham et al. (1990)	?	
	4.8×10^{-3}		Mackay and Yeun (1983)	?	
	5.9×10^{-3}		Chiou et al. (1980)	?	79
1,2-dichloropropane-d6 $\text{C}_3\text{D}_6\text{Cl}_2$ [93952-08-0] KNKRKFALVUDBJE-LIDOUZCJSA-N	3.6×10^{-3}	4600	Hiatt (2013)	M	
1,3-dichloropropane $\text{C}_3\text{H}_6\text{Cl}_2$ [142-28-9] YHRUOJUYPBUZOS-UHFFFAOYSA-N	1.0×10^{-2}	3900	Burkholder et al. (2019)	L	
	1.0×10^{-2}	3900	Burkholder et al. (2015)	L	
	1.2×10^{-2}	3100	Brockbank (2013)	L	1
	1.3×10^{-2}	5300	Hiatt (2013)	M	
	1.1×10^{-2}	5000	Kondoh and Nakajima (1997)	M	
	8.5×10^{-3}		Albanese et al. (1987)	M	
	1.0×10^{-2}	3900	Leighton and Calo (1981)	M	
	9.9×10^{-3}		Hine and Mookerjee (1975)	V	
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	299
	1.8×10^{-2}		Hilal et al. (2008)	Q	
	5.8×10^{-3}		Modarresi et al. (2007)	Q	67
		3700	Kühne et al. (2005)	Q	
	5.6×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	3.0×10^{-3}		Katritzky et al. (1998)	Q	
	1.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.0×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		3900	Kühne et al. (2005)	?	
	1.0×10^{-2}		Yaws (1999)	?	21
	9.9×10^{-3}		Yaws and Yang (1992)	?	21
	9.9×10^{-3}		Abraham et al. (1990)	?	
2,2-dichloropropane $\text{C}_3\text{H}_6\text{Cl}_2$ [594-20-7] ZEOVXNVKXIPWMS-UHFFFAOYSA-N	4.4×10^{-4}	7400	Hiatt (2013)	M	
	8.1×10^{-4}	3900	Bakierowska and Trzeczynski (2003)	M	
	7.1×10^{-4}	630	Kondoh and Nakajima (1997)	M	
		3700	Kühne et al. (2005)	Q	
		3900	Kühne et al. (2005)	?	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,1-trichloropropane $\text{C}_3\text{H}_5\text{Cl}_3$ [7789-89-1] AVGQTJUPLKNPQP-UHFFFAOYSA-N	3.1×10^{-3}		Duchowicz et al. (2020)	V	186
	3.8×10^{-3}		Yaws et al. (2005)	X	446
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	1.1×10^{-3}		Hilal et al. (2008)	Q	
	3.1×10^{-3} 6.5×10^{-4}		Yaffe et al. (2003) Katritzky et al. (1998)	Q Q	248, 249
1,1,2-trichloropropane $\text{C}_3\text{H}_5\text{Cl}_3$ [598-77-6] GRSQYISVQKPCZW-UHFFFAOYSA-N	3.1×10^{-2}		Duchowicz et al. (2020)	V	186
	1.4×10^{-2}		Yaws et al. (2005)	X	446
	4.0×10^{-3}		Duchowicz et al. (2020)	Q	
	7.9×10^{-3}		Hilal et al. (2008)	Q	
	3.1×10^{-2} 2.4×10^{-3}		Yaffe et al. (2003) Katritzky et al. (1998)	Q Q	248, 249
1,2,3-trichloropropane $\text{C}_3\text{H}_5\text{Cl}_3$ [96-18-4] CFXQEHVMCRXUSD-UHFFFAOYSA-N	3.6×10^{-2}	3700	Burkholder et al. (2019)	L	
	3.6×10^{-2}	3700	Burkholder et al. (2015)	L	
	3.3×10^{-2}	1900	Brockbank (2013)	L	1
	3.6×10^{-2}	3700	Staudinger and Roberts (2001)	L	
	3.4×10^{-2}	3700	Staudinger and Roberts (1996)	L	
	4.2×10^{-2}	7200	Hiatt (2013)	M	
	2.8×10^{-2}	5300	Kondoh and Nakajima (1997)	M	
	4.4×10^{-2}	4000	Tancrède and Yanagisawa (1990)	M	
	3.3×10^{-2}		Albanese et al. (1987)	M	
	2.9×10^{-2}	3500	Leighton and Calo (1981)	M	
	2.6×10^{-2}		Mackay et al. (2006b)	V	
	2.6×10^{-2}		Mackay et al. (1993)	V	
	3.1×10^{-2}		Dilling (1977)	V	
	2.6×10^{-2}		Yaws (2003)	X	237
	2.2×10^{-2}		Yaws et al. (2005)	X	446
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	5.3×10^{-3}		Duchowicz et al. (2020)	Q	
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	245
2.2×10^{-2}		Gharagheizi et al. (2010)	Q	246	
3.9×10^{-2}		Hilal et al. (2008)	Q		
1.4×10^{-2}		Modarresi et al. (2007)	Q	67	
	4000	Kühne et al. (2005)	Q		
2.9×10^{-2}		Yaffe et al. (2003)	Q	248, 249	
3.9×10^{-3}		Katritzky et al. (1998)	Q		
2.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
	4100	Kühne et al. (2005)	?		
2.6×10^{-2}		Yaws (1999)	?	21	
2.9×10^{-2}		Yaws and Yang (1992)	?	21	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,2,2,3-pentachloropropane $\text{C}_3\text{H}_3\text{Cl}_5$ [16714-68-4] IYFMQUDCYNWFTL-UHFFFAOYSA-N	1.4×10^{-2} 7.3×10^{-2} 6.2×10^{-1} 8.6×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1-chloro-2-methylpropane $\text{C}_4\text{H}_9\text{Cl}$ [513-36-0] QTBFPMKWQKYFLR-UHFFFAOYSA-N	8.3×10^{-3} 5.0×10^{-4} 5.0×10^{-4} 3.9×10^{-4} 6.2×10^{-4} 4.9×10^{-4} 7.3×10^{-4} 8.5×10^{-4} 8.6×10^{-3} 6.3×10^{-4}		Mackay and Shiu (1981) Duchowicz et al. (2020) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Yaws and Yang (1992)	L V Q Q Q Q Q Q Q ?	186 242, 243 244 245 67 248, 249 21, 12
2-chloro-2-methylpropane $\text{C}_4\text{H}_9\text{Cl}$ (<i>tert</i> -butyl chloride) [507-20-0] NBRKLOOSMBRFMH-UHFFFAOYSA-N	1.6×10^{-4} 7.7×10^{-4} 1.2×10^{-3} 2.2×10^{-4} 1.0×10^{-3} 3.9×10^{-4} 2.5×10^{-4} 4.9×10^{-4} 1.2×10^{-3} 2.2×10^{-4} 6.5×10^{-4} 6.9×10^{-5} 3.1×10^{-4} 7.7×10^{-4} 6.4×10^{-5}	5600	Clarke et al. (1962) Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Nirmalakhandan et al. (1997) Yaws (1999) Abraham et al. (1990)	M V X Q Q Q Q Q Q Q Q Q Q ? ?	186 237, 80 271, 243 244 245 246 67 248, 249 21, 80
1-chlorobutane $\text{C}_4\text{H}_9\text{Cl}$ (butyl chloride) [109-69-3] VFWCMGCRMGJXDK-UHFFFAOYSA-N	5.6×10^{-4} 6.7×10^{-4} 5.3×10^{-4} 5.9×10^{-4} 3.3×10^{-4} 4.8×10^{-4} 4.8×10^{-4} 5.3×10^{-4} 5.1×10^{-4} 5.9×10^{-4} 4.4×10^{-4} 1.3×10^{-3} 3.1×10^{-4} 3.9×10^{-4} 6.2×10^{-4} 4.9×10^{-4} 4.5×10^{-4}	4500 3500	Brockbank (2013) Dohnal and Hovorka (1999) Li et al. (1993) Leighton and Calo (1981) Sato and Nakajima (1979b) Mackay et al. (2006b) Mackay et al. (1993) Abraham (1984) Hine and Mookerjee (1975) Yaws (2003) Keshavarz et al. (2022) Duchowicz et al. (2020) Gharagheizi et al. (2012) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010)	L M M M M V V V V X Q Q Q Q Q Q Q	1 12 14 237 242, 243 244 245 246



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.0×10^{-4}		Hilal et al. (2008)	Q	
	8.7×10^{-4}	3700	Modarresi et al. (2007)	Q	67
			Kühne et al. (2005)	Q	
	6.1×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	1.9×10^{-4}		Yao et al. (2002)	Q	229
	5.4×10^{-4}		English and Carroll (2001)	Q	230, 231
	1.4×10^{-3}		Katritzky et al. (1998)	Q	
	1.3×10^{-3}		Russell et al. (1992)	Q	279
	3.6×10^{-4}		Suzuki et al. (1992)	Q	232
	5.0×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	5.9×10^{-4}		Duchowicz et al. (2020)	?	185, 21
	6.5×10^{-4}	3700	Mackay et al. (2006b)	?	
			Kühne et al. (2005)	?	
	5.9×10^{-4}		Yaws (1999)	?	21
	3.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	6.5×10^{-4}		Mackay et al. (1993)	?	
	5.6×10^{-4}		Hoff et al. (1993)	?	21
	5.8×10^{-4}		Yaws and Yang (1992)	?	21
	5.3×10^{-4}		Abraham et al. (1990)	?	
2-chlorobutane	4.1×10^{-4}	4500	Brockbank (2013)	L	1
C_4H_9Cl	4.1×10^{-4}	4500	Leighton and Calo (1981)	M	
(<i>sec</i> -butyl chloride)	5.3×10^{-4}		Mackay et al. (2006b)	V	
[78-86-4]	5.3×10^{-4}		Mackay et al. (1993)	V	
BSPCSKHALVHRSR-UHFFFAOYSA-N	5.1×10^{-4}		Yaws (2003)	X	237
	4.4×10^{-4}		Keshavarz et al. (2022)	Q	
	5.9×10^{-4}		Duchowicz et al. (2020)	Q	299
	5.3×10^{-4}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	3.7×10^{-4}		Gharagheizi et al. (2010)	Q	246
	6.2×10^{-4}		Hilal et al. (2008)	Q	
	8.2×10^{-4}	3700	Modarresi et al. (2007)	Q	67
			Kühne et al. (2005)	Q	
	4.2×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	1.3×10^{-4}		Yao et al. (2002)	Q	229
	4.7×10^{-4}		English and Carroll (2001)	Q	230, 274
	1.9×10^{-3}		Katritzky et al. (1998)	Q	
	4.2×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	4.1×10^{-4}		Duchowicz et al. (2020)	?	185, 21
	4.4×10^{-4}	4500	Mackay et al. (2006b)	?	
			Kühne et al. (2005)	?	
	5.2×10^{-4}		Yaws (1999)	?	21
	4.4×10^{-4}		Mackay et al. (1993)	?	
	5.3×10^{-4}		Yaws and Yang (1992)	?	21
	4.0×10^{-4}		Abraham et al. (1990)	?	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1-dichlorobutane $C_4H_8Cl_2$ [541-33-3] SEQRDAAUNCRFIT-UHFFFAOYSA-N	1.3×10^{-3}		Duchowicz et al. (2020)	V	186
	1.3×10^{-3}		Hine and Mookerjee (1975)	V	
	2.7×10^{-3}		Duchowicz et al. (2020)	Q	
	2.5×10^{-3}		Hilal et al. (2008)	Q	
	9.2×10^{-4}		Modarresi et al. (2007)	Q	67
	1.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.6×10^{-3}		English and Carroll (2001)	Q	230, 260
	1.3×10^{-3}		Katritzky et al. (1998)	Q	
	9.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
1,4-dichlorobutane $C_4H_8Cl_2$ [110-56-5] KJDRSWPQXHESDQ-UHFFFAOYSA-N	2.0×10^{-2}	3600	Brockbank (2013)	L	1
	1.2×10^{-2}		Albanese et al. (1987)	M	
	2.0×10^{-2}	3100	Leighton and Calo (1981)	M	
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	299
	2.6×10^{-2}		Hilal et al. (2008)	Q	
	4.5×10^{-3}		Modarresi et al. (2007)	Q	67
		4000	Kühne et al. (2005)	Q	
	2.0×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.9×10^{-3}		English and Carroll (2001)	Q	230, 231
	3.9×10^{-3}		Katritzky et al. (1998)	Q	
	1.1×10^{-3}		Nirmalakhandan et al. (1997)	Q	
2.0×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
	3700	Kühne et al. (2005)	?		
	2.0×10^{-2}		Abraham et al. (1990)	?	
2,3-dichlorobutane $C_4H_8Cl_2$ [7581-97-7] RMISVOPUIFJTQO-UHFFFAOYSA-N	1.4×10^{-3}		Duchowicz et al. (2020)	V	186
	2.5×10^{-3}		Yaws et al. (2005)	X	446
	8.4×10^{-4}		Duchowicz et al. (2020)	Q	
	2.8×10^{-3}		Hilal et al. (2008)	Q	
	2.5×10^{-3}		Modarresi et al. (2007)	Q	67
	1.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	3.1×10^{-3}		Katritzky et al. (1998)	Q	
1-chloropentane $C_5H_{11}Cl$ [543-59-9] SQCZQTSHSZLZIQ-UHFFFAOYSA-N	4.1×10^{-4}	4000	Brockbank (2013)	L	1
	4.2×10^{-4}		Li et al. (1993)	M	
	4.1×10^{-4}	4700	Leighton and Calo (1981)	M	
	2.7×10^{-4}		Sato and Nakajima (1979b)	M	14
	4.5×10^{-4}		Mackay et al. (2006b)	V	
	4.5×10^{-4}		Mackay et al. (1993)	V	
	4.5×10^{-4}		Abraham (1984)	V	
	4.3×10^{-4}		Amoore and Buttery (1978)	V	
	4.5×10^{-4}		Hine and Mookerjee (1975)	V	
	1.9×10^{-4}		Yaws (2003)	X	237
	5.9×10^{-4}		Keshavarz et al. (2022)	Q	
	1.3×10^{-3}		Duchowicz et al. (2020)	Q	299
	2.5×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-4}		Gharagheizi et al. (2010)	Q	246
7.3×10^{-4}		Hilal et al. (2008)	Q		



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.1×10^{-4}	4000	Modarresi et al. (2007)	Q	67
	4.2×10^{-4}		Kühne et al. (2005)	Q	
	4.1×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	1.6×10^{-3}		English and Carroll (2001)	Q	230, 231
	2.8×10^{-4}		Katritzky et al. (1998)	Q	
	3.9×10^{-4}		Suzuki et al. (1992)	Q	232
	4.1×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	4.2×10^{-4}		Duchowicz et al. (2020)	?	185, 21
	4.2×10^{-4}		Mackay et al. (2006b)	?	
	1.9×10^{-4}		4400	Kühne et al. (2005)	?
	2.8×10^{-4}	Yaws (1999)	?	21	
	4.2×10^{-4}	Abraham and Weathersby (1994)	?	21	
	4.2×10^{-4}	Mackay et al. (1993)	?		
	2.0×10^{-4}	Yaws and Yang (1992)	?	21	
	4.5×10^{-4}	Abraham et al. (1990)	?		
2-chloropentane $C_5H_{11}Cl$ [625-29-6] NFRKUDYZEVQXTE-UHFFFAOYSA-N	6.7×10^{-4}		Duchowicz et al. (2020)	V	186
	3.6×10^{-4}		Hine and Mookerjee (1975)	V	
	5.8×10^{-4}		Duchowicz et al. (2020)	Q	
	4.8×10^{-4}		Hilal et al. (2008)	Q	
	6.0×10^{-4}		Modarresi et al. (2007)	Q	67
	6.7×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	3.6×10^{-4}		English and Carroll (2001)	Q	230, 274
	2.2×10^{-3}		Katritzky et al. (1998)	Q	
	2.5×10^{-4}		Suzuki et al. (1992)	Q	232
	3.3×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	3.6×10^{-4}		Abraham et al. (1990)	?	
3-chloropentane $C_5H_{11}Cl$ [616-20-6] CXQSCYIVCSCSES-UHFFFAOYSA-N	3.8×10^{-4}		Duchowicz et al. (2020)	V	186
	3.8×10^{-4}		Meylan and Howard (1991)	V	
	3.8×10^{-4}		Hine and Mookerjee (1975)	V	
	5.8×10^{-4}		Duchowicz et al. (2020)	Q	
	4.7×10^{-4}		Hilal et al. (2008)	Q	
	5.9×10^{-4}		Modarresi et al. (2007)	Q	67
	4.5×10^{-4}		English and Carroll (2001)	Q	230, 260
	2.5×10^{-4}		Suzuki et al. (1992)	Q	232
	3.9×10^{-4}		Meylan and Howard (1991)	Q	
	3.4×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	3.8×10^{-4}		Abraham et al. (1990)	?	
1,2-dichloropentane $C_5H_{10}Cl_2$ [1674-33-5] PPLBPUKRNCHGG-UHFFFAOYSA-N	4.8×10^{-3}		Yaws et al. (2005)	X	446
	3.1×10^{-3}		Hilal et al. (2008)	Q	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,5-dichloropentane $C_5H_{10}Cl_2$ [628-76-2] LBKDGROORAKTLC-UHFFFAOYSA-N	1.0×10^{-2} 1.8×10^{-2} 2.9×10^{-2} 3.6×10^{-3} 2.0×10^{-2} 3.8×10^{-3}	4000 1600	Brockbank (2013) Leighton and Calo (1981)	L M	1
			Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005)	Q Q Q Q Q	184 67
	1.8×10^{-2} 4.2×10^{-3} 1.8×10^{-2}	4400	Yaffe et al. (2003) Katritzky et al. (1998) Duchowicz et al. (2020) Kühne et al. (2005)	Q Q ? ?	248, 249 185, 21
2,3-dichloropentane $C_5H_{10}Cl_2$ [600-11-3] HVFJQRZGGBKPL-UHFFFAOYSA-N	2.9×10^{-3} 2.8×10^{-3}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
2-chloro-2-methylbutane $C_5H_{11}Cl$ [594-36-5] CRNIHJHMEQZAAS-UHFFFAOYSA-N	3.1×10^{-3} 3.0×10^{-3}		Yaws (1999) Yaws and Yang (1992)	? ?	21 21
1-chlorohexane $C_6H_{13}Cl$ [544-10-5] MLRVZFYXUZQSRU-UHFFFAOYSA-N	3.1×10^{-4} 4.1×10^{-4} 8.0×10^{-4} 1.3×10^{-3} 6.1×10^{-4} 6.1×10^{-4}	4500	Li et al. (1993) Leighton and Calo (1981) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005)	M M Q Q Q Q Q	299 67
	3.5×10^{-4} 3.1×10^{-4} 1.7×10^{-3} 3.1×10^{-4} 4.1×10^{-4} 4.0×10^{-4}	4300	Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Duchowicz et al. (2020) Kühne et al. (2005) Abraham et al. (1990)	Q Q Q Q ? ? ?	248, 249 230, 231 185, 21
2-chlorohexane $C_6H_{13}Cl$ [638-28-8] GLCIPJOIEVLTTPR-UHFFFAOYSA-N	5.0×10^{-4} 4.2×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
3-chlorohexane $C_6H_{13}Cl$ [2346-81-8] BXSMMAVTEURRGG-UHFFFAOYSA-N	5.0×10^{-4} 5.0×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloroheptane $C_7H_{15}Cl$ [629-06-1] DZMDPHNGKBEVRE-UHFFFAOYSA-N	2.5×10^{-4} 5.1×10^{-4} 5.1×10^{-4} 2.3×10^{-4} 2.4×10^{-4} 2.5×10^{-4}		Abraham (1984) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Nirmalakhandan et al. (1997) Abraham et al. (1990)	V Q Q Q Q ?	 67 230, 231
2-chloroheptane $C_7H_{15}Cl$ [1001-89-4] PTSLUOSUHFGQHV-UHFFFAOYSA-N	3.9×10^{-4} 3.4×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
3-chloroheptane $C_7H_{15}Cl$ [999-52-0] DMKNOEJJJSHSML-UHFFFAOYSA-N	3.6×10^{-4} 3.4×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
4-chloroheptane $C_7H_{15}Cl$ [998-95-8] MGSGWAXIEMEWCQ-UHFFFAOYSA-N	3.6×10^{-4} 3.5×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
1-chlorooctane $C_8H_{17}Cl$ [111-85-3] CNDHHGUSRIZDSL-UHFFFAOYSA-N	2.6×10^{-4} 1.9×10^{-4} 2.6×10^{-4} 1.3×10^{-3} 1.6×10^{-4} 4.2×10^{-4} 2.6×10^{-4} 1.8×10^{-3}	6100	Duchowicz et al. (2020) Sarraute et al. (2004) Yaws et al. (2005) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008) Yaffe et al. (2003) Katritzky et al. (1998)	V V X Q Q Q Q Q	186 446 99 248, 249
2-chlorooctane $C_8H_{17}Cl$ [628-61-5] HKDCIIMOALDWHF-UHFFFAOYSA-N	2.7×10^{-4} 3.1×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
3-(chloromethyl)-heptane $C_8H_{17}Cl$ [123-04-6] WLVCBAMXYMWGLJ-UHFFFAOYSA-N	4.5×10^{-4} 4.9×10^{-4}		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	67
1,8-dichlorooctane $C_8H_{16}Cl_2$ [2162-99-4] WXYMNDVFLNUAIA-UHFFFAOYSA-N	7.1×10^{-3}	7100	Sarraute et al. (2006)	M	678
1-chlorononane $C_9H_{19}Cl$ [2473-01-0] RKAMCQVGHFRILV-UHFFFAOYSA-N	1.6×10^{-4} 3.5×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-chlorononane $C_9H_{19}Cl$ [2216-36-6] DTWJISBCMBWFNY-UHFFFAOYSA-N	2.7×10^{-4} 3.0×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
5-chlorononane $C_9H_{19}Cl$ [28123-70-8] GHLD SOWZIOPMTC-UHFFFAOYSA-N	2.2×10^{-4} 2.6×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
1-chlorodecane $C_{10}H_{21}Cl$ [1002-69-3] ZTEHOZMYMCEYRM-UHFFFAOYSA-N	1.6×10^{-4} 2.5×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
1,10-dichlorodecane $C_{10}H_{20}Cl_2$ [2162-98-3] RBBNTRDPSVZESY-UHFFFAOYSA-N	2.0×10^{-3} 5.3×10^{-3}		Drouillard et al. (1998) Hilal et al. (2008)	V Q	
1,2,9,10-tetrachlorodecane $C_{10}H_{18}Cl_4$ [205646-11-3] VXBNHNYIEBLRXAW-UHFFFAOYSA-N	5.6×10^{-2} 6.2×10^{-2} 3.9×10^{-2} 6.2×10^{-4} 1.4×10^{-2}		Drouillard et al. (1998) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008)	M Q Q Q Q	242, 243 244 245
pentachlorodecane isomers $C_{10}H_{17}Cl_5$ [175801-37-3] AMKBEJYNNQNKGD-UHFFFAOYSA-N	2.0×10^{-1} 3.8×10^{-1}		Drouillard et al. (1998) Drouillard et al. (1998)	M M	
1-chloroundecane $C_{11}H_{23}Cl$ [2473-03-2] ZHKKNUKCXPWZOP-UHFFFAOYSA-N	1.7×10^{-4} 2.3×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
1,2,10,11-tetrachloroundecane $C_{11}H_{20}Cl_4$ [210049-49-3] VVAAXDBMZVCVPA-UHFFFAOYSA-N	1.6×10^{-1} 4.9×10^{-2} 3.1×10^{-2} 4.9×10^{-4} 1.1×10^{-2}		Drouillard et al. (1998) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008)	M Q Q Q Q	242, 243 244 245
pentachloroundecane isomers $C_{11}H_{19}Cl_5$ [210175-48-7] BBCUCNDIXLWBNQ-UHFFFAOYSA-N	6.8×10^{-1} 1.5		Drouillard et al. (1998) Drouillard et al. (1998)	M M	
1-chlorododecane $C_{12}H_{25}Cl$ [112-52-7] YAYNEUUHHLGGAH-UHFFFAOYSA-N	2.3×10^{-4} 1.9×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,12-dichlorododecane $C_{12}H_{24}Cl_2$ [3922-28-9] RNXFPZVYZVHJVHM-UHFFFAOYSA-N	1.5×10^{-3} 3.1×10^{-3}		Drouillard et al. (1998) Hilal et al. (2008)	V Q	
1-chlorotridecane $C_{13}H_{27}Cl$ [822-13-9] ASZMYJSJEOGSBR-UHFFFAOYSA-N	2.9×10^{-4} 1.4×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
1-chlorotetradecane $C_{14}H_{29}Cl$ [2425-54-9] RNHWYOLIEJIAMV-UHFFFAOYSA-N	3.9×10^{-4} 1.2×10^{-4}		Yaws et al. (2005) Hilal et al. (2008)	X Q	446
tetrachlorocyclopentane $C_5H_6Cl_4$ [59808-78-5] ZFMWDTNZPKDVBU-UHFFFAOYSA-N	6.4×10^{-3} 4.1×10^{-1} 1.5 2.9×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1,2,3,3,4-hexachlorocyclopentane $C_5H_4Cl_6$ [68258-91-3] RPUFWOAXMFGSDJ-UHFFFAOYSA-N	5.1×10^{-2} 1.9×10^{-1} 1.6 2.2×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1,2,3,3,4,5-heptachlorocyclopentane $C_5H_3Cl_7$ [68258-90-2] XCEUTYGYMGYCBG-UHFFFAOYSA-N	1.5×10^{-1} 7.9×10^{-1} 1.6 8.6×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,2,3,3,4,5-hexachlorocyclopentene $C_5H_2Cl_6$ OSRFTCIVMWPVNP-UHFFFAOYSA-N	1.4×10^{-2} 4.4×10^{-2} 4.4×10^{-1} 6.4×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
heptachlorocyclopentene C_5HCl_7 [62111-47-1] AJUXFTIOMRYFRL-UHFFFAOYSA-N	3.9×10^{-2} 3.5×10^{-2} 8.4×10^{-2} 5.4×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
chlorocyclohexane $C_6H_{11}Cl$ [542-18-7] UNFUWYWDGSDHCW-UHFFFAOYSA-N	2.8×10^{-3} 3.2×10^{-3}	3300 4200 3200	Bakierowska and Trzeszczyński (2003) Hilal et al. (2008) Kühne et al. (2005) Kühne et al. (2005)	M Q Q ?	



Table A6.1: Chlorocarbons (C, H, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
α -1,2,3,4,5,6-hexachlorocyclohexane $\text{C}_6\text{H}_6\text{Cl}_6$ (α -lindane; α -HCH) [319-84-6] JLYXXMFPNIAWKQ-SHFUYGGZSA-N	1.5		Xiao et al. (2004)	L	366
	1.4		Xiao et al. (2004)	L	367
	3.0	5500	Cetin et al. (2006)	M	
	1.7	7500	Sahsuvar et al. (2003)	M	
	8.1×10^{-1}		Altschuh et al. (1999)	M	
	1.3	6500	Kucklick et al. (1991)	M	
	4.2×10^{-1}		Atlas et al. (1982)	M	679
	1.1		Mackay et al. (2006d)	V	
	9.1×10^{-1}		Ballschmiter and Wittlinger (1991)	V	
	2.3		Calamari et al. (1991)	V	12
	1.1		Suntio et al. (1988)	V	12
	5.9×10^{-3}	3900	Paasivirta et al. (1999)	T	
	1.8		Suntio et al. (1988)	C	680
	3.9×10^{-2}		Zhang et al. (2010)	Q	287, 288
	7.7		Zhang et al. (2010)	Q	287, 289
	4.0×10^1		Zhang et al. (2010)	Q	287, 290
	3.8×10^{-1}		Zhang et al. (2010)	Q	287, 291
	1.1		Modarresi et al. (2007)	Q	67
		7100	Kühne et al. (2005)	Q	
		7100	Kühne et al. (2005)	?	
β -1,2,3,4,5,6-hexachlorocyclohexane $\text{C}_6\text{H}_6\text{Cl}_6$ (β -lindane; β -HCH) [319-85-7] JLYXXMFPNIAWKQ-CDRYSYESSA-N	2.7×10^1		Xiao et al. (2004)	L	366
	2.7×10^1		Xiao et al. (2004)	L	367
	2.8×10^1	7800	Sahsuvar et al. (2003)	M	
	2.2×10^1		Altschuh et al. (1999)	M	
	8.6		Mackay et al. (2006d)	V	
	1.4×10^1		Ballschmiter and Wittlinger (1991)	V	
	8.3		Suntio et al. (1988)	V	12
	5.6×10^1		Suntio et al. (1988)	C	681
	6.7×10^{-1}		Ryan et al. (1988)	C	
	5.8		Keshavarz et al. (2022)	Q	
	3.0×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.1		Modarresi et al. (2007)	Q	67
		7100	Kühne et al. (2005)	Q	
	2.2×10^1		Duchowicz et al. (2020)	?	185, 21
		7800	Kühne et al. (2005)	?	
γ -1,2,3,4,5,6-hexachlorocyclohexane $\text{C}_6\text{H}_6\text{Cl}_6$ (γ -lindane; lindane; γ -HCH) [58-89-9] JLYXXMFPNIAWKQ-GNIYUCBRSA-N	3.7		Xiao et al. (2004)	L	366
	3.3		Xiao et al. (2004)	L	367
	3.1		Mackay and Shiu (1981)	L	
	3.1		Chao et al. (2017)	M	
	3.9	3300	Cetin et al. (2006)	M	
	6.0	6200	Xie et al. (2004)	M	
	4.3	7500	Sahsuvar et al. (2003)	M	
	1.9		Altschuh et al. (1999)	M	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.8	5500	Kucklick et al. (1991)	M	
	4.9		Fendinger et al. (1989)	M	72
	5.0		Fendinger and Glotfelty (1988)	M	72
	6.7		Mackay et al. (2006d)	V	
	3.3		Siebers et al. (1994)	V	
	1.0×10^1		Ballschmiter and Wittlinger (1991)	V	
	5.9		Calamari et al. (1991)	V	12
	3.7		McLachlan et al. (1990)	V	373
	7.7		Suntio et al. (1988)	V	12
	6.7×10^{-1}		Caron et al. (1985)	V	
	7.9		Burkhard and Guth (1981)	V	
	3.1		Chiou et al. (1980)	V	
	2.0×10^1		Mackay and Leinonen (1975)	V	
	6.2×10^{-2}	7100	Paasivirta et al. (1999)	T	
	3.1×10^1		McCarty (1980)	X	368
	2.0×10^1		Suntio et al. (1988)	C	12
	5.0		Suntio et al. (1988)	C	681
	1.4		Suntio et al. (1988)	C	
	5.8		Keshavarz et al. (2022)	Q	
	3.0×10^{-2}		Duchowicz et al. (2020)	Q	
	3.9×10^{-2}		Zhang et al. (2010)	Q	287, 288
	7.7		Zhang et al. (2010)	Q	287, 289
	4.7×10^1		Zhang et al. (2010)	Q	287, 290
	3.8×10^{-1}		Zhang et al. (2010)	Q	287, 291
	5.3		Hilal et al. (2008)	Q	
	1.1		Modarresi et al. (2007)	Q	67
		7100	Kühne et al. (2005)	Q	
	1.9		Duchowicz et al. (2020)	?	185, 21
		6200	Kühne et al. (2005)	?	
	2.2×10^1		Brimblecombe (1986)	?	80
δ -1,2,3,4,5,6-hexachlorocyclohexane $C_6H_6Cl_6$ (δ -lindane; δ -HCH) [319-86-8] JLYXXMFPNIAWKQ-GPIVXLJGSA-N	2.3×10^1		Duchowicz et al. (2020)	V	186
	2.3×10^1		HSDB (2015)	V	
	1.4×10^1		Mackay et al. (2006d)	V	
	1.4×10^1		Suntio et al. (1988)	V	12
	5.6×10^1		Suntio et al. (1988)	C	681
	3.0×10^{-2}		Duchowicz et al. (2020)	Q	
	1.1		Modarresi et al. (2007)	Q	67
4,5,6,7,8,8-hexachloro-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene $C_{10}H_6Cl_6$ [3734-48-3] XCJXQCUIXDUNDN-UHFFFAOYSA-N	2.0×10^{-2}		HSDB (2015)	Q	99
	2.0×10^{-2}		Zhang et al. (2010)	Q	287, 288
	6.2×10^{-3}		Zhang et al. (2010)	Q	287, 289
	2.2		Zhang et al. (2010)	Q	287, 290
	4.2×10^{-1}		Zhang et al. (2010)	Q	287, 291



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.0×10^{-4}		Wang et al. (2017)	Q	80, 238
	2.4×10^{-4}		Wang et al. (2017)	Q	80, 239
	6.3×10^{-4}		Wang et al. (2017)	Q	80, 240
	3.4×10^{-3}		Li et al. (2014)	Q	241
	4.9×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	2.6×10^{-4}		Gharagheizi et al. (2010)	Q	246
	2.1×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-3}		Modarresi et al. (2007)	Q	67
	4.2×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	1.4×10^{-3}		Yao et al. (2002)	Q	229
	2.4×10^{-3}		Suzuki et al. (1992)	Q	232
	2.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	8.1×10^{-4}		Irmann (1965)	Q	
	3.7×10^{-4}		Mackay et al. (2006b)	?	
	4.4×10^{-4}		Yaws (1999)	?	21
	3.9×10^{-4}	2700	Yaws et al. (1999)	?	21
	3.7×10^{-4}		Mackay et al. (1993)	?	
	4.4×10^{-4}		Yaws and Yang (1992)	?	21
	4.5×10^{-4}		Abraham et al. (1990)	?	
chloroethene-d3 CD ₂ CDCl (vinyl chloride-d3) [6745-35-3] BZHJMEXRYGGRV-FUDHJZNSA-N	3.8×10^{-4}	3100	Hiatt (2013)	M	
1,1-dichloroethene CH ₂ CCl ₂ [75-35-4] LGXVIGDEPROXKC-UHFFFAOYSA-N	3.7×10^{-4}	3500	Schwardt et al. (2021)	L	1
	3.7×10^{-4}	3400	Burkholder et al. (2019)	L	
	3.7×10^{-4}	3400	Burkholder et al. (2015)	L	
	3.1×10^{-4}	3900	Brockbank (2013)	L	1, 684
	3.7×10^{-4}	3400	Warneck (2007)	L	
	4.0×10^{-4}	3800	Fogg and Sangster (2003)	L	
	3.4×10^{-4}	4000	Staudinger and Roberts (2001)	L	
	3.4×10^{-4}	3900	Staudinger and Roberts (1996)	L	
	4.0×10^{-4}	3400	Schwardt et al. (2021)	M	685
	4.1×10^{-4}	4600	Hiatt (2013)	M	
	3.7×10^{-4}	4200	Dewulf et al. (1999)	M	
	4.4×10^{-4}		Chiang et al. (1998)	M	12
	4.6×10^{-4}	1600	Kondoh and Nakajima (1997)	M	
	3.5×10^{-4}	3300	Tse et al. (1992)	M	
	3.4×10^{-4}	4500	Bissonette et al. (1990)	M	
	3.7×10^{-4}	2900	Ashworth et al. (1988)	M	278, 686
	3.8×10^{-4}	3700	Gossett (1987)	M	
	1.3×10^{-4}		Yurteri et al. (1987)	M	12
	2.6×10^{-4}	4600	Leighton and Calo (1981)	M	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-4}	6600	Ervin et al. (1980)	M	
	6.6×10^{-4}		Warner et al. (1980)	M	
	6.6×10^{-5}		Pearson and McConnell (1975)	M	649, 12
	4.3×10^{-4}		Mackay et al. (2006b)	V	
	3.3×10^{-4}		Lide and Frederikse (1995)	V	
	4.3×10^{-4}		Mackay et al. (1993)	V	
	7.5×10^{-5}		Mackay and Shiu (1981)	V	
	6.5×10^{-4}		Warner et al. (1980)	V	
	5.2×10^{-5}		Dilling (1977)	V	651
	6.1×10^{-5}		Dilling (1977)	V	12
	4.3×10^{-4}		Yaws (2003)	X	237
	6.4×10^{-4}	1200	Goldstein (1982)	X	298
	2.2×10^{-3}		Ryan et al. (1988)	C	
	6.6×10^{-4}		Shen (1982)	C	
	1.0×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.3×10^{-4}		Wang et al. (2017)	Q	80, 239
	4.5×10^{-4}		Wang et al. (2017)	Q	80, 240
	1.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.8×10^{-4}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-4}		Hilal et al. (2008)	Q	
	8.9×10^{-4}		Modarresi et al. (2007)	Q	67
		3300	Kühne et al. (2005)	Q	
	3.8×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	2.6×10^{-3}		Yao et al. (2002)	Q	229, 267
	2.7×10^{-4}		Katritzky et al. (1998)	Q	
	3.8×10^{-4}		Mackay et al. (2006b)	?	
		3700	Kühne et al. (2005)	?	
	4.3×10^{-4}		Yaws (1999)	?	21
	3.8×10^{-4}		Mackay et al. (1993)	?	
	4.3×10^{-4}		Yaws and Yang (1992)	?	21
	2.7×10^{-4}		Abraham et al. (1990)	?	
1,2-dichloroethene $\text{C}_2\text{H}_2\text{Cl}_2$ [540-59-0] KFUSEUYWQURPO-UHFFFAOYSA-N	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	5.1×10^{-3}		Duchowicz et al. (2020)	Q	299
	3.7×10^{-4}		Hilal et al. (2008)	Q	
	2.3×10^{-3}		Modarresi et al. (2007)	Q	67
	1.4×10^{-3}		Yaffe et al. (2003)	Q	248, 272
	6.2×10^{-4}		Katritzky et al. (1998)	Q	
	4.5×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.4×10^{-3}		Duchowicz et al. (2020)	?	185, 21



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(Z)-1,2-dichloroethene CHClCHCl	2.3×10^{-3}	3400	Schwardt et al. (2021)	L	1
(cis-1,2-dichloroethene) [156-59-2] KFUSEUYWQURPO-UPHRSURJSA-N	2.6×10^{-3}	3700	Burkholder et al. (2019)	L	
	2.6×10^{-3}	3700	Burkholder et al. (2015)	L	
	2.4×10^{-3}	4000	Brockbank (2013)	L	1
	2.6×10^{-3}	3700	Warneck (2007)	L	
	2.5×10^{-3}	4000	Fogg and Sangster (2003)	L	
	2.3×10^{-3}	3900	Staudinger and Roberts (2001)	L	
	2.3×10^{-3}	3900	Staudinger and Roberts (1996)	L	
	2.7×10^{-3}	3800	Hiatt (2013)	M	
	2.5×10^{-3}	3900	Chen et al. (2012)	M	
	2.2×10^{-3}	3100	Shimotori and Arnold (2003)	M	
	1.5×10^{-3}		Ryu and Park (1999)	M	
	3.2×10^{-3}		Hovorka and Dohnal (1997)	M	12
	2.5×10^{-3}	3000	Kondoh and Nakajima (1997)	M	
	1.3×10^{-3}	3100	Park et al. (1997)	M	
	2.4×10^{-3}	4000	Wright et al. (1992)	M	687
	2.5×10^{-3}	3800	Tse et al. (1992)	M	
	2.5×10^{-3}	4200	Bissonette et al. (1990)	M	
	2.1×10^{-3}	3200	Ashworth et al. (1988)	M	278
	2.6×10^{-3}	4200	Gossett (1987)	M	
	2.2×10^{-3}		Yurteri et al. (1987)	M	12
	2.2×10^{-3}	4100	Ervin et al. (1980)	M	
	1.1×10^{-3}		Sato and Nakajima (1979b)	M	14
	1.3×10^{-3}		Mackay et al. (2006b)	V	
	1.3×10^{-3}		Park et al. (1997)	V	
	1.3×10^{-3}		Mackay et al. (1993)	V	
	1.3×10^{-3}		Mackay and Shiu (1981)	V	
	1.3×10^{-3}		Dilling (1977)	V	
	2.9×10^{-3}		Hine and Mookerjee (1975)	V	
	1.3×10^{-3}		Yaws (2003)	X	237
	1.8×10^{-3}		Wang et al. (2017)	Q	314, 80, 238
	4.9×10^{-4}		Wang et al. (2017)	Q	314, 80, 239
	1.1×10^{-3}		Wang et al. (2017)	Q	314, 80, 240
	3.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.3×10^{-3}		Modarresi et al. (2007)	Q	67
		3300	Kühne et al. (2005)	Q	
	1.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	5.2×10^{-3}		Yao et al. (2002)	Q	229
	2.7×10^{-3}		English and Carroll (2001)	Q	230, 231
	2.2×10^{-3}		Mackay et al. (2006b)	?	
		4200	Kühne et al. (2005)	?	
	1.3×10^{-3}		Yaws (1999)	?	21
	1.2×10^{-3}		Abraham and Weathersby (1994)	?	21



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-3}		Mackay et al. (1993)	?	
	1.3×10^{-3}		Yaws and Yang (1992)	?	21
	1.3×10^{-3}		Abraham et al. (1990)	?	
<i>(E)</i> -1,2-dichloroethene CHClCHCl	9.9×10^{-4}	3600	Schwardt et al. (2021)	L	1
<i>(trans)</i> -1,2-dichloroethene [156-60-5] KFUSEUYWQRPO-OWOJBTEDSA-N	1.0×10^{-3}	3600	Burkholder et al. (2019)	L	
	1.0×10^{-3}	3600	Burkholder et al. (2015)	L	
	1.0×10^{-3}	3900	Brockbank (2013)	L	1
	1.0×10^{-3}	3500	Warneck (2007)	L	
	1.1×10^{-3}	4200	Fogg and Sangster (2003)	L	
	9.0×10^{-4}	4100	Staudinger and Roberts (2001)	L	
	9.0×10^{-4}	4100	Staudinger and Roberts (1996)	L	
	9.2×10^{-4}	2600	Schwardt et al. (2021)	M	688, 11
	1.0×10^{-3}	4000	Hiatt (2013)	M	
	1.0×10^{-3}	3500	Shimotori and Arnold (2003)	M	
	1.6×10^{-3}		Ryu and Park (1999)	M	
	1.3×10^{-3}		Hovorka and Dohnal (1997)	M	12
	1.1×10^{-3}	2200	Kondoh and Nakajima (1997)	M	
	1.8×10^{-3}	6200	Park et al. (1997)	M	
	9.3×10^{-4}	4900	Khalfaoui and Newsham (1994b)	M	689
	9.8×10^{-4}	3400	Hansen et al. (1993)	M	281
	1.0×10^{-3}	4200	Wright et al. (1992)	M	690
	1.0×10^{-3}	3700	Tse et al. (1992)	M	
	9.7×10^{-4}	5000	Cooling et al. (1992)	M	691
	8.4×10^{-4}	4800	Bissonette et al. (1990)	M	
	9.9×10^{-4}	3000	Ashworth et al. (1988)	M	278, 686
	1.1×10^{-3}	4200	Gossett (1987)	M	
	1.1×10^{-3}		Yurteri et al. (1987)	M	12
	7.0×10^{-4}	5400	Ervin et al. (1980)	M	
	1.9×10^{-3}		Warner et al. (1980)	M	
	8.1×10^{-4}		Sato and Nakajima (1979b)	M	14
	1.5×10^{-3}		Mackay et al. (2006b)	V	
	1.5×10^{-3}		Park et al. (1997)	V	
	1.5×10^{-3}		Mackay et al. (1993)	V	
	1.5×10^{-3}		Hwang et al. (1992)	V	
	1.5×10^{-3}		Mackay and Shiu (1981)	V	
	2.4×10^{-3}		Warner et al. (1980)	V	
	1.5×10^{-3}		Dilling (1977)	V	
	1.5×10^{-3}		Hine and Mookerjee (1975)	V	
	1.5×10^{-3}		Yaws (2003)	X	237
	1.9×10^{-3}	1700	Goldstein (1982)	X	298
	1.5×10^{-3}		Ryan et al. (1988)	C	
	1.9×10^{-3}		Shen (1982)	C	
	1.8×10^{-3}		Wang et al. (2017)	Q	314, 80, 238
	4.9×10^{-4}		Wang et al. (2017)	Q	314, 80, 239



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^{-3}		Wang et al. (2017)	Q	314, 80, 240
	2.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.3×10^{-3}		Modarresi et al. (2007)	Q	67
		3300	Kühne et al. (2005)	Q	
	2.2×10^{-3}		Yao et al. (2002)	Q	229
	2.3×10^{-3}		English and Carroll (2001)	Q	230, 231
	1.0×10^{-3}		Mackay et al. (2006b)	?	
		4300	Kühne et al. (2005)	?	
	1.5×10^{-3}		Yaws (1999)	?	21
	8.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.0×10^{-3}		Mackay et al. (1993)	?	
	1.5×10^{-3}		Yaws and Yang (1992)	?	21
	1.5×10^{-3}		Abraham et al. (1990)	?	
trichloroethene C_2HCl_3 (trichloroethylene) [79-01-6] XSTXAVWGX DQKEL-UHFFFAOYSA-N	1.1×10^{-3}	4100	Schwardt et al. (2021)	L	1
	1.1×10^{-3}	4300	Burkholder et al. (2019)	L	
	8.6×10^{-4}	4200	Burkholder et al. (2019)	L	70
	1.1×10^{-3}	4300	Burkholder et al. (2015)	L	
	8.6×10^{-4}	4200	Burkholder et al. (2015)	L	70
	1.0×10^{-3}	4200	Brockbank (2013)	L	1
	1.1×10^{-3}	4300	Warneck (2007)	L	
	1.0×10^{-3}	4300	Fogg and Sangster (2003)	L	
	1.0×10^{-3}	4600	Staudinger and Roberts (2001)	L	
	9.9×10^{-4}	4600	Staudinger and Roberts (1996)	L	
	6.6×10^{-4}		Steward et al. (1973)	L	14
	1.1×10^{-3}	4100	Allott et al. (1973)	L	
	1.0×10^{-3}	4200	Schwardt et al. (2021)	M	692
	1.2×10^{-3}	4700	Hiatt (2013)	M	
	1.6×10^{-3}	2800	Zhang et al. (2013)	M	324
	1.3×10^{-3}		Zhang et al. (2013)	M	325
	1.0×10^{-3}	3900	Chen et al. (2012)	M	
	9.4×10^{-4}		Helburn et al. (2008)	M	
	1.0×10^{-3}	3900	Shimotori and Arnold (2003)	M	
	9.5×10^{-4}	4300	Görgényi et al. (2002)	M	693
	1.2×10^{-3}	3600	Bierwagen and Keller (2001)	M	
	7.6×10^{-4}	4900	Moore (2000)	M	70
	1.0×10^{-3}		David et al. (2000)	M	72
	1.1×10^{-3}	3900	Vane and Giroux (2000)	M	
	1.1×10^{-3}	4800	Knauss et al. (2000)	M	694
	9.5×10^{-4}	4900	Dewulf et al. (1999)	M	
	9.5×10^{-4}		Ryu and Park (1999)	M	
	9.3×10^{-4}	3700	Heron et al. (1998)	M	
	1.1×10^{-3}		Chiang et al. (1998)	M	12
	1.4×10^{-3}		Peng and Wan (1998)	M	
	8.7×10^{-4}	4000	Peng and Wan (1998)	M	70
	1.1×10^{-3}	3800	Peng and Wan (1997)	M	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.3×10^{-3}		Hovorka and Dohnal (1997)	M	12
	1.1×10^{-3}	2200	Kondoh and Nakajima (1997)	M	
	8.8×10^{-4}	3600	Park et al. (1997)	M	
	8.5×10^{-4}		Turner et al. (1996)	M	
	8.3×10^{-4}		Ramachandran et al. (1996)	M	
	1.2×10^{-3}	3900	Dewulf et al. (1995)	M	
	1.3×10^{-3}		Nielsen et al. (1994)	M	
	9.5×10^{-4}	5000	Khalfaoui and Newsham (1994b)	M	695
	9.4×10^{-4}	3100	Robbins et al. (1993)	M	696
	1.1×10^{-3}		Hoff et al. (1993)	M	
	1.0×10^{-3}		Li et al. (1993)	M	
	1.1×10^{-3}	3700	Wright et al. (1992)	M	697
	1.1×10^{-3}	4200	Tse et al. (1992)	M	
	9.7×10^{-4}	4900	Cooling et al. (1992)	M	698
	1.3×10^{-3}	5200	Tancredi and Yanagisawa (1990)	M	
	1.0×10^{-3}	5200	Bissonette et al. (1990)	M	
	9.7×10^{-4}	2000	Lamarche and Droste (1989)	M	345
	5.5×10^{-4}		Guitart et al. (1989)	M	14
	9.5×10^{-4}	3700	Ashworth et al. (1988)	M	278
	1.0×10^{-3}	4800	Gossett (1987)	M	
	9.6×10^{-4}	4700	Munz and Roberts (1987)	M	
	9.8×10^{-4}		Hellmann (1987)	M	87
	9.4×10^{-4}		Yurteri et al. (1987)	M	12
	9.0×10^{-4}	5400	Schoene and Steinhanses (1985)	M	
	1.1×10^{-3}	4300	Gossett et al. (1985)	M	
	1.0×10^{-3}		Garbarini and Lion (1985)	M	
	9.7×10^{-4}	4900	Lincoff and Gossett (1984)	M	
	1.0×10^{-3}	4600	Leighton and Calo (1981)	M	
	7.4×10^{-4}	4800	Ervin et al. (1980)	M	
	8.4×10^{-4}		Warner et al. (1980)	M	
	5.0×10^{-4}		Sato and Nakajima (1979b)	M	14
	1.1×10^{-3}		Pearson and McConnell (1975)	M	649, 12
	8.5×10^{-4}		Mackay et al. (2006b)	V	
	9.9×10^{-4}		Park et al. (1997)	V	
	8.4×10^{-4}		Mackay et al. (1993)	V	
	1.1×10^{-3}		Hwang et al. (1992)	V	
	8.1×10^{-4}		Mackay and Shiu (1981)	V	
	8.4×10^{-4}		Warner et al. (1980)	V	
	8.2×10^{-4}		Dilling (1977)	V	651
	1.0×10^{-3}		Dilling (1977)	V	12
	2.4×10^{-3}		Dilling (1977)	V	153
	8.4×10^{-4}		Hine and Mookerjee (1975)	V	
	8.4×10^{-4}		Dilling et al. (1975)	V	
	8.6×10^{-4}		Yaws (2003)	X	258
	8.5×10^{-4}		Yaws (2003)	X	237
	8.8×10^{-4}	1600	Goldstein (1982)	X	298
	1.1×10^{-3}		Ryan et al. (1988)	C	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.4×10^{-4}		Shen (1982)	C	
	6.2×10^{-4}		Dupeux et al. (2022)	Q	259
	2.2×10^{-3}		Keshavarz et al. (2022)	Q	
	2.9×10^{-3}		Duchowicz et al. (2020)	Q	184
	2.9×10^{-3}		Wang et al. (2017)	Q	80, 238
	2.2×10^{-4}		Wang et al. (2017)	Q	80, 239
	6.9×10^{-4}		Wang et al. (2017)	Q	80, 240
	8.4×10^{-4}		Li et al. (2014)	Q	241
	5.5×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	8.7×10^{-4}		Gharagheizi et al. (2010)	Q	246
	3.0×10^{-4}		Hilal et al. (2008)	Q	
	1.8×10^{-3}		Modarresi et al. (2007)	Q	67
		3600	Kühne et al. (2005)	Q	
	1.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.1×10^{-3}		English and Carroll (2001)	Q	230, 274
	4.0×10^{-4}		Katritzky et al. (1998)	Q	
	8.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.0×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	9.7×10^{-4}		Mackay et al. (2006b)	?	
		4200	Kühne et al. (2005)	?	
	8.5×10^{-4}		Yaws (1999)	?	21
	5.2×10^{-4}		Abraham and Weathersby (1994)	?	21
	9.7×10^{-4}		Mackay et al. (1993)	?	
	8.4×10^{-4}		Yaws and Yang (1992)	?	21
	8.4×10^{-4}		Abraham et al. (1990)	?	
tetrachloroethene	5.7×10^{-4}	4700	Schwardt et al. (2021)	L	1
C_2Cl_4	5.5×10^{-4}	4500	Burkholder et al. (2019)	L	
(tetrachloroethylene)	4.6×10^{-4}	4400	Burkholder et al. (2019)	L	70
[127-18-4]	5.5×10^{-4}	4500	Burkholder et al. (2015)	L	
CYTYCFOTNPOANT-UHFFFAOYSA-N	4.6×10^{-4}	4400	Burkholder et al. (2015)	L	70
	5.6×10^{-4}	4700	Brockbank (2013)	L	1
	6.2×10^{-4}	4500	Warneck (2007)	L	
	6.0×10^{-4}	4200	Fogg and Sangster (2003)	L	
	5.9×10^{-4}	4800	Staudinger and Roberts (2001)	L	
	5.8×10^{-4}	4800	Staudinger and Roberts (1996)	L	
	4.3×10^{-4}		Mackay and Shiu (1981)	L	
	5.8×10^{-4}	4500	Schwardt et al. (2021)	M	699
	9.9×10^{-4}	4600	Hiatt (2013)	M	
	6.2×10^{-4}	4200	Chen et al. (2012)	M	
	5.8×10^{-4}	4200	Shimotori and Arnold (2003)	M	
	4.1×10^{-4}	5300	Moore (2000)	M	70
	6.0×10^{-4}	4100	Vane and Giroux (2000)	M	
	4.8×10^{-4}	4400	Knauss et al. (2000)	M	700
	5.3×10^{-4}		Ryu and Park (1999)	M	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.6×10^{-4}		Dohnal and Hovorka (1999)	M	12
	6.2×10^{-4}		Chiang et al. (1998)	M	12
	7.8×10^{-4}		Peng and Wan (1998)	M	
	4.7×10^{-4}	4100	Peng and Wan (1998)	M	70
	6.1×10^{-4}	4200	Peng and Wan (1997)	M	
	8.4×10^{-4}		Hovorka and Dohnal (1997)	M	12
	6.9×10^{-4}	2200	Kondoh and Nakajima (1997)	M	
	5.5×10^{-4}	4200	Park et al. (1997)	M	
	6.9×10^{-4}	4800	Dewulf et al. (1995)	M	
	5.8×10^{-4}	5200	Robbins et al. (1993)	M	701
	6.3×10^{-4}		Hoff et al. (1993)	M	
	6.3×10^{-4}		Li et al. (1993)	M	
	8.1×10^{-4}	2100	Kolb et al. (1992)	M	33, 277
	5.9×10^{-4}	5500	Tancrède and Yanagisawa (1990)	M	
	6.2×10^{-4}	5300	Bissonette et al. (1990)	M	
	5.4×10^{-4}	4400	Ashworth et al. (1988)	M	278
	5.6×10^{-4}	4900	Gossett (1987)	M	
	5.4×10^{-4}	4400	Munz and Roberts (1987)	M	
	7.7×10^{-4}		Hellmann (1987)	M	87
	7.5×10^{-4}		Yurteri et al. (1987)	M	12
	6.5×10^{-4}	4600	Gossett et al. (1985)	M	
	5.7×10^{-4}	5100	Lincoff and Gossett (1984)	M	
	6.1×10^{-4}	4700	Leighton and Calo (1981)	M	
	5.7×10^{-4}	5200	Ervin et al. (1980)	M	
	3.4×10^{-4}		Warner et al. (1980)	M	
	1.1×10^{-3}	4300	Gossett (1980)	M	
	1.7×10^{-4}		Sato and Nakajima (1979b)	M	14
	5.0×10^{-4}		Pearson and McConnell (1975)	M	649, 12
	3.7×10^{-4}		Mackay et al. (2006b)	V	
	3.4×10^{-4}		Park et al. (1997)	V	
	3.7×10^{-4}		Mackay et al. (1993)	V	
	3.6×10^{-4}		Hwang et al. (1992)	V	
	9.1×10^{-4}		Addison et al. (1983)	V	
	3.5×10^{-4}		Warner et al. (1980)	V	
	3.4×10^{-4}		Dilling (1977)	V	651
	4.0×10^{-4}		Dilling (1977)	V	12
	1.2×10^{-3}		Dilling (1977)	V	153
	3.7×10^{-4}		Hine and Mookerjee (1975)	V	
	9.8×10^{-4}		Dilling et al. (1975)	V	
	3.6×10^{-4}		Yaws (2003)	X	237
	3.6×10^{-4}	1500	Goldstein (1982)	X	298
	6.3×10^{-4}		Ryan et al. (1988)	C	
	3.4×10^{-4}		Shen (1982)	C	
	8.1×10^{-4}		Dilling (1977)	C	
	8.1×10^{-4}		Dilling et al. (1975)	C	
	4.4×10^{-3}		Wang et al. (2017)	Q	80, 238
	1.2×10^{-4}		Wang et al. (2017)	Q	80, 239



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.5×10^{-4}		Wang et al. (2017)	Q	80, 240
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-3}		Modarresi et al. (2007)	Q	67
		3900	Kühne et al. (2005)	Q	
	5.6×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	3.1×10^{-4}		English and Carroll (2001)	Q	230, 231
	9.9×10^{-5}		Katritzky et al. (1998)	Q	
	8.8×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	5.8×10^{-4}		Mackay et al. (2006b)	?	
		5100	Kühne et al. (2005)	?	
	3.7×10^{-4}		Yaws (1999)	?	21
	1.7×10^{-4}		Abraham and Weathersby (1994)	?	21
	5.8×10^{-4}		Mackay et al. (1993)	?	
	3.7×10^{-4}		Yaws and Yang (1992)	?	21
	3.4×10^{-4}		Abraham et al. (1990)	?	
	2.9×10^{-3}		Chiou et al. (1980)	?	79
dichloroethyne C_2Cl_2 [7572-29-4] ZMJOVJSTYLQINE-UHFFFAOYSA-N	4.9×10^{-4}		HSDB (2015)	Q	99
1-chloro-1-propene $\text{C}_3\text{H}_5\text{Cl}$ [590-21-6] OWXJKYNZGFSVRC-UHFFFAOYSA-N	1.8×10^{-4}		HSDB (2015)	Q	99
2-chloro-1-propene $\text{C}_3\text{H}_5\text{Cl}$ [557-98-2] PNLQPWWBHXMFCA-UHFFFAOYSA-N	1.4×10^{-4}		HSDB (2015)	Q	99
3-chloro-1-propene $\text{C}_3\text{H}_5\text{Cl}$ (allyl chloride) [107-05-1] OSDWBNJEKMUWAV-UHFFFAOYSA-N	9.1×10^{-4}		Mackay and Shiu (1981)	L	
	1.3×10^{-3}	4500	Hiatt (2013)	M	
	3.7×10^{-3}		Welke et al. (1998)	M	
	9.0×10^{-4}		Duchowicz et al. (2020)	V	186
	9.0×10^{-4}		HSDB (2015)	V	
	4.6×10^{-4}		Mackay et al. (1993)	V	
	9.2×10^{-4}		Dilling (1977)	V	
	1.1×10^{-3}		Hine and Mookerjee (1975)	V	
	1.1×10^{-3}		Yaws (2003)	X	237
	4.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.1×10^{-3}		Li et al. (2014)	Q	241
	1.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	8.4×10^{-4}		Gharagheizi et al. (2010)	Q	246
	4.0×10^{-3}		Hilal et al. (2008)	Q	
	2.8×10^{-3}		Modarresi et al. (2007)	Q	67



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.9×10^{-4}		Yao et al. (2002)	Q	229
	1.1×10^{-3}		English and Carroll (2001)	Q	230, 231
	1.8×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	1.9×10^{-3}		Suzuki et al. (1992)	Q	232
	1.7×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-3}		Yaws (1999)	?	21
	1.1×10^{-3}		Yaws and Yang (1992)	?	21
	1.1×10^{-3}		Abraham et al. (1990)	?	
1,1-dichloropropene $C_3H_4Cl_2$ [563-58-6] ZAIDIVBQUMFXEC-UHFFFAOYSA-N	6.1×10^{-4}	4200	Hiatt (2013)	M	
	5.4×10^{-4}	1900	Kondoh and Nakajima (1997)	M	
1,2-dichloropropene $C_3H_4Cl_2$ [563-54-2] PPKPKFIWDXDAGC-UHFFFAOYSA-N	2.0×10^{-3}		HSDB (2015)	V	
	3.1×10^{-4}		Hilal et al. (2008)	Q	
	1.8×10^{-3}		Modarresi et al. (2007)	Q	67
1,3-dichloropropene $C_3H_4Cl_2$ [542-75-6] UOORRWUZONOOLO-UHFFFAOYSA-N	6.4×10^{-3}	4300	Wright et al. (1992)	M	702
	2.8×10^{-3}		Warner et al. (1980)	M	
	7.3×10^{-3}		Warner et al. (1980)	V	
	2.4×10^{-5}		Barcelo and Hennion (1997)	X	567
	2.8×10^{-3}	1500	Goldstein (1982)	X	298
	5.8×10^{-3}		Hilal et al. (2008)	C	
	2.8×10^{-3}		Horvath and Getzen (1999)	C	
	8.1×10^{-3}		Ryan et al. (1988)	C	
	2.8×10^{-3}		Shen (1982)	C	
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	5.1×10^{-5}		Goodarzi et al. (2010)	Q	568
	5.7×10^{-3}		Hilal et al. (2008)	Q	
	5.1×10^{-3}		Modarresi et al. (2007)	Q	67
<i>cis</i> -1,3-dichloropropene $C_3H_4Cl_2$ [10061-01-5] UOORRWUZONOOLO-UPHRSURJSA-N	4.2×10^{-3}		Mackay and Shiu (1981)	L	
	9.5×10^{-3}	5500	Hiatt (2013)	M	
	1.0×10^{-2}		Thomas et al. (2006)	M	154, 703
	6.3×10^{-3}	4300	Kondoh and Nakajima (1997)	M	
	4.2×10^{-3}		Albanese et al. (1987)	M	
	5.0×10^{-3}	5800	Leistra (1970)	M	
	4.2×10^{-3}		Dilling (1977)	V	
	8.7×10^{-3}		Thomas et al. (2006)	?	154, 704
	5.5×10^{-3}		Yates and Gan (1998)	?	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>trans</i> -1,3-dichloropropene $C_3H_4Cl_2$ [10061-02-6] UOORRWUZONOLO-OWOJBTEDSA-N	5.6×10^{-3}	4800	Mackay and Shiu (1981)	L	
	5.8×10^{-3}		Hiatt (2013)	M	
	1.5×10^{-2}	5000	Thomas et al. (2006)	M	154, 703
	1.0×10^{-2}		Kondoh and Nakajima (1997)	M	
	5.6×10^{-3}		Albanese et al. (1987)	M	
	8.1×10^{-3}	5700	Leistra (1970)	M	
	5.6×10^{-3}		Dilling (1977)	V	
	1.5×10^{-2}		Thomas et al. (2006)	?	154, 704
9.4×10^{-3}		Yates and Gan (1998)	?		
2,3-dichloropropene $C_3H_4Cl_2$ [78-88-6] FALCMQXTWHPRIH-UHFFFAOYSA-N	2.8×10^{-3}		Mackay and Shiu (1981)	L	
	3.5×10^{-3}		Albanese et al. (1987)	M	
	2.4×10^{-3}		Duchowicz et al. (2020)	V	186
	2.7×10^{-3}		Dilling (1977)	V	
	2.4×10^{-3}		Yaws (2003)	X	237
	4.0×10^{-3}		Duchowicz et al. (2020)	Q	
	4.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	2.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
	4.8×10^{-3}		Hilal et al. (2008)	Q	
	3.8×10^{-3}		Modarresi et al. (2007)	Q	67
	2.9×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.8×10^{-3}		Yao et al. (2002)	Q	229, 267
2.0×10^{-3}		Katritzky et al. (1998)	Q		
2.4×10^{-3}		Yaws (1999)	?	21	
1,2,3-trichloro-1-propene $C_3H_3Cl_3$ [96-19-5] HIILBTHBHCLUER-UHFFFAOYSA-N	5.5×10^{-4}		HSDB (2015)	Q	99
1,1,2,3,3,3-hexachloro-1-propene C_3Cl_6 [1888-71-7] VFDYKPARTDCDCU-UHFFFAOYSA-N	2.1×10^{-3}		Duchowicz et al. (2020)	V	186
	1.3×10^{-3}		Duchowicz et al. (2020)	Q	
	6.2×10^{-3}		HSDB (2015)	Q	99
	9.9×10^{-4}		Hilal et al. (2008)	Q	
	3.8×10^{-3}		Modarresi et al. (2007)	Q	67
2.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249	
3-chloro-1-butene C_4H_7Cl [563-52-0] VZGLVCFVUREVDP-UHFFFAOYSA-N	5.6×10^{-4}		Ebert et al. (2023)	?	316
3-chloro-2-methyl-1-propene C_4H_7Cl [563-47-3] OHXAOPZTJOUYKM-UHFFFAOYSA-N	1.1×10^{-3}		Duchowicz et al. (2020)	V	186
	1.1×10^{-3}		HSDB (2015)	V	
	1.5×10^{-3}		Duchowicz et al. (2020)	Q	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-2-butene C_4H_7Cl (crotyl chloride) [591-97-9] YTKRILODNOEEXP-UHFFFAOYSA-N	9.5×10^{-4}		Ebert et al. (2023)	?	318
(<i>Z</i>)-1-chloro-2-butene C_4H_7Cl (<i>cis</i> -1-chloro-2-butene) [4628-21-1] YTKRILODNOEEXP-IHWYPQMZSA-N	1.2×10^{-3}	2800	Bakierowska and Trzeczynski (2003)	M	
		3800	Kühne et al. (2005)	Q	
		2800	Kühne et al. (2005)	?	
(<i>E</i>)-1-chloro-2-butene C_4H_7Cl (<i>trans</i> -1-chloro-2-butene) [4894-61-5] YTKRILODNOEEXP-NSCUHMNSA-N	3.1×10^{-3}	3000	Bakierowska and Trzeczynski (2003)	M	
		3800	Kühne et al. (2005)	Q	
		3000	Kühne et al. (2005)	?	
1,3-dichloro-2-butene $C_4H_6Cl_2$ [926-57-8] WLIADPFXSACYLS-UHFFFAOYSA-N	2.6×10^{-4}		HSDB (2015)	Q	99
1,4-dichloro-2-butene $C_4H_6Cl_2$ [764-41-0] FQDIANVAWVHZIR-UHFFFAOYSA-N	1.2×10^{-3}		Duchowicz et al. (2020)	V	186
	1.7×10^{-2}		HSDB (2015)	V	
	4.2×10^{-3}		Duchowicz et al. (2020)	Q	
	8.9×10^{-3}		Modarresi et al. (2007)	Q	67
(<i>Z</i>)-1,4-dichloro-2-butene $C_4H_6Cl_2$ [1476-11-5] FQDIANVAWVHZIR-UPHRSURJSA-N	3.0×10^{-2}	9400	Hiatt (2013)	M	
	1.0×10^{-2}		Albanese et al. (1987)	M	
	8.5×10^{-3}		Duchowicz et al. (2020)	V	186
	8.2×10^{-3}		HSDB (2015)	V	
	4.2×10^{-3}		Duchowicz et al. (2020)	Q	
(<i>E</i>)-1,4-dichloro-2-butene $C_4H_6Cl_2$ [110-57-6] FQDIANVAWVHZIR-OWOJBTEDSA-N	3.5×10^{-2}	6600	Hiatt (2013)	M	
	1.7×10^{-2}		Albanese et al. (1987)	M	
	1.5×10^{-2}		Duchowicz et al. (2020)	V	186
	1.5×10^{-2}		HSDB (2015)	V	
	4.2×10^{-3}		Duchowicz et al. (2020)	Q	
	7.2×10^{-2}		Hilal et al. (2008)	Q	
	8.9×10^{-3}		Modarresi et al. (2007)	Q	67
3,4-dichloro-1-butene $C_4H_6Cl_2$ [760-23-6] XVEASTGLHPVZNA-UHFFFAOYSA-N	1.2×10^{-3}		Duchowicz et al. (2020)	V	186
	1.1×10^{-3}		HSDB (2015)	V	
	6.4×10^{-3}		Duchowicz et al. (2020)	Q	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-2-methylpropene C_4H_7Cl (dimethylvinyl chloride) [513-37-1] KWISWUFGPUHDY-UHFFFAOYSA-N	5.2×10^{-4}		HSDB (2015)	V	
			Haynes (2014)	W	705
2-chloro-1,3-butadiene C_4H_5Cl [126-99-8] YAQLQRRMGMLJV-UHFFFAOYSA-N	4.7×10^{-2} 1.8×10^{-4}		Mackay et al. (1993)	V	
			HSDB (2015)	Q	99
hexachlorobutadiene $CCl_2CClCClCCl_2$ [87-68-3] RWNKSTSCBHKHTB-UHFFFAOYSA-N	5.6×10^{-4}	5500	Brockbank (2013)	L	1
	8.3×10^{-4}	3100	Fogg and Sangster (2003)	L	
	2.3×10^{-3}	6200	Hiatt (2013)	M	
	6.2×10^{-4}	4900	Dewulf et al. (1999)	M	
	7.0×10^{-4}	2500	Kondoh and Nakajima (1997)	M	
	2.3×10^{-3}		Oliver (1985)	M	
	9.6×10^{-4}		Warner et al. (1980)	M	
	4.0×10^{-4}		Pearson and McConnell (1975)	M	649, 12
	6.1×10^{-4}		Mackay et al. (2006b)	V	
	6.5×10^{-4}		Mackay et al. (1993)	V	
	9.1×10^{-4}		Ballschmiter and Wittlinger (1991)	V	
	3.8×10^{-4}		Warner et al. (1980)	V	
	4.2×10^{-4}		Yaws (2003)	X	237
	9.8×10^{-4}	4600	Goldstein (1982)	X	298
	9.7×10^{-4}		Hilal et al. (2008)	C	
	9.6×10^{-4}		Horvath and Getzen (1999)	C	
	9.4×10^{-4}		Ryan et al. (1988)	C	
	9.6×10^{-4}		Shen (1982)	C	
	9.0×10^{-4}		Zhang et al. (2010)	Q	287, 288
	5.0×10^{-4}		Zhang et al. (2010)	Q	287, 289
2.3×10^{-3}		Zhang et al. (2010)	Q	287, 290	
1.7×10^{-2}		Zhang et al. (2010)	Q	287, 291	
4.3×10^{-4}		Gharagheizi et al. (2010)	Q	246	
6.2×10^{-4}		Hilal et al. (2008)	Q		
7.6×10^{-3}		Modarresi et al. (2007)	Q	67	
	5300	Kühne et al. (2005)	Q		
2.7×10^{-4}		Yao et al. (2002)	Q	229	
	3500	Kühne et al. (2005)	?		
4.2×10^{-4}		Yaws (1999)	?	21	
hexachlorocyclopentadiene C_5Cl_6 [77-47-4] VUNCWTMEJYMOOR-UHFFFAOYSA-N	3.7×10^{-4}		Wolfe et al. (1982)	M	
	6.0×10^{-4}		Warner et al. (1980)	M	
	6.1×10^{-4}		Mackay et al. (2006b)	V	
	6.0×10^{-4}		Mackay et al. (1993)	V	
	6.2×10^{-4}		Wolfe et al. (1982)	V	
	2.7×10^{-4}		Warner et al. (1980)	V	
	6.0×10^{-4}	1500	Goldstein (1982)	X	298
2.7×10^{-4}		Ryan et al. (1988)	C		



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.0×10^{-4}		Shen (1982)	C	
	4.6×10^{-3}		Zhang et al. (2010)	Q	287, 288
	5.3×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.4×10^{-2}		Zhang et al. (2010)	Q	287, 290
	1.6×10^{-2}		Zhang et al. (2010)	Q	287, 291
	2.3×10^{-3}		Hilal et al. (2008)	Q	
	2.2×10^{-2}		Modarresi et al. (2007)	Q	67
	3.7×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	2.4×10^{-3}		Katritzky et al. (1998)	Q	
chlordanes	1.8×10^{-1}		Fendinger et al. (1989)	M	72
$C_{10}H_6Cl_8$	1.2×10^{-1}		Fendinger et al. (1989)	M	645
[57-74-9]	2.1×10^{-1}		Warner et al. (1980)	M	
BIWJNBZANLAXMG-UHFFFAOYSA-N	1.1×10^{-1}		Suntio et al. (1988)	V	12
	1.1×10^{-3}		Barcelo and Hennion (1997)	X	567
	2.0×10^{-1}		Suntio et al. (1988)	C	
	1.1×10^{-1}		Suntio et al. (1988)	C	
	1.0×10^{-1}		Ryan et al. (1988)	C	
	2.1×10^{-1}		Shen (1982)	C	
	1.3×10^{-1}		Keshavarz et al. (2022)	Q	
	3.6×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.4×10^{-1}		Zhang et al. (2010)	Q	287, 288
	4.8×10^{-2}		Zhang et al. (2010)	Q	287, 289
	2.4×10^1		Zhang et al. (2010)	Q	287, 290
	1.5		Zhang et al. (2010)	Q	287, 291
	2.1×10^{-4}		Goodarzi et al. (2010)	Q	568, 569
	5.3×10^{-2}		Hilal et al. (2008)	Q	
	2.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21
<i>cis</i> -chlordanes	1.7×10^{-1}		Shen and Wania (2005)	L	366
$C_{10}H_6Cl_8$	1.8×10^{-1}		Shen and Wania (2005)	L	367
(α -chlordanes)	3.7×10^{-2}	4100	Jantunen and Bidleman (2006)	M	
[5103-71-9]	1.5×10^{-1}	6100	Cetin et al. (2006)	M	
BIWJNBZANLAXMG-KMMBHOGFSA-N	1.1×10^{-2}		Atlas et al. (1982)	M	679
	2.8×10^{-2}		Duchowicz et al. (2020)	V	186
			Mackay et al. (2006d)	V	558
	4.8×10^{-3}	7300	Paasivirta et al. (1999)	T	
	3.6×10^{-2}		Duchowicz et al. (2020)	Q	
<i>trans</i> -chlordanes	1.7×10^{-1}		Shen and Wania (2005)	L	366
$C_{10}H_6Cl_8$	1.5×10^{-1}		Shen and Wania (2005)	L	367
(β -chlordanes)	3.4×10^{-2}	3500	Jantunen and Bidleman (2006)	M	
[5103-74-2]	6.3×10^{-2}	7600	Cetin et al. (2006)	M	
BIWJNBZANLAXMG-OESJLNMISA-N	7.4×10^{-3}		Atlas et al. (1982)	M	679
	2.0×10^{-2}		Duchowicz et al. (2020)	V	186
			Mackay et al. (2006d)	V	558
	3.6×10^{-3}	7100	Paasivirta et al. (1999)	T	
	3.6×10^{-2}		Duchowicz et al. (2020)	Q	
	1.0		Modarresi et al. (2007)	Q	67



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.6×10^{-3}		Mackay et al. (1979)	M	
	1.6×10^{-3}		Sato and Nakajima (1979b)	M	14
	2.8×10^{-3}	4900	Hartkopf and Karger (1973)	M	
	2.7×10^{-3}		Mackay et al. (2006b)	V	
	2.9×10^{-3}	2400	Fogg and Sangster (2003)	V	
	2.7×10^{-3}		Shiu and Mackay (1997)	V	
	2.8×10^{-3}		Park et al. (1997)	V	
	2.9×10^{-3}		Lide and Frederikse (1995)	V	
	2.7×10^{-3}		Mackay et al. (1993)	V	
	2.7×10^{-3}		Mackay et al. (1992a)	V	
	2.5×10^{-3}		Hwang et al. (1992)	V	
	2.7×10^{-3}		Bobra et al. (1985)	V	
	2.7×10^{-3}		Yoshida et al. (1983)	V	
	2.7×10^{-3}		Cabani et al. (1981)	V	
	2.7×10^{-3}		Warner et al. (1980)	V	
	2.2×10^{-3}		Hine and Mookerjee (1975)	V	
	2.7×10^{-3}		Mackay et al. (1979)	T	
	2.2×10^{-3}		Yaws (2003)	X	237
	2.5×10^{-3}	2100	Goldstein (1982)	X	298
	2.7×10^{-3}		Schüürmann (2000)	C	21
	2.7×10^{-3}		Ryan et al. (1988)	C	
	2.5×10^{-3}		Shen (1982)	C	
	2.4×10^{-2}		Hayer et al. (2022)	Q	20
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	8.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	246
	4.0×10^{-3}		Hilal et al. (2008)	Q	
	8.6×10^{-3}		Modarresi et al. (2007)	Q	67
		4000	Kühne et al. (2005)	Q	
	2.9×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	2.8×10^{-3}		Delgado and Alderete (2002)	Q	
	3.6×10^{-3}		Yao et al. (2002)	Q	229
	4.0×10^{-3}		English and Carroll (2001)	Q	230, 231
	1.7×10^{-3}		Katritzky et al. (1998)	Q	
	1.5×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	2.2×10^{-3}		Suzuki et al. (1992)	Q	232
	4.2×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.8×10^{-3}		Arbuckle (1983)	Q	
	3.2×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4000	Kühne et al. (2005)	?	
	2.2×10^{-3}		Yaws (1999)	?	21
	1.6×10^{-3}		Abraham and Weathersby (1994)	?	21
	2.6×10^{-3}		Mackay et al. (1993)	?	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-3}		Yaws and Yang (1992)	?	21
	2.8×10^{-3}		Abraham et al. (1990)	?	
	3.8×10^{-3}		Mackay and Yeun (1983)	?	
chlorobenzene-d5 C_6D_5Cl [3114-55-4] MVPPADPHJFYWMZ-RALIUCGRSA-N	3.6×10^{-3}	4500	Hiatt (2013)	M	
1,2-dichlorobenzene $C_6H_4Cl_2$ (<i>o</i> -dichlorobenzene) [95-50-1] RFFLAFLAYFXFSW-UHFFFAOYSA-N	5.6×10^{-3}	3700	Schwardt et al. (2021)	L	1
	5.9×10^{-3}	5200	Brockbank (2013)	L	1, 710
	6.8×10^{-3}	5300	Fogg and Sangster (2003)	L	711
	5.4×10^{-3}	5900	Staudinger and Roberts (2001)	L	
	5.4×10^{-3}	5900	Staudinger and Roberts (1996)	L	
	5.3×10^{-3}		Mackay and Shiu (1981)	L	
	8.0×10^{-3}	4200	Hiatt (2013)	M	
	6.3×10^{-3}		Li et al. (2008)	M	
	4.7×10^{-3}		Ryu and Park (1999)	M	
	5.1×10^{-3}		Shiu and Mackay (1997)	M	
	7.2×10^{-3}		Hovorka and Dohnal (1997)	M	12
	6.2×10^{-3}	5000	Kondoh and Nakajima (1997)	M	
	4.9×10^{-3}	4400	Park et al. (1997)	M	
	4.8×10^{-3}		Li and Carr (1993)	M	
	3.5×10^{-3}		Yu (1992)	M	12
	4.9×10^{-3}	5100	Bissonette et al. (1990)	M	
	5.3×10^{-3}	1400	Ashworth et al. (1988)	M	42, 278
	8.2×10^{-3}		Oliver (1985)	M	
	5.9×10^{-3}	6700	Gossett et al. (1985)	M	
	5.2×10^{-3}		Mackay and Shiu (1981)	M	
	5.1×10^{-3}		Warner et al. (1980)	M	
	3.5×10^{-3}		Sato and Nakajima (1979b)	M	14
	5.6×10^{-3}		Mackay et al. (2006b)	V	
	4.1×10^{-3}		Shiu and Mackay (1997)	V	
	8.6×10^{-3}		Park et al. (1997)	V	
	8.3×10^{-3}		Lide and Frederikse (1995)	V	
	4.1×10^{-3}		Mackay et al. (1992a)	V	
	6.0×10^{-3}		Hwang et al. (1992)	V	
	4.1×10^{-3}		Bobra et al. (1985)	V	
	4.9×10^{-3}		Warner et al. (1980)	V	
	4.0×10^{-3}		Hine and Mookerjee (1975)	V	
	3.5×10^{-3}		Yaws (2003)	X	237
	5.2×10^{-3}	2800	Goldstein (1982)	X	298
	5.2×10^{-3}		Schüürmann (2000)	C	21
	2.7×10^{-3}		Ryan et al. (1988)	C	
	5.1×10^{-3}		Shen (1982)	C	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	1.5×10^{-2}		Duchowicz et al. (2020)	Q	184
	4.0×10^{-3}		Li et al. (2014)	Q	241



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.7×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
	8.2×10^{-3}		Hilal et al. (2008)	Q	
	4.5×10^{-3}		Modarresi et al. (2007)	Q	67
		4400	Kühne et al. (2005)	Q	
	5.6×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	7.1×10^{-3}		Delgado and Alderete (2002)	Q	
	8.0×10^{-3}		Yao et al. (2002)	Q	229
	4.7×10^{-3}		English and Carroll (2001)	Q	230, 231
	3.3×10^{-3}		Katritzky et al. (1998)	Q	
	2.3×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	8.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	5.1×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4800	Kühne et al. (2005)	?	
	3.5×10^{-3}		Yaws (1999)	?	21
	3.6×10^{-3}		Abraham and Weathersby (1994)	?	21
	3.3×10^{-3}		Yaws and Yang (1992)	?	21
	5.1×10^{-3}		Abraham et al. (1990)	?	
	6.2×10^{-3}		Chiou et al. (1980)	?	79
1,2-dichlorobenzene-d4 $C_6D_4Cl_2$ (<i>o</i> -dichlorobenzene-d4) [2199-69-1] RFFLAFLAYFXFSW-RHQRLBAQSA-N	8.2×10^{-3}	4200	Hiatt (2013)	M	
1,3-dichlorobenzene $C_6H_4Cl_2$ (<i>m</i> -dichlorobenzene) [541-73-1] ZPQOPVIELGIULI-UHFFFAOYSA-N	3.1×10^{-3}	3700	Schwardt et al. (2021)	L	1
	3.1×10^{-3}	4400	Brockbank (2013)	L	1
	3.4×10^{-3}	4300	Fogg and Sangster (2003)	L	
	2.8×10^{-3}		Mackay and Shiu (1981)	L	
	5.2×10^{-3}	4800	Hiatt (2013)	M	
	2.9×10^{-3}		Li et al. (2008)	M	
	3.7×10^{-3}		de Wolf and Lieder (1998)	M	87
	4.7×10^{-3}		Hovorka and Dohnal (1997)	M	12
	3.8×10^{-3}	4400	Kondoh and Nakajima (1997)	M	
	3.4×10^{-3}		Hoff et al. (1993)	M	
	3.0×10^{-3}	2600	Ashworth et al. (1988)	M	33, 278
	5.5×10^{-3}		Oliver (1985)	M	
	3.8×10^{-3}		Warner et al. (1980)	M	
	2.1×10^{-3}		Sato and Nakajima (1979b)	M	14
	3.1×10^{-3}		Mackay et al. (2006b)	V	
	2.7×10^{-3}		Shiu and Mackay (1997)	V	
	5.6×10^{-3}		Lide and Frederikse (1995)	V	
	2.7×10^{-3}		Mackay et al. (1992a)	V	
	2.7×10^{-3}		Bobra et al. (1985)	V	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.3×10^{-3}		Warner et al. (1980)	V	
	2.1×10^{-3}		Hine and Mookerjee (1975)	V	
	2.9×10^{-3}		Yaws (2003)	X	237
	3.9×10^{-3}	2400	Goldstein (1982)	X	298
	3.7×10^{-3}		Ryan et al. (1988)	C	
	3.8×10^{-3}		Shen (1982)	C	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	9.2×10^{-3}		Duchowicz et al. (2020)	Q	299
	3.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
	4.7×10^{-3}		Hilal et al. (2008)	Q	
	3.2×10^{-3}		Modarresi et al. (2007)	Q	67
		4100	Kühne et al. (2005)	Q	
	3.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	4.5×10^{-3}		Delgado and Alderete (2002)	Q	
	5.0×10^{-3}		Yao et al. (2002)	Q	229, 267
	3.7×10^{-3}		English and Carroll (2001)	Q	230, 274
	4.2×10^{-3}		Katritzky et al. (1998)	Q	
	2.3×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	8.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	3.8×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4500	Kühne et al. (2005)	?	
	2.9×10^{-3}		Yaws (1999)	?	21
	2.2×10^{-3}		Abraham and Weathersby (1994)	?	21
	3.0×10^{-3}		Yaws and Yang (1992)	?	21
	2.7×10^{-3}		Abraham et al. (1990)	?	
1,4-dichlorobenzene	3.2×10^{-3}	3800	Schwardt et al. (2021)	L	1
$\text{C}_6\text{H}_4\text{Cl}_2$	3.8×10^{-3}	6000	Brockbank (2013)	L	1
(<i>p</i> -dichlorobenzene)	4.5×10^{-3}	4400	Fogg and Sangster (2003)	L	
[106-46-7]	6.3×10^{-3}		Mackay and Shiu (1981)	L	
OCJBOOLMMGPQU-UHFFFAOYSA-N	5.8×10^{-3}	4600	Hiatt (2013)	M	
	3.3×10^{-3}		Li et al. (2008)	M	
	2.5×10^{-3}		Chiang et al. (1998)	M	12
	4.1×10^{-3}		Shiu and Mackay (1997)	M	
	5.4×10^{-3}		Hovorka and Dohnal (1997)	M	12
	4.7×10^{-3}	4800	Kondoh and Nakajima (1997)	M	
	3.1×10^{-3}	2700	Ashworth et al. (1988)	M	278
	5.2×10^{-3}		Yurteri et al. (1987)	M	12
	6.6×10^{-3}		Oliver (1985)	M	
	4.2×10^{-3}		Mackay and Shiu (1981)	M	
	3.6×10^{-3}		Warner et al. (1980)	M	
	4.1×10^{-3}		Mackay et al. (2006b)	V	
	6.3×10^{-3}		Shiu and Mackay (1997)	V	
	6.7×10^{-3}		Lide and Frederikse (1995)	V	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.3×10^{-3}		Mackay et al. (1992a)	V	
	3.8×10^{-3}		Suntio et al. (1988)	V	12
	5.8×10^{-3}		Bobra et al. (1985)	V	
	2.2×10^{-3}		Hine and Mookerjee (1975)	V	
	2.3×10^{-3}		Yaws (2003)	X	237
	3.7×10^{-3}	2700	Goldstein (1982)	X	298
	4.1×10^{-3}		Schüürmann (2000)	C	21
	4.1×10^{-3}		Ryan et al. (1988)	C	
	3.6×10^{-3}		Shen (1982)	C	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	8.4×10^{-3}		Duchowicz et al. (2020)	Q	184
	3.9×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
	6.5×10^{-3}		Hilal et al. (2008)	Q	
	3.0×10^{-3}		Modarresi et al. (2007)	Q	67
		4100	Kühne et al. (2005)	Q	
	4.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	4.1×10^{-3}		Delgado and Alderete (2002)	Q	
	4.3×10^{-3}		Katritzky et al. (1998)	Q	
	2.3×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	8.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	2.1×10^{-3}		Arbuckle (1983)	Q	
	4.1×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		3700	Kühne et al. (2005)	?	
	2.3×10^{-3}		Yaws and Yang (1992)	?	21
	3.8×10^{-3}		Abraham et al. (1990)	?	
1,2,3-trichlorobenzene	6.2×10^{-3}	4600	Brockbank (2013)	L	1
$C_6H_3Cl_3$	1.5×10^{-2}	4800	Hiatt (2013)	M	
[87-61-6]	6.3×10^{-3}	4600	Brockbank et al. (2013)	M	
RELMFMZEBKVZJC-UHFFFAOYSA-N	8.0×10^{-3}		Lee et al. (2012)	M	
	3.6×10^{-3}	4200	Dewulf et al. (1999)	M	
	7.9×10^{-3}		Shiu and Mackay (1997)	M	
	1.5×10^{-2}	7300	Kondoh and Nakajima (1997)	M	
	1.4×10^{-2}		ten Hulscher et al. (1992)	M	12
	1.1×10^{-2}		Oliver (1985)	M	
	7.9×10^{-3}		Mackay and Shiu (1981)	M	
	4.1×10^{-3}		Mackay et al. (2006b)	V	
	5.8×10^{-3}		Fogg and Sangster (2003)	V	
	2.1×10^{-3}		Fogg and Sangster (2003)	V	
	4.1×10^{-3}		Shiu and Mackay (1997)	V	
	3.3×10^{-3}		Abraham et al. (1994a)	V	
	4.1×10^{-3}		Mackay et al. (1992a)	V	
	4.2×10^{-3}		Bobra et al. (1985)	V	
	4.3×10^{-3}		Mackay and Shiu (1981)	V	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	2.1×10^{-2}		Duchowicz et al. (2020)	Q	299
	5.0×10^{-3}		Abraham et al. (2019)	Q	
	8.0×10^{-3}		Li et al. (2014)	Q	241
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	4.5×10^{-3}		Zhang et al. (2010)	Q	287, 288
	6.9×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.6×10^{-2}		Zhang et al. (2010)	Q	287, 290
	5.2×10^{-3}		Zhang et al. (2010)	Q	287, 291
	8.0×10^{-3}		Hilal et al. (2008)	Q	
	4.6×10^{-3}		Modarresi et al. (2007)	Q	67
		4800	Kühne et al. (2005)	Q	
	1.1×10^{-2}		Delgado and Alderete (2002)	Q	
	3.4×10^{-3}		English and Carroll (2001)	Q	230, 231
	4.4×10^{-3}		Katritzky et al. (1998)	Q	
	3.5×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	1.8×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	7.9×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4200	Kühne et al. (2005)	?	
1,2,3-trichlorobenzene-d3 $C_6D_3Cl_3$ [3907-98-0] SMNOERSLNYGGOU-UHFFFAOYSA-N	1.5×10^{-2}	4600	Hiatt (2013)	M	
1,2,4-trichlorobenzene $C_6H_3Cl_3$ [120-82-1] PBKONEOXTCPAFI-UHFFFAOYSA-N	3.9×10^{-3}	3100	Schwardt et al. (2021)	L	1
	4.2×10^{-3}	6400	Brockbank (2013)	L	1
	1.1×10^{-2}	5100	Hiatt (2013)	M	
	5.8×10^{-3}		Lee et al. (2012)	M	
	2.4×10^{-3}	3500	Dewulf et al. (1999)	M	712
	2.7×10^{-3}		Ryu and Park (1999)	M	
	6.5×10^{-3}	5500	Kondoh and Nakajima (1997)	M	
	9.9×10^{-3}		ten Hulscher et al. (1992)	M	12
	4.6×10^{-3}	3900	Ashworth et al. (1988)	M	33, 278
	8.2×10^{-3}		Oliver (1985)	M	
	7.0×10^{-3}		Warner et al. (1980)	M	
			Mackay et al. (2006b)	V	683
	7.1×10^{-3}		Fogg and Sangster (2003)	V	
	8.6×10^{-3}		Fogg and Sangster (2003)	V	
	3.6×10^{-3}		Shiu and Mackay (1997)	V	
	7.1×10^{-3}		Lide and Frederikse (1995)	V	
	3.6×10^{-3}		Mackay et al. (1992a)	V	
	4.8×10^{-3}		McLachlan et al. (1990)	V	373
	3.6×10^{-3}		Bobra et al. (1985)	V	
	2.5×10^{-3}		Yoshida et al. (1983)	V	
	2.6×10^{-3}		Mackay and Shiu (1981)	V	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.3×10^{-3}		Warner et al. (1980)	V	
	3.3×10^{-3}		Yaws (2003)	X	237
	7.0×10^{-3}		Goldstein (1982)	X	446
	7.0×10^{-3}	2500	Goldstein (1982)	X	298
	6.9×10^{-3}		Meylan and Howard (1991)	C	
	4.2×10^{-4}		Ryan et al. (1988)	C	
	7.0×10^{-3}		Shen (1982)	C	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	2.5×10^{-3}		Abraham et al. (2019)	Q	
	4.5×10^{-3}		Zhang et al. (2010)	Q	287, 288
	7.7×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.5×10^{-2}		Zhang et al. (2010)	Q	287, 290
	4.6×10^{-3}		Zhang et al. (2010)	Q	287, 291
	2.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	9.9×10^{-3}		Hilal et al. (2008)	Q	
	4.2×10^{-3}		Modarresi et al. (2007)	Q	67
		4500	Kühne et al. (2005)	Q	
	2.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	6.7×10^{-3}		Delgado and Alderete (2002)	Q	
	7.4×10^{-3}		Yao et al. (2002)	Q	229
	3.4×10^{-3}		English and Carroll (2001)	Q	230, 260
	6.4×10^{-3}		Katritzky et al. (1998)	Q	
	1.6×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.5×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	4.5×10^{-3}		Meylan and Howard (1991)	Q	
	6.9×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		3200	Kühne et al. (2005)	?	
	3.3×10^{-3}		Yaws (1999)	?	21
1,2,4-trichlorobenzene-d3 $C_6D_3Cl_3$ [2199-72-6] PBKONEOXTCPAFI-CBYSEHNBSA-N	9.8×10^{-3}	4600	Hiatt (2013)	M	
1,3,5-trichlorobenzene $C_6H_3Cl_3$ [108-70-3] XKEFYDZQGKAQCN-UHFFFAOYSA-N	1.8×10^{-3}	4100	Dewulf et al. (1999)	M	713
	5.2×10^{-3}		ten Hulscher et al. (1992)	M	12
	3.5×10^{-2}		Hellmann (1987)	M	87
	5.2×10^{-3}		Oliver (1985)	M	
			Mackay et al. (2006b)	V	683
	1.4×10^{-3}		Fogg and Sangster (2003)	V	
	8.5×10^{-4}		Fogg and Sangster (2003)	V	
	9.1×10^{-4}		Shiu and Mackay (1997)	V	
	1.0×10^{-2}		Lide and Frederikse (1995)	V	
	1.5×10^{-3}		Abraham et al. (1994a)	V	
	9.1×10^{-4}		Mackay et al. (1992a)	V	
	9.1×10^{-4}		Bobra et al. (1985)	V	
	6.2×10^{-3}		Mackay and Shiu (1981)	V	



Rolf Sander: Compilation of Henry’s law constants

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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	7.5×10^{-3}		Duchowicz et al. (2020)	Q	184
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	4.6×10^{-3}		Hilal et al. (2008)	Q	
	4.2×10^{-3}		Modarresi et al. (2007)	Q	67
		4200	Kühne et al. (2005)	Q	
	4.5×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	4.6×10^{-3}		Delgado and Alderete (2002)	Q	
	1.6×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	3.5×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	4.5×10^{-3}		Meylan and Howard (1991)	Q	
	1.8×10^{-3}		Rumble (2021)	?	714
	5.2×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4400	Kühne et al. (2005)	?	
1,2,3,4-tetrachlorobenzene $C_6H_2Cl_4$ [634-66-2] GBDZXPJXOMHESU-UHFFFAOYSA-N	3.5×10^{-3}		Ryu and Park (1999)	M	
	1.3×10^{-2}	4800	ten Hulscher et al. (1992)	M	
	5.7×10^{-2}		Hellmann (1987)	M	87
	1.4×10^{-2}		Oliver (1985)	M	
	9.0×10^{-3}		Mackay et al. (2006b)	V	
	6.9×10^{-3}		Shiu and Mackay (1997)	V	
	6.9×10^{-3}		Mackay et al. (1992a)	V	
	5.8×10^{-3}		McLachlan et al. (1990)	V	373
	6.9×10^{-3}		Bobra et al. (1985)	V	
	3.8×10^{-3}		Mackay and Shiu (1981)	V	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	2.0×10^{-2}		Duchowicz et al. (2020)	Q	299
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	6.1×10^{-3}		Zhang et al. (2010)	Q	287, 288
	7.7×10^{-3}		Zhang et al. (2010)	Q	287, 289
	2.1×10^{-2}		Zhang et al. (2010)	Q	287, 290
	4.6×10^{-3}		Zhang et al. (2010)	Q	287, 291
	8.6×10^{-3}		Hilal et al. (2008)	Q	
	5.7×10^{-3}		Modarresi et al. (2007)	Q	67
		5200	Kühne et al. (2005)	Q	
	1.1×10^{-2}		Delgado and Alderete (2002)	Q	
	4.2×10^{-3}		English and Carroll (2001)	Q	230, 231
	5.7×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	6.1×10^{-3}		Meylan and Howard (1991)	Q	
	1.3×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		4500	Kühne et al. (2005)	?	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,5-tetrachlorobenzene $C_6H_2Cl_4$ [634-90-2] QZYNWJQFTJXIRN-UHFFFAOYSA-N	6.3×10^{-3}		Shiu and Mackay (1997)	M	
	1.0×10^{-2}		ten Hulscher et al. (1992)	M	12
	6.3×10^{-3}		Mackay and Shiu (1981)	M	
	1.7×10^{-3}		Mackay et al. (2006b)	V	
	2.1×10^{-3}		Fogg and Sangster (2003)	V	
	1.8×10^{-3}		Fogg and Sangster (2003)	V	
	1.7×10^{-3}		Shiu and Mackay (1997)	V	
	1.7×10^{-3}		Mackay et al. (1992a)	V	
	1.7×10^{-3}		Bobra et al. (1985)	V	
	1.7×10^{-3}		Mackay and Shiu (1981)	V	
	6.3×10^{-3}		Meylan and Howard (1991)	C	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	1.2×10^{-2}		Duchowicz et al. (2020)	Q	
	1.7×10^{-3}		Li et al. (2014)	Q	241
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
7.7×10^{-3}		Hilal et al. (2008)	Q		
5.4×10^{-3}		Modarresi et al. (2007)	Q	67	
7.1×10^{-3}		Delgado and Alderete (2002)	Q		
4.2×10^{-3}		English and Carroll (2001)	Q	230, 274	
3.2×10^{-2}		Nirmalakhandan et al. (1997)	Q		
5.7×10^{-3}		Myrdal and Yalkowsky (1994)	Q		
6.1×10^{-3}		Meylan and Howard (1991)	Q		
2.4×10^{-2}		Nirmalakhandan and Speece (1988)	Q		
6.2×10^{-3}		Duchowicz et al. (2020)	?	185, 21	
1,2,4,5-tetrachlorobenzene $C_6H_2Cl_4$ [95-94-3] JHBKHLUZVFWLAG-UHFFFAOYSA-N	1.8×10^{-2}		McPhedran et al. (2013)	M	
	6.6×10^{-3}		Lee et al. (2012)	M	
	9.9×10^{-3}		Oliver (1985)	M	
	8.2×10^{-3}		Mackay et al. (2006b)	V	
	2.8×10^{-4}		Fogg and Sangster (2003)	V	
	1.1×10^{-3}		Fogg and Sangster (2003)	V	
	8.2×10^{-3}		Shiu and Mackay (1997)	V	
	8.2×10^{-3}		Mackay et al. (1992a)	V	
	8.2×10^{-3}		Bobra et al. (1985)	V	
	3.8×10^{-3}		Mackay and Shiu (1981)	V	
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	6.1×10^{-3}		Zhang et al. (2010)	Q	287, 288
	8.4×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.8×10^{-2}		Zhang et al. (2010)	Q	287, 290
	4.8×10^{-3}		Zhang et al. (2010)	Q	287, 291
9.2×10^{-3}		Hilal et al. (2008)	Q		
6.1×10^{-3}		Modarresi et al. (2007)	Q	67	
6.8×10^{-3}		Delgado and Alderete (2002)	Q		
4.2×10^{-3}		English and Carroll (2001)	Q	230, 231	



Rolf Sander: Compilation of Henry’s law constants

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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.2×10^{-2}		Nirmalakhandan et al. (1997)	Q	
	5.7×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	6.1×10^{-3}		Meylan and Howard (1991)	Q	
pentachlorobenzene C_6HCl_5 [608-93-5] GEOCDNVZRAIQZ-UHFFFAOYSA-N	1.4×10^{-2}	5400	Schwardt et al. (2021)	L	1
	1.4×10^{-2}	5200	Shen and Wania (2005)	L	366
	1.4×10^{-2}	5600	Shen and Wania (2005)	L	367
	3.0×10^{-2}		McPhedran et al. (2013)	M	
	5.6×10^{-3}		Lee et al. (2012)	M	
	1.4×10^{-2}	5200	ten Hulscher et al. (1992)	M	
	2.0×10^{-1}		Hellmann (1987)	M	87
	1.4×10^{-2}		Oliver (1985)	M	
	1.2×10^{-2}		Mackay et al. (2006b)	V	
	3.5×10^{-2}		Fogg and Sangster (2003)	V	
	2.4×10^{-2}		Fogg and Sangster (2003)	V	
	1.2×10^{-2}		Shiu and Mackay (1997)	V	
	1.2×10^{-2}		Mackay et al. (1992a)	V	
	1.2×10^{-2}		Bobra et al. (1985)	V	
	1.0×10^{-3}		Mackay and Shiu (1981)	V	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	1.5×10^{-2}		Duchowicz et al. (2020)	Q	299
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	8.2×10^{-3}		Zhang et al. (2010)	Q	287, 288
	6.9×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.8×10^{-2}		Zhang et al. (2010)	Q	287, 290
	7.0×10^{-3}		Zhang et al. (2010)	Q	287, 291
	7.2×10^{-3}		Hilal et al. (2008)	Q	
	1.1×10^{-2}		Modarresi et al. (2007)	Q	67
		5700	Kühne et al. (2005)	Q	
	1.0×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	7.9×10^{-3}		Delgado and Alderete (2002)	Q	
	9.4×10^{-3}		Myrdal and Yalkowsky (1994)	Q	
	1.4×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		5100	Kühne et al. (2005)	?	
hexachlorobenzene C_6Cl_6 [118-74-1] CKAPSXZOOQJIBF-UHFFFAOYSA-N	6.5×10^{-3}	6600	Brockbank (2013)	L	1
	1.9×10^{-2}	6000	Shen and Wania (2005)	L	366
	1.5×10^{-2}	6400	Shen and Wania (2005)	L	367
	3.3×10^{-2}		McPhedran et al. (2013)	M	
	7.6×10^{-3}		Lee et al. (2012)	M	
	3.0×10^{-2}	6900	Jantunen and Bidleman (2006)	M	
	4.2×10^{-2}		Altschuh et al. (1999)	M	
	3.8×10^{-5}	570	Hansen et al. (1993)	M	281
	2.0×10^{-2}	5700	ten Hulscher et al. (1992)	M	
	2.6		Hellmann (1987)	M	87
	2.1×10^{-2}		Oliver (1985)	M	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.4×10^{-2}		Atlas et al. (1983)	M	72
	7.5×10^{-3}		Atlas et al. (1982)	M	679
	5.8×10^{-3}		Warner et al. (1980)	M	
	7.6×10^{-3}		Mackay et al. (2006b)	V	
	7.6×10^{-3}		Shiu and Mackay (1997)	V	
	7.7×10^{-3}		Lide and Frederikse (1995)	V	
	7.6×10^{-3}		Mackay et al. (1992a)	V	
	7.1×10^{-3}		Ballschmiter and Wittlinger (1991)	V	
	1.1×10^{-2}		Calamari et al. (1991)	V	12
	1.4×10^{-1}		Riederer (1990)	V	
	2.5×10^{-2}		McLachlan et al. (1990)	V	373
	1.4×10^{-1}		Suntio et al. (1988)	V	12
	7.2×10^{-3}		Bobra et al. (1985)	V	
	1.6×10^{-2}		Yoshida et al. (1983)	V	
	2.0×10^{-1}		Mackay and Shiu (1981)	V	
	3.0×10^{-3}	3700	Paasivirta et al. (1999)	T	
	2.6×10^{-3}		Yaws (2003)	X	237
	5.8×10^{-3}	1600	Goldstein (1982)	X	298
	1.0×10^{-2}		Hilal et al. (2008)	C	
	1.5×10^{-2}		Suntio et al. (1988)	C	12
	5.8×10^{-3}		Ryan et al. (1988)	C	
	5.8×10^{-3}		Shen (1982)	C	
	7.4×10^{-3}		Keshavarz et al. (2022)	Q	
	1.4×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.1×10^{-2}		Zhang et al. (2010)	Q	287, 288
	6.1×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.6×10^{-2}		Zhang et al. (2010)	Q	287, 290
	1.0×10^{-2}		Zhang et al. (2010)	Q	287, 291
	2.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	1.4×10^{-2}		Modarresi et al. (2007)	Q	67
		6400	Kühne et al. (2005)	Q	
	2.1×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	6.5×10^{-3}		Delgado and Alderete (2002)	Q	
	1.6×10^{-2}		Myrdal and Yalkowsky (1994)	Q	
	8.6×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	5.8×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		7200	Kühne et al. (2005)	?	
	2.4×10^{-5}		Yaws and Yang (1992)	?	21
(chloromethyl)-benzene $C_6H_5CH_2Cl$	2.2×10^{-2}	4400	Brockbank (2013)	L	1
(benzylchloride) [100-44-7] KCXMKQUNVWSEMD-UHFFFAOYSA-N	2.0×10^{-2}	7200	Hiatt (2013)	M	
	2.8×10^{-2}		Hovorka and Dohnal (1997)	M	12
	1.2×10^{-2}		Li and Carr (1993)	M	
	2.4×10^{-2}		Duchowicz et al. (2020)	V	186
	2.4×10^{-2}		HSDB (2015)	V	
	2.9×10^{-2}		Lide and Frederikse (1995)	V	
	1.6×10^{-2}		Mackay and Shiu (1981)	V	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.6×10^{-3}		Duchowicz et al. (2020)	Q	
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	271, 243
	3.1×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.0×10^{-2}		Hilal et al. (2008)	Q	
	1.9×10^{-2}		Modarresi et al. (2007)	Q	67
	1.6×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.3×10^{-2}		Katritzky et al. (1998)	Q	
	1.0×10^{-2}		Abraham et al. (1990)	?	
1-chloro-2-methylbenzene C_7H_7Cl (<i>o</i> -chlorotoluene) [95-49-8] IBSQPLPBRSHHTG-UHFFFAOYSA-N	2.2×10^{-3}	4500	Brockbank (2013)	L	1
	3.2×10^{-3}	4100	Hiatt (2013)	M	
	2.4×10^{-3}	3400	Kondoh and Nakajima (1997)	M	
	2.8×10^{-3}	3500	Leighton and Calo (1981)	M	
	1.9×10^{-2}	3000	Goldstein (1982)	X	298
	2.8×10^{-3}		Schüürmann (2000)	C	21
	5.3×10^{-2}		Keshavarz et al. (2022)	Q	
	4.3×10^{-3}		Duchowicz et al. (2020)	Q	299
	4.3×10^{-3}		Hilal et al. (2008)	Q	
	5.4×10^{-3}		Modarresi et al. (2007)	Q	67
		4400	Kühne et al. (2005)	Q	
	5.7×10^{-3}		Katritzky et al. (1998)	Q	
	3.1×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	2.8×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4900	Kühne et al. (2005)	?	
	2.8×10^{-3}		Abraham et al. (1990)	?	
1-chloro-3-methylbenzene C_7H_7Cl (<i>m</i> -chlorotoluene) [108-41-8] OSOUNOBYRMOXQQ-UHFFFAOYSA-N	6.1×10^{-4}		Duchowicz et al. (2020)	V	186
	6.2×10^{-4}		Schüürmann (2000)	V	
	4.3×10^{-3}		Duchowicz et al. (2020)	Q	
	3.8×10^{-3}		Hilal et al. (2008)	Q	
	6.4×10^{-3}		Modarresi et al. (2007)	Q	67
		4400	Kühne et al. (2005)	Q	
	6.1×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	4.8×10^{-3}		Katritzky et al. (1998)	Q	
		4800	Kühne et al. (2005)	?	
1-chloro-4-methylbenzene C_7H_7Cl (<i>p</i> -chlorotoluene) [106-43-4] NPDACUSD TOMAMK-UHFFFAOYSA-N	2.7×10^{-3}	4900	Brockbank (2013)	L	1
	4.1×10^{-3}	4200	Hiatt (2013)	M	
	2.9×10^{-3}	3900	Kondoh and Nakajima (1997)	M	
	2.3×10^{-3}		Duchowicz et al. (2020)	V	186
	2.2×10^{-3}		HSDB (2015)	V	
	3.1×10^{-3}		Yaws (2003)	X	237, 12
	4.3×10^{-3}		Duchowicz et al. (2020)	Q	
	8.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	4.0×10^{-3}		Hilal et al. (2008)	Q	
	6.8×10^{-3}		Modarresi et al. (2007)	Q	67
		4400	Kühne et al. (2005)	Q	



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.1×10^{-3}		Yao et al. (2002)	Q	229
	4.8×10^{-3}	4300	Katritzky et al. (1998)	Q	
			Kühne et al. (2005)	?	
	2.3×10^{-3}		Yaws (1999)	?	21, 12
(dichloromethyl)-benzene $C_7H_6Cl_2$ [98-87-3] CAHQGWAXKLOREW-UHFFFAOYSA-N	2.5×10^{-2}		Duchowicz et al. (2020)	V	186
	1.8×10^{-2}		Duchowicz et al. (2020)	Q	
	1.3×10^{-2}		Zhang et al. (2010)	Q	287, 288
	3.4×10^{-2}		Zhang et al. (2010)	Q	287, 289
	1.1×10^{-1}		Zhang et al. (2010)	Q	287, 290
	1.0×10^{-2}		Zhang et al. (2010)	Q	287, 291
	3.9×10^{-2}		Hilal et al. (2008)	Q	
	2.0×10^{-2}		Modarresi et al. (2007)	Q	67
1,2-dichloro-4-methylbenzene $C_7H_6Cl_2$ (3,4-dichlorotoluene) [95-75-0] WYUIWKFIQJVKW-UHFFFAOYSA-N	3.8×10^{-3}		Duchowicz et al. (2020)	V	186
	7.9×10^{-3}		Duchowicz et al. (2020)	Q	
	7.9×10^{-3}		Hilal et al. (2008)	Q	
	4.1×10^{-3}		Modarresi et al. (2007)	Q	67
	4.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	9.0×10^{-3}		Katritzky et al. (1998)	Q	
1,3-dichloro-2-methylbenzene $C_7H_6Cl_2$ (2,6-dichlorotoluene) [118-69-4] DMEDNTFWIHCBRK-UHFFFAOYSA-N	2.3×10^{-3}		HSDB (2015)	Q	99
	3.1×10^{-3}		Zhang et al. (2010)	Q	287, 288
	8.6×10^{-3}		Zhang et al. (2010)	Q	287, 289
	4.2×10^{-3}		Zhang et al. (2010)	Q	287, 290
	1.8×10^{-3}		Zhang et al. (2010)	Q	287, 291
2,4-dichloro-1-methylbenzene $C_7H_6Cl_2$ (2,4-dichlorotoluene) [95-73-8] FUNUTBJJKQIVSY-UHFFFAOYSA-N	2.7×10^{-3}	5000	Schwardt et al. (2021)	L	1
	2.7×10^{-3}	5000	Brockbank (2013)	L	1
	2.7×10^{-3}	4900	Brockbank et al. (2013)	M	
	2.3×10^{-3}		HSDB (2015)	Q	99
	3.1×10^{-3}		Zhang et al. (2010)	Q	287, 288
	5.4×10^{-3}		Zhang et al. (2010)	Q	287, 289
	6.7×10^{-3}		Zhang et al. (2010)	Q	287, 290
	1.8×10^{-3}		Zhang et al. (2010)	Q	287, 291
		4400	Kühne et al. (2005)	Q	
		5500	Kühne et al. (2005)	?	
2,3,6-trichloromethylbenzene $C_7H_5Cl_3$ (2,3,6-trichlorotoluene) [2077-46-5] UZYYBZNZSSNYSA-UHFFFAOYSA-N	6.6×10^{-3}		Oliver (1985)	M	
	1.4×10^{-2}		Hilal et al. (2008)	Q	
	6.0×10^{-3}		Modarresi et al. (2007)	Q	67
	4.1×10^{-3}		Meylan and Howard (1991)	Q	
2,4,5-trichloromethylbenzene $C_7H_5Cl_3$ (2,4,5-trichlorotoluene) [6639-30-1] ZCXHZKNWIYVQNC-UHFFFAOYSA-N	6.6×10^{-3}		Oliver (1985)	M	
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	6.2×10^{-3}		Modarresi et al. (2007)	Q	67
	4.1×10^{-3}		Meylan and Howard (1991)	Q	



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4,6-trichloromethylbenzene $C_7H_5Cl_3$ (2,4,6-trichlorotoluene) [23749-65-7] RCKUIOMKBEGTG-UHFFFAOYSA-N	6.5×10^{-3}		Ebert et al. (2023)	?	365
pentachloromethylbenzene $C_7H_3Cl_5$ (2,3,4,5,6-pentachlorotoluene) [877-11-2] AVSIMRGRHWKCAY-UHFFFAOYSA-N	1.3×10^{-2} 1.6×10^{-2} 1.7×10^{-2} 7.4×10^{-3}		Oliver (1985) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991)	M Q Q Q	67
1-chloro-2-(chloromethyl)benzene $C_7H_6Cl_2$ [611-19-8] BASMANVIUSSIM-UHFFFAOYSA-N	6.4×10^{-3} 7.2×10^{-2} 2.1×10^{-1} 6.1×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1-chloro-4-(chloromethyl)benzene $C_7H_6Cl_2$ [104-83-6] JQZAEUFPPSRDOP-UHFFFAOYSA-N	2.9×10^{-2} 6.4×10^{-3} 7.5×10^{-2} 8.2×10^{-2} 6.1×10^{-3}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
chloro(dichloromethyl)benzene $C_7H_5Cl_3$ [88-66-4] BXSVMYKOUULJCL-UHFFFAOYSA-N	1.8×10^{-2} 7.3×10^{-2} 5.4×10^{-2} 1.3×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
(trichloromethyl)-benzene $C_7H_5Cl_3$ [98-07-7] XEMRAKSQROQPBR-UHFFFAOYSA-N	3.8×10^{-2} 3.8×10^{-2} 7.2×10^{-3} 2.0×10^{-2} 4.7×10^{-3}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
1-chloro-4-(trichloromethyl)benzene $C_7H_4Cl_4$ [5216-25-1] LVZPKYYPPLUECL-UHFFFAOYSA-N	5.1×10^{-2} 1.8×10^{-2} 3.4×10^{-2} 6.9×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1-chloro-3-ethenylbenzene C_8H_7Cl [2039-85-2] BOVQCIDBZXNFEJ-UHFFFAOYSA-N	4.7×10^{-3}		HSDB (2015)	Q	99
1-chloro-4-ethenylbenzene C_8H_7Cl [1073-67-2] KTZVZZJJVJQZHV-UHFFFAOYSA-N	4.7×10^{-3}		HSDB (2015)	Q	99



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4-dichloro-2,5-dimethylbenzene $C_8H_8Cl_2$ [1124-05-6] UTGSRNVBAFCOEU-UHFFFAOYSA-N	2.7×10^{-3} 1.2×10^{-2} 4.6×10^{-3} 2.3×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,4-bis(trichloromethyl)benzene $C_8H_4Cl_6$ [68-36-0] OTEKOJQFKOIXMU-UHFFFAOYSA-N	7.9×10^{-1} 3.7×10^{-2} 1.1×10^{-1} 5.8×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
α, α -dichloro- <i>o</i> -xylene $C_8H_8Cl_2$ [612-12-4] FMGGHNGKHRCJLL-UHFFFAOYSA-N	1.0×10^{-1}	11000	Hiatt (2013)	M	
2-chlorostyrene C_8H_7Cl [2039-87-4] ISRGONDNXBCDBM-UHFFFAOYSA-N	4.7×10^{-3} 6.2×10^{-3}		HSDB (2015) Hilal et al. (2008)	Q Q	99
octachlorostyrene C_8Cl_8 [29082-74-4] RUYUCCQRWINUHE-UHFFFAOYSA-N	7.6×10^{-2} 4.3×10^{-2} 1.6×10^{-2} 4.3×10^{-2}		Oliver (1985) HSDB (2015) Hilal et al. (2008) Meylan and Howard (1991)	M Q Q Q	99
heptachlor $C_{10}H_5Cl_7$ [76-44-8] FRCCEHPWNOQAEU-UHFFFAOYSA-N	3.3×10^{-2} 2.6×10^{-2} 1.9×10^{-2} 3.4×10^{-2} 6.7×10^{-3} 2.8×10^{-3} 8.9×10^{-3} 8.8×10^{-5} 4.3×10^{-3} 6.7×10^{-3} 6.5×10^{-3} 6.7×10^{-3} 1.3×10^{-1} 2.9×10^{-2} 2.0×10^{-4} 2.4×10^{-2} 5.8×10^{-1} 5.6×10^{-2} 3.4×10^{-2} 2.8×10^{-3}	4300	Shen and Wania (2005) Shen and Wania (2005) Cetin et al. (2006) Altschuh et al. (1999) Warner et al. (1980) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) McCarty (1980) Meylan and Howard (1991) Ryan et al. (1988) Shen (1982) Keshavarz et al. (2022) Duchowicz et al. (2020) Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991) Duchowicz et al. (2020) MacBean (2012a)	L L M M M V V X X C C C Q Q Q Q Q Q Q Q Q ?	366 367 12 567 368 568 67 185, 21



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-2-methyl-2-phenylpropane $C_{10}H_{13}Cl$ [515-40-2] DNXXUUPUQXSUFH-UHFFFAOYSA-N	2.0×10^{-3}		Zhang et al. (2010)	Q	287, 288
	9.5×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.6×10^{-2}		Zhang et al. (2010)	Q	287, 290
	1.6×10^{-3}		Zhang et al. (2010)	Q	287, 291
1,3-dichloro-5-[(2S)-2,4,4,4-tetrachlorobutan-2-yl]benzene $C_{10}H_8Cl_6$ [73588-42-8] DELZPCKTBPBEE-VIFPVQESA-N	8.4×10^{-2}		Zhang et al. (2010)	Q	287, 288
	6.1×10^{-2}		Zhang et al. (2010)	Q	287, 289
	1.5		Zhang et al. (2010)	Q	287, 290
	2.9×10^{-3}		Zhang et al. (2010)	Q	287, 291
1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene $C_{10}H_5Cl_9$ (nonachlor) [3734-49-4] OCHOKXCPKDPNQU-UHFFFAOYSA-N	3.9×10^{-1}		HSDB (2015)	Q	99
1,1-dichloro-2,2-bis-(4-chlorophenyl)-ethane $C_{14}H_{10}Cl_4$ (p,p'-DDD) [72-54-8] AHJKRLASYNVKDZ-UHFFFAOYSA-N	1.5		Shen and Wania (2005)	L	366
	2.0		Shen and Wania (2005)	L	367
	7.6×10^{-1}		Chao et al. (2017)	M	
	9.1×10^{-1}	5100	Cetin et al. (2006)	M	
	1.5		Altschuh et al. (1999)	M	
			Mackay et al. (2006d)	V	558
	1.1×10^{-1}		Ballschmiter and Wittlinger (1991)	V	
	1.6		Suntio et al. (1988)	V	12
	4.6×10^{-1}		Yoshida et al. (1983)	V	
	2.9×10^{-2}	7300	Paasivirta et al. (1999)	T	
	8.1×10^{-4}		Ryan et al. (1988)	C	
	4.3×10^{-1}		Keshavarz et al. (2022)	Q	
	9.5×10^{-2}		Duchowicz et al. (2020)	Q	184
	2.1		Hilal et al. (2008)	Q	
	3.1×10^{-1}		Modarresi et al. (2007)	Q	67
	1.5		Duchowicz et al. (2020)	?	185, 21
mitotane $C_{14}H_{10}Cl_4$ (o,p'-DDD) [53-19-0] JWBOIMRXGHLCP-PP-UHFFFAOYSA-N	1.2		Duchowicz et al. (2020)	V	186
	1.2		HSDB (2015)	V	
	1.6		Suntio et al. (1988)	V	12
	5.6×10^2		Suntio et al. (1988)	C	715
	9.5×10^{-2}		Duchowicz et al. (2020)	Q	
	2.3×10^{-1}		Zhang et al. (2010)	Q	287, 288
	1.6		Zhang et al. (2010)	Q	287, 289
	1.1×10^1		Zhang et al. (2010)	Q	287, 290
	3.9×10^{-1}		Zhang et al. (2010)	Q	287, 291



Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1-dichloro-2,2-bis-(4-chlorophenyl)-ethane $C_{14}H_8Cl_4$ (p,p'-DDE) [72-55-9] UCNVFOCBFJQOAL-UHFFFAOYSA-N	2.4×10^{-1} 2.4×10^{-1} 2.9×10^{-2} 1.6×10^{-1} 2.4×10^{-1} 8.1×10^{-3}	4700 7700	Shen and Wania (2005) Shen and Wania (2005) Jantunen and Bidleman (2006) Cetin et al. (2006) Altschuh et al. (1999) Atlas et al. (1982) Mackay et al. (2006d) Ballschmiter and Wittlinger (1991) Calamari et al. (1991) McLachlan et al. (1990) Suntio et al. (1988) Yoshida et al. (1983) Addison et al. (1983) Paasivirta et al. (1999) Suntio et al. (1988) Ryan et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	L L M M M M V V V V V V V T C C Q Q Q Q ?	366 367 679 558 12 373 12 681 67 185, 21
o,p'-DDE $C_{14}H_8Cl_4$ [3424-82-6] ZDYJWDIWLRLXDB-UHFFFAOYSA-N	5.3×10^{-1} 3.9×10^{-1} 3.9×10^{-1} 1.4×10^{-1} 4.2×10^{-2}		Duchowicz et al. (2020) Mackay et al. (2006d) Suntio et al. (1988) Suntio et al. (1988) Duchowicz et al. (2020)	V V V C Q	186 12 12
1,1,1-trichloro-2-(2-chlorophenyl)-2-(4-chlorophenyl)ethane $C_{14}H_9Cl_5$ (o,p'-DDT) [789-02-6] CVUGPAFCQJIYDT-UHFFFAOYSA-N	1.3 2.9 1.9×10^{-2} 4.4×10^{-2}		Duchowicz et al. (2020) Mackay et al. (2006d) Calamari et al. (1991) Duchowicz et al. (2020)	V V V Q	186 12
1,1,1-trichloro-2,2-bis-(4-chlorophenyl)-ethane $C_{14}H_9Cl_5$ (DDT; p,p'-DDT) [50-29-3] YVGGHNCTFOXJCH-UHFFFAOYSA-N	9.1×10^{-1} 9.1×10^{-1} 1.9×10^{-1} 9.0×10^{-1} 1.2 7.7×10^{-1} 1.2 1.7×10^{-1} 3.4×10^{-1} 4.2×10^{-1} 6.1×10^{-1}	7500	Shen and Wania (2005) Shen and Wania (2005) Mackay and Shiu (1981) Cetin et al. (2006) Altschuh et al. (1999) Fendinger et al. (1989) Fendinger et al. (1989) Mackay et al. (2006d) Ballschmiter and Wittlinger (1991) Calamari et al. (1991) Suntio et al. (1988) Caron et al. (1985)	L L L M M M M V V V V V	366 367 72 645 558 12 12



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.7×10^{-1}		Yoshida et al. (1983)	V	
	1.3×10^{-1}		Burkhard and Guth (1981)	V	
	2.5×10^{-1}		Mackay and Leinonen (1975)	V	
	1.9×10^{-2}	7800	Paasivirta et al. (1999)	T	
	4.2×10^{-3}		Barcelo and Hennion (1997)	X	567
	1.7×10^{-1}		Suntio et al. (1988)	C	681
	2.0×10^{-1}		Ryan et al. (1988)	C	
	4.3×10^{-1}		Keshavarz et al. (2022)	Q	
	4.4×10^{-2}		Duchowicz et al. (2020)	Q	299
	6.4×10^{-1}		Zhang et al. (2010)	Q	287, 288
	6.2×10^{-1}		Zhang et al. (2010)	Q	287, 289
	1.6×10^1		Zhang et al. (2010)	Q	287, 290
	2.0×10^{-1}		Zhang et al. (2010)	Q	287, 291
	7.7×10^{-3}		Goodarzi et al. (2010)	Q	568
	6.7×10^{-1}		Hilal et al. (2008)	Q	
	3.5×10^{-1}		Modarresi et al. (2007)	Q	67
	1.2		Duchowicz et al. (2020)	?	185, 21
	2.8×10^{-1}		Brimblecombe (1986)	?	80
aldrin	6.7×10^{-2}		Shen and Wania (2005)	L	366
$C_{12}H_8Cl_6$	4.3×10^{-2}		Shen and Wania (2005)	L	367
[309-00-2]	3.6×10^{-1}		Mackay and Shiu (1981)	L	
QBYJBZPUGVGKQQ-SJAEHHSWA-N	2.6×10^{-1}		Chao et al. (2017)	M	
	2.2×10^{-2}	3900	Cetin et al. (2006)	M	
	2.2×10^{-1}		Altschuh et al. (1999)	M	
	2.0×10^{-2}		Warner et al. (1980)	M	
	1.1×10^{-2}		Mackay et al. (2006d)	V	
	1.1×10^{-2}		Suntio et al. (1988)	V	12
	6.9×10^{-1}		Mackay and Leinonen (1975)	V	
	1.1×10^{-4}		Barcelo and Hennion (1997)	X	567
	2.0×10^{-2}		Hilal et al. (2008)	C	
	2.0×10^{-2}		Meylan and Howard (1991)	C	
	7.0×10^{-1}		Suntio et al. (1988)	C	12
	6.1×10^{-1}		Suntio et al. (1988)	C	
	2.6×10^{-2}		Suntio et al. (1988)	C	681
	2.0×10^{-2}		Suntio et al. (1988)	C	12
	8.2×10^{-1}		Ryan et al. (1988)	C	
	2.0×10^{-2}		Shen (1982)	C	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.3×10^{-2}		Duchowicz et al. (2020)	Q	184
	6.4×10^{-4}		Goodarzi et al. (2010)	Q	568, 569
	8.6×10^{-3}		Hilal et al. (2008)	Q	
	1.6×10^{-1}		Modarresi et al. (2007)	Q	67
	2.6×10^{-2}		Meylan and Howard (1991)	Q	
	2.2×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	8.4×10^{-1}		Brimblecombe (1986)	?	80



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Table A6.1: Chlorocarbons (C, H, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
isodrin $C_{12}H_8Cl_6$ [465-73-6] QBYJBZPUGVGKQQ-DIFDVCDBSA-N	2.5×10^{-2}		HSDB (2015)	Q	99
1,1'-(2,2-dichloroethylidene)bis[4-ethylbenzene $C_{18}H_{20}Cl_2$ (perthane) [72-56-0] QFMDFTQJHFVNR-UHFFFAOYSA-N	5.8×10^{-2}		HSDB (2015)	Q	99



A6.2 Polychlorinated naphthalenes (PCNs)

Table A6.2: Polychlorinated naphthalenes (PCNs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloronaphthalene $C_{10}H_7Cl$ (PCN-1) [90-13-1] JTPNXXUCIXHOKM-UHFFFAOYSA-N	2.8×10^{-2}		Shiu and Mackay (1997)	M	
	2.8×10^{-3}		Mackay and Shiu (1981)	M	
	5.0×10^{-2}		Yaws (2003)	X	237
	4.7×10^{-2}		Yaws et al. (2005)	X	446
	2.4×10^{-2}		Keshavarz et al. (2022)	Q	
	3.3×10^{-2}		Duchowicz et al. (2020)	Q	
	1.1×10^{-2}		Li et al. (2014)	Q	241
	3.1×10^{-1}		Gharagheizi et al. (2012)	Q	
	5.3×10^{-2}		Gharagheizi et al. (2010)	Q	246
	5.7×10^{-2}		Hilal et al. (2008)	Q	
	7.3×10^{-2}		Modarresi et al. (2007)	Q	67
	3.1×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	1.1×10^{-2}		Katritzky et al. (1998)	Q	
	6.5×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
2.8×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
5.1×10^{-2}		Yaws (1999)	?	21	
2-chloronaphthalene $C_{10}H_7Cl$ (PCN-2) [91-58-7] CGYGETOMCSJHJU-UHFFFAOYSA-N	3.0×10^{-2}		Shiu and Mackay (1997)	M	
	3.1×10^{-2}		Mackay and Shiu (1981)	M	
	1.5×10^{-2}		Hwang et al. (1992)	V	
	1.6×10^{-2}	3800	Goldstein (1982)	X	298
	3.1×10^{-2}		Ryan et al. (1988)	C	
	2.4×10^{-2}		Keshavarz et al. (2022)	Q	
	3.3×10^{-2}		Duchowicz et al. (2020)	Q	184
	6.0×10^{-2}		Hilal et al. (2008)	Q	
	1.0×10^{-1}		Modarresi et al. (2007)	Q	67
	3.1×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	6.5×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
3.1×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
1,2-dichloronaphthalene $C_{10}H_6Cl_2$ (PCN-3) [2050-69-3] MOXLHAPKZWTHEX-UHFFFAOYSA-N	1.2×10^{-1}		Ebert et al. (2023)	?	716
1,3-dichloronaphthalene $C_{10}H_6Cl_2$ (PCN-4) [2198-75-6] AMCBMCWLCDERHY-UHFFFAOYSA-N	3.4×10^{-2}		Zhang et al. (2010)	Q	287, 288
	7.0×10^{-2}		Zhang et al. (2010)	Q	287, 289
	4.2×10^{-2}		Zhang et al. (2010)	Q	287, 290
	4.7×10^{-2}		Zhang et al. (2010)	Q	287, 291



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Table A6.2: Polychlorinated naphthalenes (PCNs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4-dichloronaphthalene $C_{10}H_6Cl_2$ (PCN-5) [1825-31-6] JDPKCYMVSKDOGS-UHFFFAOYSA-N	2.4×10^{-2} 3.2×10^{-2}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
1,5-dichloronaphthalene $C_{10}H_6Cl_2$ (PCN-6) [1825-30-5] ZBQZXTBAGBTUAD-UHFFFAOYSA-N	4.0×10^{-2}		Ebert et al. (2023)	?	716
2,7-dichloronaphthalene $C_{10}H_6Cl_2$ (PCN-12) [2198-77-8] DWBQZSYTSNYEEJ-UHFFFAOYSA-N	3.1×10^{-2}		Ebert et al. (2023)	?	717
1,2,4-trichloronaphthalene $C_{10}H_5Cl_3$ (PCN-14) [50402-51-2] MRJBOPVWPORBKZ-UHFFFAOYSA-N	8.3×10^{-2}		Ebert et al. (2023)	?	365
1,2,5-trichloronaphthalene $C_{10}H_5Cl_3$ (PCN-15) [55720-33-7] MMHZKSMFILONG-UHFFFAOYSA-N	1.1×10^{-1}	5300	Odabasi and Adali (2016)	M	718
1,2,6-trichloronaphthalene $C_{10}H_5Cl_3$ (PCN-16) [51570-44-6] AAUJSCRITBXDJH-UHFFFAOYSA-N	1.7×10^{-1}	6500	Odabasi and Adali (2016)	M	718
1,2,7-trichloronaphthalene $C_{10}H_5Cl_3$ (PCN-17) [55720-34-8] QYYUVUXSJZJCLQ-UHFFFAOYSA-N	1.5×10^{-1}		Ebert et al. (2023)	?	365
1,3,5-trichloronaphthalene $C_{10}H_5Cl_3$ (PCN-19) [51570-43-5] DZHZYPCCEISGSQ-UHFFFAOYSA-N	7.1×10^{-2}	5500	Odabasi and Adali (2016)	M	718



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Table A6.2: Polychlorinated naphthalenes (PCNs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4,5-trichloronaphthalene $C_{10}H_5Cl_3$ (PCN-23) [2437-55-0] VQSNXLCFFHGXTI-UHFFFAOYSA-N	2.2×10^{-1}	5400	Odabasi and Adali (2016)	M	718
1,4,6-trichloronaphthalene $C_{10}H_5Cl_3$ (PCN-24) [2437-54-9] RLTTZFDRZKJVKJ-UHFFFAOYSA-N	8.3×10^{-2}		Ebert et al. (2023)	?	365
1,6,7-trichloronaphthalene $C_{10}H_5Cl_3$ (PCN-25) [55720-39-3] FUEZTEBYLIMNHN-UHFFFAOYSA-N	1.5×10^{-1}		Ebert et al. (2023)	?	365
1,2,3,4-tetrachloronaphthalene $C_{10}H_4Cl_4$ (PCN-27) [20020-02-4] NAQWICRLNQSPW-UHFFFAOYSA-N	4.1×10^{-2} 4.1×10^{-2} 8.3×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
1,2,3,5-tetrachloronaphthalene $C_{10}H_4Cl_4$ (PCN-28) [53555-63-8] HJKSUVYQCAMBG-UHFFFAOYSA-N	1.3×10^{-1}		Ebert et al. (2023)	?	716
1,2,4,5-tetrachloronaphthalene $C_{10}H_4Cl_4$ (PCN-32) [6733-54-6] BIVDISPRSYAHQQ-UHFFFAOYSA-N	1.5×10^{-1}	5900	Odabasi and Adali (2016)	M	718
1,2,4,6-tetrachloronaphthalene $C_{10}H_4Cl_4$ (PCN-33) [51570-45-7] GLVVZPZGCNEVEM-UHFFFAOYSA-N	7.8×10^{-2}		Ebert et al. (2023)	?	365
1,2,4,7-tetrachloronaphthalene $C_{10}H_4Cl_4$ (PCN-34) [67922-21-8] PWXOBMRJWBEEED-UHFFFAOYSA-N	7.8×10^{-2}		Ebert et al. (2023)	?	365



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Rolf Sander: Compilation of Henry's law constants

Table A6.2: Polychlorinated naphthalenes (PCNs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,8-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-35) [6529-87-9] WCMSFBRREKZZFL-UHFFFAOYSA-N	1.8×10^{-1}	6000	Odabasi and Adali (2016)	M	718
1,2,5,6-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-36) [67922-22-9] ZPUUGNBIWHBXM-UHFFFAOYSA-N	1.0×10^{-1}		Ebert et al. (2023)	?	365
1,2,5,7-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-37) [67922-23-0] KQZUIOXHRIVQGR-UHFFFAOYSA-N	7.8×10^{-2}		Ebert et al. (2023)	?	365
1,2,5,8-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-38) [149864-80-2] DLTBLLHAQLBHDR-UHFFFAOYSA-N	2.2×10^{-1}		Ebert et al. (2023)	?	365
1,2,6,8-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-40) [67922-24-1] OVAYDYKVLHHIDQ-UHFFFAOYSA-N	2.2×10^{-1}		Ebert et al. (2023)	?	365
1,3,5,7-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-42) [53555-64-9] OTTCXKPQKOLSJN-UHFFFAOYSA-N	5.6×10^{-2}	5600	Odabasi and Adali (2016)	M	718
1,3,5,8-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-43) [31604-28-1] VFTLNRFRCXWJJK-UHFFFAOYSA-N	1.3×10^{-1}		Ebert et al. (2023)	?	717
1,3,6,8-tetrachloronaphthalene $\text{C}_{10}\text{H}_4\text{Cl}_4$ (PCN-45) [150224-15-0] XXWQPOHDPJYIN-UHFFFAOYSA-N	1.0×10^{-1}		Ebert et al. (2023)	?	365



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Table A6.2: Polychlorinated naphthalenes (PCNs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4,5,8-tetrachloronaphthalene $C_{10}H_4Cl_4$ (PCN-46) [3432-57-3] LITCKAVLJAKHOE-UHFFFAOYSA-N	3.5×10^{-1}	5700	Odabasi and Adali (2016)	M	718
1,4,6,7-tetrachloronaphthalene $C_{10}H_4Cl_4$ (PCN-47) [55720-43-9] VJZRGIYSYVGDUMU-UHFFFAOYSA-N	9.2×10^{-2}	5800	Odabasi and Adali (2016)	M	718
1,2,3,4,6-pentachloronaphthalene $C_{10}H_3Cl_5$ (PCN-50) [67922-26-3] BAOLNVSMVTYGDGA-UHFFFAOYSA-N	7.8×10^{-2}	9000	Odabasi and Adali (2016)	M	718
1,2,3,5,7-pentachloronaphthalene $C_{10}H_3Cl_5$ (PCN-52) [53555-65-0] OVSKLQPHXHPXDR-UHFFFAOYSA-N	6.9×10^{-2}		Ebert et al. (2023)	?	365
1,2,3,5,8-pentachloronaphthalene $C_{10}H_3Cl_5$ (PCN-53) [150224-24-1] HVYRFNJXZVEGFK-UHFFFAOYSA-N	1.7×10^{-1}	9700	Odabasi and Adali (2016)	M	718
1,2,4,5,6-pentachloronaphthalene $C_{10}H_3Cl_5$ (PCN-57) [150224-20-7] KPOZENRUJCHWOA-UHFFFAOYSA-N	1.4×10^{-1}	9500	Odabasi and Adali (2016)	M	718
1,2,4,5,7-pentachloronaphthalene $C_{10}H_3Cl_5$ (PCN-58) [150224-19-4] WYLDWCYZCFRVRH-UHFFFAOYSA-N	8.9×10^{-2}	8700	Odabasi and Adali (2016)	M	718
1,2,4,5,8-pentachloronaphthalene $C_{10}H_3Cl_5$ (PCN-59) [150224-25-2] FEIKEVSWLMYFFF-UHFFFAOYSA-N	2.6×10^{-1}	9100	Odabasi and Adali (2016)	M	718



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Table A6.2: Polychlorinated naphthalenes (PCNs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,6,7-pentachloronaphthalene $C_{10}H_3Cl_5$ (PCN-60) [150224-17-2] GXQUDLBNLKOIQB-UHFFFAOYSA-N	6.9×10^{-2}		Ebert et al. (2023)	?	365
1,2,4,6,8-pentachloronaphthalene $C_{10}H_3Cl_5$ (PCN-61) [150224-22-9] HGSDQSUMXKHGTH-UHFFFAOYSA-N	1.0×10^{-1}	8800	Odabasi and Adali (2016)	M	718
1,2,4,7,8-pentachloronaphthalene $C_{10}H_3Cl_5$ (PCN-62) [150224-21-8] LBCOXKFWBDTJTF-UHFFFAOYSA-N	1.7×10^{-1}	9200	Odabasi and Adali (2016)	M	718
1,2,3,4,5,6-hexachloronaphthalene $C_{10}H_2Cl_6$ (PCN-63) [58877-88-6] CTLMCQOGOWNFHA-UHFFFAOYSA-N	7.8×10^{-1}	12000	Odabasi and Adali (2016)	M	718
1,2,3,4,5,7-hexachloronaphthalene $C_{10}H_2Cl_6$ (PCN-64) [67922-27-4] SWRNUKWDYPZGV-UHFFFAOYSA-N	3.7×10^{-1}		Ebert et al. (2023)	?	365
1,2,3,4,5,8-hexachloronaphthalene $C_{10}H_2Cl_6$ (PCN-65) [103426-93-3] PGCDNPCENWGYMA-UHFFFAOYSA-N	9.3×10^{-1}	10000	Odabasi and Adali (2016)	M	718
1,2,3,4,6,7-hexachloronaphthalene $C_{10}H_2Cl_6$ (PCN-66) [103426-96-6] ZRNSVEOEIWQEMU-UHFFFAOYSA-N	4.3×10^{-1}		Ebert et al. (2023)	?	716
1,2,3,5,6,7-hexachloronaphthalene $C_{10}H_2Cl_6$ (PCN-67) [103426-97-7] XZLJCGGQLNWDWT-UHFFFAOYSA-N	2.5×10^{-1}		Ebert et al. (2023)	?	365



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Table A6.2: Polychlorinated naphthalenes (PCNs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,5,6,8-hexachloronaphthalene $C_{10}H_2Cl_6$ (PCN-68) [103426-95-5] FQELCOACCYGLL-UHFFFAOYSA-N	3.7×10^{-1}		Ebert et al. (2023)	?	365
1,2,3,5,7,8-hexachloronaphthalene $C_{10}H_2Cl_6$ (PCN-69) [103426-94-4] JPQLLIUTUFJWMH-UHFFFAOYSA-N	4.3×10^{-1}	12000	Odabasi and Adali (2016)	M	718
1,2,4,5,6,8-hexachloronaphthalene $C_{10}H_2Cl_6$ (PCN-71) [90948-28-0] JHKLUFTHIWTKX-UHFFFAOYSA-N	4.5×10^{-1}		Ebert et al. (2023)	?	365
1,2,4,5,7,8-hexachloronaphthalene $C_{10}H_2Cl_6$ (PCN-72) [103426-92-2] SFZREMCYQNYMZ-UHFFFAOYSA-N	4.5×10^{-1}		Ebert et al. (2023)	?	365
1,2,3,4,5,6,7-heptachloronaphthalene $C_{10}HCl_7$ (PCN-73) [58863-14-2] NDZIBNJHNBHUKW-UHFFFAOYSA-N	3.6	10000	Odabasi and Adali (2016)	M	718
1,2,3,4,5,6,8-heptachloronaphthalene $C_{10}HCl_7$ (PCN-74) [58863-15-3] QYEGXUUXWMKHS-UHFFFAOYSA-N	2.4	10000	Odabasi and Adali (2016)	M	718
octachloronaphthalene $C_{10}Cl_8$ (PCN-75) [2234-13-1] RTNLUFLDZOAXIC-UHFFFAOYSA-N	1.2 1.4×10^{-2} 1.4×10^{-2} 7.8×10^{-2}	7800	Odabasi and Adali (2016) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	M V V Q	718 186



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A6.3 Polychlorinated biphenyls (PCBs)

Table A6.3: Polychlorinated biphenyls (PCBs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-chlorobiphenyl $C_{12}H_9Cl$ (PCB-1) [2051-60-7] LAXBNTIAOJWAOP-UHFFFAOYSA-N	3.0×10^{-2}		Lau et al. (2006)	M	719
	2.3×10^{-2}		Lau et al. (2006)	M	720
	3.0×10^{-2}	5300	Charles and Destailats (2005)	M	
	4.9×10^{-2}	5100	Bamford et al. (2000)	M	
	1.7×10^{-2}	5300	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-2}		Mackay et al. (2006b)	V	
	1.4×10^{-2}		Mackay et al. (1992a)	V	
	2.7×10^{-3}		Hwang et al. (1992)	V	
	1.4×10^{-2}		Shiu and Mackay (1986)	V	
	3.5×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	3.9×10^{-2}		Duchowicz et al. (2020)	Q	184
	2.3×10^{-2}		Hilal et al. (2008)	Q	
	7.0×10^{-2}		Modarresi et al. (2007)	Q	67
1.7×10^{-2}		Fang Lee (2007)	Q	721	
2.2×10^{-2}		Fang Lee (2007)	Q	722	
	4600	Kühne et al. (2005)	Q		
	3.3×10^{-2}	Dunnivant et al. (1992)	Q		
	1.3×10^{-2}	Duchowicz et al. (2020)	?	185, 21	
		5400	Kühne et al. (2005)	?	
3-chlorobiphenyl $C_{12}H_9Cl$ (PCB-2) [2051-61-8] NMWSKOLWZZWHPL-UHFFFAOYSA-N	3.2×10^{-2}	5400	Paasivirta and Sinkkonen (2009)	V	
	1.3×10^{-2}		Mackay et al. (2006b)	V	
	1.3×10^{-2}		Mackay et al. (1992a)	V	
	1.3×10^{-2}		Shiu and Mackay (1986)	V	
	6.9×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	3.9×10^{-2}		Duchowicz et al. (2020)	Q	299
	3.7×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	67
	3.7×10^{-2}		Fang Lee (2007)	Q	721
	3.1×10^{-2}		Fang Lee (2007)	Q	722
	3.5×10^{-2}		Dunnivant et al. (1992)	Q	
1.6×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
4-chlorobiphenyl $C_{12}H_9Cl$ (PCB-3) [2051-62-9] FPWNLURCHDRMHC-UHFFFAOYSA-N	2.8×10^{-2}	5700	Li et al. (2003)	L	366
	4.2×10^{-2}	6100	Li et al. (2003)	L	367
	3.6×10^{-2}		Lau et al. (2006)	M	719
	2.9×10^{-2}		Lau et al. (2006)	M	720
	3.5×10^{-2}	6700	Charles and Destailats (2005)	M	
	5.6×10^{-2}	6700	Bamford et al. (2002)	M	
	1.4×10^{-2}	5100	Paasivirta and Sinkkonen (2009)	V	
	2.3×10^{-2}		Mackay et al. (2006b)	V	
	2.3×10^{-2}		Mackay et al. (1992a)	V	
	2.3×10^{-2}		Shiu and Mackay (1986)	V	
	7.7×10^{-2}		Burkhard et al. (1985)	V	



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	3.9×10^{-2}		Duchowicz et al. (2020)	Q	299
	3.9×10^{-2}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	67
	2.1×10^{-2}		Fang Lee (2007)	Q	721
	3.4×10^{-2}		Fang Lee (2007)	Q	722
	3.6×10^{-2}		Dunnivant et al. (1992)	Q	
	1.7×10^{-2}		Duchowicz et al. (2020)	?	185, 21
2,2'-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-4) [13029-08-8] JAYCNKDKIKZTAF-UHFFFAOYSA-N	4.6×10^{-2}	6000	Bamford et al. (2002)	M	
	4.0×10^{-2}		Fendinger and Glotfelty (1990)	M	
	2.9×10^{-2}		Dunnivant et al. (1988)	M	
	2.9×10^{-2}		Dunnivant and Elzerman (1988)	M	723
	3.3×10^{-2}		Murphy et al. (1987)	M	12
	4.5×10^{-2}		Murphy et al. (1983a)	M	24
	7.1×10^{-3}	5500	Paasivirta and Sinkkonen (2009)	V	
	1.7×10^{-2}		Mackay et al. (2006b)	V	
	1.7×10^{-2}		Mackay et al. (1992a)	V	
	1.7×10^{-2}		Shiu and Mackay (1986)	V	
	1.8×10^{-2}		Burkhard et al. (1985)	V	
	2.6×10^{-2}		Chiou et al. (1980)	V	
	4.5×10^{-2}		Murphy et al. (1983b)	X	724, 24
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	299
	2.5×10^{-2}		Hilal et al. (2008)	Q	
	6.9×10^{-2}		Modarresi et al. (2007)	Q	67
	2.7×10^{-2}		Fang Lee (2007)	Q	721
	2.1×10^{-2}		Fang Lee (2007)	Q	722
	4.8×10^{-2}		English and Carroll (2001)	Q	230, 231
	3.0×10^{-2}		Dunnivant et al. (1992)	Q	
	4.3×10^{-2}		Duchowicz et al. (2020)	?	185, 21
2,3-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-5) [16605-91-7] XOMKZKJEJZBJJ-UHFFFAOYSA-N	4.3×10^{-2}	5800	Bamford et al. (2002)	M	
	2.1×10^{-2}	5500	Paasivirta and Sinkkonen (2009)	V	
	5.1×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	7.1×10^{-2}		Duchowicz et al. (2020)	Q	184
	4.7×10^{-2}		Hilal et al. (2008)	Q	
	8.2×10^{-2}		Modarresi et al. (2007)	Q	67
	3.8×10^{-2}		Fang Lee (2007)	Q	721
	4.1×10^{-2}		Fang Lee (2007)	Q	722
		5000	Kühne et al. (2005)	Q	
	4.3×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	4.1×10^{-2}		Dunnivant et al. (1992)	Q	
	3.5×10^{-2}		Sabljić and Güsten (1989)	Q	
	4.3×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		5800	Kühne et al. (2005)	?	



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3'-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-6) [25569-80-6] ZHBBDRJXVXKEX-UHFFFAOYSA-N	4.3×10^{-2}	5700	Bamford et al. (2002)	M	
	3.9×10^{-2}		Brunner et al. (1990)	M	
	3.2×10^{-2}		Murphy et al. (1987)	M	12
	4.7×10^{-2}		Murphy et al. (1983a)	M	24
	3.9×10^{-2}	5900	Paasivirta and Sinkkonen (2009)	V	
	2.5×10^{-2}		Shiu and Mackay (1986)	V	
	3.6×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	184
	5.6×10^{-2}		Hilal et al. (2008)	Q	
	7.2×10^{-2}		Modarresi et al. (2007)	Q	67
	3.4×10^{-2}		Fang Lee (2007)	Q	721
	3.3×10^{-2}		Fang Lee (2007)	Q	722
	4.3×10^{-2}		Yaffe et al. (2003)	Q	248, 249
3.0×10^{-2}	Dunnivant et al. (1992)	Q			
2.5×10^{-2}	Sabljić and Güsten (1989)	Q			
3.9×10^{-2}	Duchowicz et al. (2020)	?	185, 21		
2,4-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-7) [33284-50-3] WEJZHJXJPXXMU-UHFFFAOYSA-N	3.7×10^{-2}	5200	Bamford et al. (2002)	M	
	2.8×10^{-2}		Dunnivant and Elzerman (1988)	M	
	2.7×10^{-2}		Murphy et al. (1987)	M	12
	3.0×10^{-2}	5700	Paasivirta and Sinkkonen (2009)	V	
	2.2×10^{-2}		Mackay et al. (2006b)	V	
	2.2×10^{-2}		Mackay et al. (1992a)	V	
	2.2×10^{-2}		Shiu and Mackay (1986)	V	
	3.4×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	4.2×10^{-2}		Duchowicz et al. (2020)	Q	
	3.9×10^{-2}		Hilal et al. (2008)	Q	
	8.6×10^{-2}		Modarresi et al. (2007)	Q	67
	2.2×10^{-2}		Fang Lee (2007)	Q	721
	3.0×10^{-2}	Fang Lee (2007)	Q	722	
	3.4×10^{-2}	4700	Kühne et al. (2005)	Q	
	3.4×10^{-2}		Yaffe et al. (2003)	Q	248, 249
2.6×10^{-2}	Dunnivant et al. (1992)		Q		
3.5×10^{-2}	Duchowicz et al. (2020)	?	185, 21		
	5500	Kühne et al. (2005)	?		
2,4'-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-8) [34883-43-7] UFNIBRDIUNVOMX-UHFFFAOYSA-N	3.8×10^{-2}	6000	Li et al. (2003)	L	366
	4.4×10^{-2}	6300	Li et al. (2003)	L	367
	2.6×10^{-2}		Lau et al. (2006)	M	719
	1.9×10^{-2}		Lau et al. (2006)	M	720
	2.3×10^{-2}	5300	Charles and Destailats (2005)	M	
	4.0×10^{-2}	5300	Bamford et al. (2000)	M	
	3.5×10^{-2}		Murphy et al. (1987)	M	12
	5.7×10^{-2}		Brownawell (1986)	M	294
	4.5×10^{-2}		Murphy et al. (1983a)	M	24
	1.0×10^{-2}		Atlas et al. (1982)	M	679



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-2}	5600	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Shiu and Mackay (1986)	V	
	4.0×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	299
	5.7×10^{-2}		Hilal et al. (2008)	Q	
	8.4×10^{-2}		Modarresi et al. (2007)	Q	67
	1.7×10^{-2}		Fang Lee (2007)	Q	721
	3.4×10^{-2}		Fang Lee (2007)	Q	722
		4700	Kühne et al. (2005)	Q	
	4.3×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
	3.2×10^{-2}		Sabljić and Güsten (1989)	Q	
	4.3×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		5600	Kühne et al. (2005)	?	
2,5-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-9) [34883-39-1] KKQWHYGECTYFIA-UHFFFAOYSA-N	2.3×10^{-2}	5700	ten Hulscher et al. (1992)	M	
	2.5×10^{-2}		Dunnivant et al. (1988)	M	
	2.5×10^{-2}		Dunnivant and Elzerman (1988)	M	723
	2.0×10^{-2}	5600	Paasivirta and Sinkkonen (2009)	V	
	5.0×10^{-2}		Mackay et al. (2006b)	V	
	5.0×10^{-2}		Mackay et al. (1992a)	V	
	5.0×10^{-2}		Shiu and Mackay (1986)	V	
	3.0×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	3.8×10^{-2}		Duchowicz et al. (2020)	Q	184
	4.1×10^{-2}		Hilal et al. (2008)	Q	
	7.0×10^{-2}		Modarresi et al. (2007)	Q	67
	3.1×10^{-2}		Fang Lee (2007)	Q	721
	2.6×10^{-2}		Fang Lee (2007)	Q	722
		4700	Kühne et al. (2005)	Q	
	3.4×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	3.0×10^{-2}		Dunnivant et al. (1992)	Q	
	3.5×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		5800	Kühne et al. (2005)	?	
2,6-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-10) [33146-45-1] IYZWUWBAFUBNCH-UHFFFAOYSA-N	1.2×10^{-2}	5700	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	4.2×10^{-2}		Duchowicz et al. (2020)	Q	299
	3.0×10^{-2}		Hilal et al. (2008)	Q	
	5.8×10^{-2}		Modarresi et al. (2007)	Q	67
	1.9×10^{-2}		Fang Lee (2007)	Q	721
	2.3×10^{-2}		Fang Lee (2007)	Q	722
	4.3×10^{-2}		Yaffe et al. (2003)	Q	248, 272
	2.3×10^{-2}		Dunnivant et al. (1992)	Q	
	2.1×10^{-2}		Sabljić and Güsten (1989)	Q	
	4.3×10^{-2}		Duchowicz et al. (2020)	?	185, 21



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
3,3'-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-11) [2050-67-1] KTXUOWUHFLLBZPW-UHFFFAOYSA-N	4.2×10^{-2}	5700	Dunnivant et al. (1988)	M	723	
	4.2×10^{-2}		Dunnivant and Elzerman (1988)	M		
	3.4×10^{-2}		Paasivirta and Sinkkonen (2009)	V		
	5.9×10^{-2}		Mackay et al. (2006b)	V		
	5.8×10^{-2}		Mackay et al. (1992a)	V		
	7.4×10^{-2}		Burkhard et al. (1985)	V		
	4.5×10^{-2}		Keshavarz et al. (2022)	Q		
	5.5×10^{-2}		Duchowicz et al. (2020)	Q		184
	9.0×10^{-2}		Hilal et al. (2008)	Q		
	2.0×10^{-1}		Modarresi et al. (2007)	Q		67
	7.4×10^{-2}		Fang Lee (2007)	Q		721
4.3×10^{-2}	Fang Lee (2007)	Q	722			
3.4×10^{-2}	Dunnivant et al. (1992)	Q				
4.3×10^{-2}	Meylan and Howard (1991)	Q				
4.2×10^{-2}	Duchowicz et al. (2020)	?	185, 21			
3,4-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-12) [2974-92-7] ZGHQYYPWMLBM-UHFFFAOYSA-N	7.0×10^{-2}	5300	Brunner et al. (1990)	M	723	
	4.8×10^{-2}		Dunnivant et al. (1988)	M		
	4.8×10^{-2}		Dunnivant and Elzerman (1988)	M		
	2.0×10^{-2}		Paasivirta and Sinkkonen (2009)	V		
	1.0×10^{-1}		Burkhard et al. (1985)	V		
	4.5×10^{-2}		Keshavarz et al. (2022)	Q		
	7.1×10^{-2}		Duchowicz et al. (2020)	Q		184
	7.7×10^{-2}		Hilal et al. (2008)	Q		
	1.1×10^{-1}		Modarresi et al. (2007)	Q		67
	4.8×10^{-2}		Fang Lee (2007)	Q		721
	4.3×10^{-2}		Fang Lee (2007)	Q		722
7.3×10^{-2}	Yaffe et al. (2003)	Q	248, 249			
4.2×10^{-2}	Dunnivant et al. (1992)	Q				
7.0×10^{-2}	Duchowicz et al. (2020)	?	185, 21			
3,4'-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-13) [2974-90-5] CJDNEKOMKXLSBN-UHFFFAOYSA-N	4.9×10^{-2}	6100	Bamford et al. (2002)	M	721	
	8.5×10^{-2}	5900	Paasivirta and Sinkkonen (2009)	V		
	8.1×10^{-2}	Burkhard et al. (1985)	V			
	9.5×10^{-2}	Hilal et al. (2008)	Q			
	3.7×10^{-2}	Fang Lee (2007)	Q	721		
	4.4×10^{-2}	Fang Lee (2007)	Q	722		
	3.9×10^{-2}	Dunnivant et al. (1992)	Q			
	3.1×10^{-2}	Sabljić and Güsten (1989)	Q			
3,5-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-14) [34883-41-5] QHZSDTDMQZPUKC-UHFFFAOYSA-N	2.7×10^{-2}	5500	Paasivirta and Sinkkonen (2009)	V	721	
	6.0×10^{-2}		Burkhard et al. (1985)	V		
	5.0×10^{-2}		Hilal et al. (2008)	Q		
	9.4×10^{-2}		Modarresi et al. (2007)	Q		67
	6.7×10^{-2}		Fang Lee (2007)	Q		721
	3.2×10^{-2}		Fang Lee (2007)	Q		722
	2.3×10^{-2}		Dunnivant et al. (1992)	Q		
2.0×10^{-2}	Sabljić and Güsten (1989)	Q				



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,4'-dichlorobiphenyl $C_{12}H_8Cl_2$ (PCB-15) [2050-68-2] YTBRNEUEFCNVHC-UHFFFAOYSA-N	7.0×10^{-2}	6000	Li et al. (2003)	L	366
	7.5×10^{-2}	6700	Li et al. (2003)	L	367
	5.0×10^{-2}		Lau et al. (2006)	M	719
	3.3×10^{-2}		Lau et al. (2006)	M	720
	3.5×10^{-2}	5300	Charles and Destailats (2005)	M	33
	1.0×10^{-1}		Fendinger and Glotfelty (1990)	M	
	5.0×10^{-2}		Dunnivant et al. (1988)	M	
	5.0×10^{-2}		Dunnivant and Elzerman (1988)	M	723
	3.3×10^{-3}	4900	Paasivirta and Sinkkonen (2009)	V	
	5.6×10^{-2}		Mackay et al. (2006b)	V	
	5.9×10^{-2}		Mackay et al. (1992a)	V	
	5.9×10^{-2}		Shiu and Mackay (1986)	V	
	9.1×10^{-2}		Burkhard et al. (1985)	V	
	1.0×10^{-1}		Chiou et al. (1980)	V	
	3.3×10^{-2}		Murphy et al. (1983b)	X	724, 24
	6.8×10^{-2}		Dunnivant et al. (1988)	C	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	184
	9.7×10^{-2}		Hilal et al. (2008)	Q	
	1.8×10^{-1}		Modarresi et al. (2007)	Q	67
2.1×10^{-2}		Fang Lee (2007)	Q	721	
4.8×10^{-2}		Fang Lee (2007)	Q	722	
4.4×10^{-2}		Dunnivant et al. (1992)	Q		
4.3×10^{-2}		Meylan and Howard (1991)	Q		
5.0×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
2,2',3-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-16) [38444-78-9] XVIZMMSINIOQP-UHFFFAOYSA-N	4.2×10^{-2}	5700	Bamford et al. (2002)	M	
	4.1×10^{-2}		Murphy et al. (1987)	M	12
	1.2×10^{-2}		Atlas et al. (1982)	M	679
	1.5×10^{-2}	5800	Paasivirta and Sinkkonen (2009)	V	
	1.3×10^{-2}		Shiu and Mackay (1986)	V	
	2.8×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	299
	5.6×10^{-2}		Hilal et al. (2008)	Q	
	6.9×10^{-2}		Modarresi et al. (2007)	Q	67
	6.1×10^{-2}		Fang Lee (2007)	Q	721
	4.4×10^{-2}		Fang Lee (2007)	Q	722
		4500	Kühne et al. (2005)	Q	
	3.9×10^{-2}		Dunnivant et al. (1992)	Q	
	3.6×10^{-2}		Sabljić and Güsten (1989)	Q	
4.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
	4700	Kühne et al. (2005)	?		



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-17) [37680-66-3] YKKYCYQDUUXNLN-UHFFFAOYSA-N	3.3×10^{-2}	4700	Bamford et al. (2002)	M	
	3.0×10^{-2}		Murphy et al. (1987)	M	12
	4.0×10^{-2}	6200	Paasivirta and Sinkkonen (2009)	V	
	1.9×10^{-2}		Burkhard et al. (1985)	V	
	3.7×10^{-2}		Hilal et al. (2008)	Q	
	3.5×10^{-2}		Fang Lee (2007)	Q	721
	3.2×10^{-2}		Fang Lee (2007)	Q	722
	2.6×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-18) [37680-65-2] DCMURXAZTZQAFB-UHFFFAOYSA-N	2.9×10^{-1}		Bhangare et al. (2019)	M	725
	9.0×10^{-2}		Bhangare et al. (2019)	M	726
	3.9×10^{-2}	4200	Bamford et al. (2000)	M	
	3.9×10^{-2}		Brunner et al. (1990)	M	
	2.6×10^{-2}		Dunnivant and Elzerman (1988)	M	
	3.3×10^{-2}		Murphy et al. (1987)	M	12
	4.9×10^{-2}		Oliver (1985)	M	
	4.9×10^{-2}		Murphy et al. (1983a)	M	24
	9.9×10^{-3}		Atlas et al. (1982)	M	679
	9.8×10^{-3}	5800	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Mackay et al. (2006b)	V	
	1.1×10^{-2}		Mackay et al. (1992a)	V	
	1.1×10^{-2}		Shiu and Mackay (1986)	V	
	1.7×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	299
	4.6×10^{-2}		Hilal et al. (2008)	Q	
	6.4×10^{-2}		Modarresi et al. (2007)	Q	67
	4.9×10^{-2}		Fang Lee (2007)	Q	721
	2,2',6-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-19) [38444-73-4] MVXIJRBBCLNLX-UHFFFAOYSA-N	3.0×10^{-2}		Fang Lee (2007)	Q
		4200	Kühne et al. (2005)	Q	
5.8×10^{-2}			Yaffe et al. (2003)	Q	248, 272
6.0×10^{-2}			English and Carroll (2001)	Q	230, 274
3.1×10^{-2}			Dunnivant et al. (1992)	Q	
3.9×10^{-2}			Duchowicz et al. (2020)	?	185, 21
		4500	Kühne et al. (2005)	?	
3.3×10^{-2}		4700	Bamford et al. (2002)	M	
2,2',6-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-19) [38444-73-4] MVXIJRBBCLNLX-UHFFFAOYSA-N	4.3×10^{-2}		Brunner et al. (1990)	M	
	3.3×10^{-2}		Murphy et al. (1987)	M	12
	4.7×10^{-2}		Murphy et al. (1983a)	M	24
	2.5×10^{-3}	5400	Paasivirta and Sinkkonen (2009)	V	
	8.0×10^{-3}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	6.0×10^{-2}		Duchowicz et al. (2020)	Q	
	5.4×10^{-2}		Hilal et al. (2008)	Q	
	6.0×10^{-2}		Modarresi et al. (2007)	Q	67
	3.0×10^{-2}		Fang Lee (2007)	Q	721



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.4×10^{-2}	3600	Fang Lee (2007)	Q	722
	2.2×10^{-2}		Kühne et al. (2005)	Q	
	2.2×10^{-2}		Dunnivant et al. (1992)	Q	
	4.3×10^{-2}		Sabljić and Güsten (1989)	Q	
			Duchowicz et al. (2020)	?	185, 21
		3100	Kühne et al. (2005)	?	
2,3,3'-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-20) [38444-84-7] SXHLTVKPNQVZGL-UHFFFAOYSA-N	1.2×10^{-2}	5800	Atlas et al. (1982)	M	679
	2.0×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-2}		Shiu and Mackay (1986)	V	
	5.8×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	299
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	8.4×10^{-2}		Modarresi et al. (2007)	Q	67
	7.6×10^{-2}		Fang Lee (2007)	Q	721
	6.5×10^{-2}		Fang Lee (2007)	Q	722
	4.5×10^{-2}	Dunnivant et al. (1992)	Q		
	3.3×10^{-2}	Sabljić and Güsten (1989)	Q		
	6.2×10^{-2}	Duchowicz et al. (2020)	?	185, 21	
2,3,4-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-21) [55702-46-0] IUYHQGMDSZOPDZ-UHFFFAOYSA-N	4.3×10^{-3}	5200	Paasivirta and Sinkkonen (2009)	V	
	6.8×10^{-2}		Burkhard et al. (1985)	V	
	7.9×10^{-2}		Hilal et al. (2008)	Q	
	5.0×10^{-2}		Fang Lee (2007)	Q	721
	5.9×10^{-2}		Fang Lee (2007)	Q	722
	4.3×10^{-2}		Dunnivant et al. (1992)	Q	
	4.7×10^{-2}	Sabljić and Güsten (1989)	Q		
2,3,4'-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-22) [38444-85-8] ZMHWQAHZKUPENF-UHFFFAOYSA-N	3.4×10^{-2}	4800	Bamford et al. (2002)	M	
	5.0×10^{-2}		Murphy et al. (1987)	M	12
	5.5×10^{-2}	5600	Murphy et al. (1983a)	M	24
	1.3×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	6.5×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	184
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	1.0×10^{-1}		Modarresi et al. (2007)	Q	67
	3.8×10^{-2}		Fang Lee (2007)	Q	721
	6.4×10^{-2}		Fang Lee (2007)	Q	722
	5.2×10^{-2}		Dunnivant et al. (1992)	Q	
	4.4×10^{-2}	Sabljić and Güsten (1989)	Q		
	7.0×10^{-2}	Duchowicz et al. (2020)	?	185, 21	



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
2,3,5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-23) [55720-44-0] GBUCDGDROYMOAN-UHFFFAOYSA-N	1.5×10^{-2}	5700	Paasivirta and Sinkkonen (2009)	V		
	3.9×10^{-2}		Burkhard et al. (1985)	V		
	6.9×10^{-2}		Fang Lee (2007)	Q	721	
	4.7×10^{-2}		Fang Lee (2007)	Q	722	
	3.1×10^{-2}		Dunnivant et al. (1992)	Q		
	2.8×10^{-2}		Sabljić and Güsten (1989)	Q		
2,3,6-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-24) [55702-45-9] LVROLHVSYNLFBE-UHFFFAOYSA-N	3.3×10^{-2}	4700	Bamford et al. (2002)	M		
	4.5×10^{-2}		Brunner et al. (1990)	M		
	3.1×10^{-2}		Murphy et al. (1987)	M	12	
	7.7×10^{-3}	5600	Paasivirta and Sinkkonen (2009)	V		
	2.3×10^{-2}		Burkhard et al. (1985)	V		
	4.5×10^{-2}		Keshavarz et al. (2022)	Q		
	5.3×10^{-2}		Duchowicz et al. (2020)	Q	299	
	4.7×10^{-2}		Hilal et al. (2008)	Q		
	8.5×10^{-2}		Modarresi et al. (2007)	Q	67	
	4.2×10^{-2}		Fang Lee (2007)	Q	721	
	4.4×10^{-2}		Fang Lee (2007)	Q	722	
			4500	Kühne et al. (2005)	Q	
	3.2×10^{-2}			Dunnivant et al. (1992)	Q	
2.9×10^{-2}	Sabljić and Güsten (1989)	Q				
	2800	Duchowicz et al. (2020)	?	185, 21		
4.5×10^{-2}		Kühne et al. (2005)	?			
2,3',4-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-25) [55712-37-3] XBBZAUFLFUPBZSP-UHFFFAOYSA-N	3.3×10^{-2}	4700	Bamford et al. (2002)	M		
	2.4×10^{-2}		Murphy et al. (1987)	M	12	
	6.2×10^{-2}		Murphy et al. (1983a)	M	24	
	2.8×10^{-2}	5900	Paasivirta and Sinkkonen (2009)	V		
	3.9×10^{-2}		Burkhard et al. (1985)	V		
	4.4×10^{-2}		Fang Lee (2007)	Q	721	
	4.5×10^{-2}		Fang Lee (2007)	Q	722	
			4800	Kühne et al. (2005)	Q	
	3.1×10^{-2}			Dunnivant et al. (1992)	Q	
	2.3×10^{-2}			Sabljić and Güsten (1989)	Q	
	5700	Kühne et al. (2005)	?			
2,3',5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-26) [38444-81-4] ONNCPBRWFBSKDMQ-UHFFFAOYSA-N	3.5×10^{-2}	4900	Bamford et al. (2002)	M		
	3.0×10^{-2}		Dunnivant et al. (1988)	M		
	3.0×10^{-2}		Dunnivant and Elzerman (1988)	M	723	
	2.9×10^{-2}	5900	Murphy et al. (1987)	M	12	
	2.2×10^{-2}		Paasivirta and Sinkkonen (2009)	V		
	3.5×10^{-2}		Burkhard et al. (1985)	V		
	4.5×10^{-2}		Keshavarz et al. (2022)	Q		
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	299	
	9.9×10^{-2}		Hilal et al. (2008)	Q		
	7.3×10^{-2}		Modarresi et al. (2007)	Q	67	
	6.1×10^{-2}		Fang Lee (2007)	Q	721	
	4.3×10^{-2}		Fang Lee (2007)	Q	722	
3.3×10^{-2}	Dunnivant et al. (1992)	Q				



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.9×10^{-2}		Meylan and Howard (1991)	Q	
	4.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21
2,3',6-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-27) [38444-76-7] VQOFJPFYCHPTR-UHFFFAOYSA-N	3.5×10^{-2}	6100	Murphy et al. (1987)	M	12
	3.1×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	2.4×10^{-2}		Burkhard et al. (1985)	V	
	3.7×10^{-2}		Fang Lee (2007)	Q	721
	4.2×10^{-2}		Fang Lee (2007)	Q	722
	2.4×10^{-2}		Dunnivant et al. (1992)	Q	
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q	
2,4,4'-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-28) [7012-37-5] BZTYNSQSZHARAZ-UHFFFAOYSA-N	3.0×10^{-2}	6300	Li et al. (2003)	L	366
	3.3×10^{-2}	6600	Li et al. (2003)	L	367
	5.9×10^{-3}		Bhangare et al. (2019)	M	725
	5.0×10^{-2}		Bhangare et al. (2019)	M	726
	2.3×10^{-2}		Lau et al. (2006)	M	719
	1.4×10^{-2}		Lau et al. (2006)	M	720
	1.8×10^{-2}	2300	Charles and Destailats (2005)	M	33
	2.6×10^{-2}	3900	Bamford et al. (2000)	M	
	3.6×10^{-2}	6100	ten Hulscher et al. (1992)	M	
	4.9×10^{-2}		Brunner et al. (1990)	M	
	3.1×10^{-2}		Dunnivant and Elzerman (1988)	M	
	3.7×10^{-2}		Murphy et al. (1987)	M	12
	6.9×10^{-2}		Brownawell (1986)	M	294
	2.7×10^{-2}	5900	Paasivirta and Sinkkonen (2009)	V	
	4.4×10^{-2}		Burkhard et al. (1985)	V	
	2.7×10^{-2}	7100	Paasivirta et al. (1999)	T	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	6.0×10^{-2}		Duchowicz et al. (2020)	Q	
	1.0×10^{-1}		Hilal et al. (2008)	Q	
	9.9×10^{-2}		Modarresi et al. (2007)	Q	67
	2.2×10^{-2}		Fang Lee (2007)	Q	721
	4.7×10^{-2}		Fang Lee (2007)	Q	722
	5.2×10^{-2}	4800	Kühne et al. (2005)	Q	
	5.2×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	3.5×10^{-2}		Dunnivant et al. (1992)	Q	
	4.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	4.9×10^{-2}	4800	Kühne et al. (2005)	?	
2,4,5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-29) [15862-07-4] VGVKVVCCUATMNG-UHFFFAOYSA-N	3.1×10^{-2}	6500	Schwardt et al. (2021)	L	1
	3.1×10^{-2}	6300	Li et al. (2003)	L	366
	3.3×10^{-2}	6700	Li et al. (2003)	L	367
	2.6×10^{-2}	4200	Bamford et al. (2000)	M	
	4.9×10^{-2}		Brunner et al. (1990)	M	
	7.7×10^{-3}	5500	Paasivirta and Sinkkonen (2009)	V	
	4.1×10^{-3}		Mackay et al. (2006b)	V	
	4.1×10^{-2}		Mackay et al. (1992a)	V	
	4.2×10^{-2}		Shiu and Mackay (1986)	V	
	3.9×10^{-2}		Burkhard et al. (1985)	V	



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.3×10^{-2}		Duchowicz et al. (2020)	Q	
	4.5×10^{-2}		Bhangare et al. (2019)	Q	
	7.9×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	67
	4.0×10^{-2}		Fang Lee (2007)	Q	721
	4.2×10^{-2}		Fang Lee (2007)	Q	722
		5100	Kühne et al. (2005)	Q	
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
	3.7×10^{-2}		Sabljić and Güsten (1989)	Q	
	4.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		4500	Kühne et al. (2005)	?	
2,4,6-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-30) [35693-92-6] MTLMVEWEYZFYTH-UHFFFAOYSA-N	1.5×10^{-2}		Dunnivant et al. (1988)	M	
	1.5×10^{-2}		Dunnivant and Elzerman (1988)	M	723
	1.0×10^{-2}		Duchowicz et al. (2020)	V	186
	8.5×10^{-3}	5600	Paasivirta and Sinkkonen (2009)	V	
	2.0×10^{-2}		Mackay et al. (2006b)	V	
	2.0×10^{-2}		Mackay et al. (1992a)	V	
	2.0×10^{-2}		Shiu and Mackay (1986)	V	
	1.6×10^{-2}		Burkhard et al. (1985)	V	
	3.5×10^{-2}		Duchowicz et al. (2020)	Q	
	2.9×10^{-2}		Hilal et al. (2008)	Q	
	2.4×10^{-2}		Fang Lee (2007)	Q	721
	2.5×10^{-2}		Fang Lee (2007)	Q	722
	1.7×10^{-2}		Dunnivant et al. (1992)	Q	
2,4',5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-31) [16606-02-3] VAHKBZSAUKPEOV-UHFFFAOYSA-N	2.7×10^{-2}	6100	Li et al. (2003)	L	366
	2.9×10^{-2}	6600	Li et al. (2003)	L	367
	3.4×10^{-2}	4900	Bamford et al. (2002)	M	
	5.2×10^{-2}		Brunner et al. (1990)	M	
	3.7×10^{-2}		Murphy et al. (1987)	M	12
	4.9×10^{-2}		Murphy et al. (1983a)	M	24
	1.1×10^{-2}		Atlas et al. (1982)	M	679
	1.3×10^{-2}	5700	Paasivirta and Sinkkonen (2009)	V	
	1.8×10^{-2}		Shiu and Mackay (1986)	V	
	3.9×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.5×10^{-2}		Duchowicz et al. (2020)	Q	
	1.0×10^{-1}		Hilal et al. (2008)	Q	
	9.1×10^{-2}		Modarresi et al. (2007)	Q	67
	3.0×10^{-2}		Fang Lee (2007)	Q	721
	4.1×10^{-2}		Fang Lee (2007)	Q	722
	3.6×10^{-2}		Dunnivant et al. (1992)	Q	
	3.5×10^{-2}		Sabljić and Güsten (1989)	Q	
	5.2×10^{-2}		Duchowicz et al. (2020)	?	185, 21



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
2,4',6-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-32) [38444-77-8] IHIDFKLAWYPTKB-UHFFFAOYSA-N	1.2×10^{-2}	5700	Paasivirta and Sinkkonen (2009)	V		
	2.7×10^{-2}		Burkhard et al. (1985)	V		
	4.5×10^{-2}		Keshavarz et al. (2022)	Q		
	6.0×10^{-2}		Duchowicz et al. (2020)	Q	299	
	7.5×10^{-2}		Hilal et al. (2008)	Q		
	6.9×10^{-2}		Modarresi et al. (2007)	Q	67	
	1.8×10^{-2}		Fang Lee (2007)	Q	721	
	4.1×10^{-2}		Fang Lee (2007)	Q	722	
	2.5×10^{-2}		Dunnivant et al. (1992)	Q		
2.4×10^{-2}	Sabljić and Güsten (1989)	Q				
4.9×10^{-2}	Duchowicz et al. (2020)	?	185, 21			
2,3',4'-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-33) [38444-86-9] RIMXLXBUQQMDHV-UHFFFAOYSA-N	3.6×10^{-2}	5100	Bamford et al. (2002)	M		
	4.4×10^{-2}		Murphy et al. (1987)	M	12	
	6.6×10^{-2}		Murphy et al. (1983a)	M	24	
	2.5×10^{-2}		Westcott et al. (1981)	M		
	1.3×10^{-2}		5600	Paasivirta and Sinkkonen (2009)	V	
				Mackay et al. (2006b)	V	683
				Mackay et al. (1992a)	V	
				Shiu and Mackay (1986)	V	
				Burkhard et al. (1985)	V	
				Keshavarz et al. (2022)	Q	
Duchowicz et al. (2020)		Q		299		
Hilal et al. (2008)		Q				
Modarresi et al. (2007)		Q		67		
Fang Lee (2007)		Q		721		
Fang Lee (2007)	Q	722				
Dunnivant et al. (1992)	Q					
Sabljić and Güsten (1989)	Q					
Duchowicz et al. (2020)	?	185, 21				
2,3',5'-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-34) [37680-68-5] GXVMAQACUOSFJF-UHFFFAOYSA-N	1.3×10^{-2}	5800	Paasivirta and Sinkkonen (2009)	V		
	3.4×10^{-2}		Burkhard et al. (1985)	V		
	4.5×10^{-2}		Keshavarz et al. (2022)	Q		
	6.0×10^{-2}		Duchowicz et al. (2020)	Q	184	
	7.3×10^{-2}		Hilal et al. (2008)	Q		
	7.1×10^{-2}		Modarresi et al. (2007)	Q	67	
	1.1×10^{-1}		Fang Lee (2007)	Q	721	
	3.9×10^{-2}		Fang Lee (2007)	Q	722	
	2.3×10^{-2}		Dunnivant et al. (1992)	Q		
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q		
	4.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21	



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3',4-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-35) [37680-69-6] JHBVPKZLIBDTJR-UHFFFAOYSA-N	1.8×10^{-2}	5600	Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-1}		Burkhard et al. (1985)	V	
	9.5×10^{-2}		Fang Lee (2007)	Q	721
	5.9×10^{-2}		Fang Lee (2007)	Q	722
	5.5×10^{-2}		Dunnivant et al. (1992)	Q	
	4.4×10^{-2}		Sabljić and Güsten (1989)	Q	
3,3',5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-36) [38444-87-0] RIBGNAJQTOXRDK-UHFFFAOYSA-N	5.8×10^{-2}	5600	Brunner et al. (1990)	M	
	1.3×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	7.2×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	6.0×10^{-2}		Duchowicz et al. (2020)	Q	299
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	8.8×10^{-2}		Modarresi et al. (2007)	Q	67
	1.3×10^{-1}		Fang Lee (2007)	Q	721
	4.7×10^{-2}		Fang Lee (2007)	Q	722
	5.8×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.9×10^{-2}		Dunnivant et al. (1992)	Q	
	1.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	5.8×10^{-2}		Duchowicz et al. (2020)	?	185, 21
3,4,4'-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-37) [38444-90-5] YZANRISAORXTHU-UHFFFAOYSA-N	9.9×10^{-2}	5400	Brunner et al. (1990)	M	
	6.5×10^{-2}		Murphy et al. (1987)	M	12
	1.2×10^{-2}		Atlas et al. (1982)	M	679
	1.3×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-2}		Shiu and Mackay (1986)	V	
	1.4×10^{-1}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	184
	1.8×10^{-1}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	67
	4.8×10^{-2}		Fang Lee (2007)	Q	721
	6.1×10^{-2}		Fang Lee (2007)	Q	722
	6.5×10^{-2}		Dunnivant et al. (1992)	Q	
6.9×10^{-2}	Sabljić and Güsten (1989)	Q			
9.9×10^{-2}	Duchowicz et al. (2020)	?	185, 21		
3,4,5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-38) [53555-66-1] BSFZSQRJGZHMV-UHFFFAOYSA-N	1.2×10^{-2}	5400	Paasivirta and Sinkkonen (2009)	V	
	1.3×10^{-1}		Burkhard et al. (1985)	V	
	8.8×10^{-2}		Fang Lee (2007)	Q	721
	5.2×10^{-2}		Fang Lee (2007)	Q	722
	4.2×10^{-2}		Dunnivant et al. (1992)	Q	
	4.8×10^{-2}		Sabljić and Güsten (1989)	Q	



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
3,4',5-trichlorobiphenyl $C_{12}H_7Cl_3$ (PCB-39) [38444-88-1] SYSBNFJJSJLZMM-UHFFFAOYSA-N	1.2×10^{-2}	5600	Paasivirta and Sinkkonen (2009)	V		
	8.0×10^{-2}		Burkhard et al. (1985)	V		
	6.6×10^{-2}		Fang Lee (2007)	Q	721	
	4.4×10^{-2}		Fang Lee (2007)	Q	722	
	3.3×10^{-2}		Dunnivant et al. (1992)	Q		
	2.3×10^{-2}		Sabljić and Güsten (1989)	Q		
2,2',3,3'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-40) [38444-93-8] VTLYHLREPCPKX-UHFFFAOYSA-N	3.6×10^{-2}	3600	Bamford et al. (2002)	M		
	9.9×10^{-2}		Brunner et al. (1990)	M		
	4.9×10^{-2}		Dunnivant et al. (1988)	M		
		4.9×10^{-2}		Dunnivant and Elzerman (1988)	M	723
		6.1×10^{-2}		Murphy et al. (1987)	M	12
		8.2×10^{-2}		Oliver (1985)	M	
		1.8×10^{-3}	5300	Paasivirta and Sinkkonen (2009)	V	
		4.6×10^{-2}		Mackay et al. (2006b)	V	
		4.6×10^{-2}		Mackay et al. (1992a)	V	
		4.5×10^{-2}		Shiu and Mackay (1986)	V	
		4.9×10^{-2}		Burkhard et al. (1985)	V	
		2.4×10^{-1}		Keshavarz et al. (2022)	Q	
		1.9×10^{-1}		Duchowicz et al. (2020)	Q	299
		1.1×10^{-1}		Hilal et al. (2008)	Q	
		6.8×10^{-2}		Modarresi et al. (2007)	Q	67
		1.2×10^{-1}		Fang Lee (2007)	Q	721
		9.7×10^{-2}		Fang Lee (2007)	Q	722
	2.3×10^{-1}	Yaffe et al. (2003)		Q	248, 272	
	6.5×10^{-2}	English and Carroll (2001)		Q	230, 231	
	5.4×10^{-2}	Dunnivant et al. (1992)		Q		
	9.9×10^{-2}	Duchowicz et al. (2020)	?	185, 21		
2,2',3,4-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-41) [52663-59-9] SEWHDNLIHDBVDZ-UHFFFAOYSA-N	4.9×10^{-2}	6200	Murphy et al. (1987)	M	12	
	1.6×10^{-2}		Paasivirta and Sinkkonen (2009)	V		
	4.2×10^{-2}		Burkhard et al. (1985)	V		
	2.4×10^{-1}		Keshavarz et al. (2022)	Q		
			Duchowicz et al. (2020)	Q	184	
			Hilal et al. (2008)	Q		
			8.7×10^{-2}	Modarresi et al. (2007)	Q	67
			7.9×10^{-2}	Fang Lee (2007)	Q	721
			7.1×10^{-2}	Fang Lee (2007)	Q	722
			4.0×10^{-2}	Dunnivant et al. (1992)	Q	
			4.8×10^{-2}	Sabljić and Güsten (1989)	Q	
	7.0×10^{-2}	Duchowicz et al. (2020)	?	185, 21		
2,2',3,4'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-42) [36559-22-5] ALFHIHDQSYXSGP-UHFFFAOYSA-N	2.8×10^{-2}	3100	Bamford et al. (2002)	M		
	5.0×10^{-2}		Murphy et al. (1987)	M	12	
		8.6×10^{-3}	5900	Paasivirta and Sinkkonen (2009)	V	
		3.4×10^{-2}		Burkhard et al. (1985)	V	
		2.4×10^{-1}		Keshavarz et al. (2022)	Q	
		1.1×10^{-1}		Duchowicz et al. (2020)	Q	299
	7.2×10^{-2}		Hilal et al. (2008)	Q		



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.1×10^{-2}		Modarresi et al. (2007)	Q	67
	6.0×10^{-2}		Fang Lee (2007)	Q	721
	6.7×10^{-2}		Fang Lee (2007)	Q	722
	3.9×10^{-2}		Dunnivant et al. (1992)	Q	
	3.1×10^{-2}		Sabljić and Güsten (1989)	Q	
	7.0×10^{-2}		Duchowicz et al. (2020)	?	185, 21
2,2',3,5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-43) [70362-46-8] NRBNBYFPJCCCKTO-UHFFFAOYSA-N	1.3×10^{-2}	6300	Paasivirta and Sinkkonen (2009)	V	
	2.4×10^{-2}		Burkhard et al. (1985)	V	
	1.1×10^{-1}		Fang Lee (2007)	Q	721
	6.1×10^{-2}		Fang Lee (2007)	Q	722
	2.9×10^{-2}		Dunnivant et al. (1992)	Q	
	2.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-44) [41464-39-5] ALDJKXAHSDLLB-UHFFFAOYSA-N	5.4×10^{-3}		Bhangare et al. (2019)	M	725
	3.4×10^{-2}		Bhangare et al. (2019)	M	726
	3.6×10^{-2}	3100	Bamford et al. (2000)	M	
	5.2×10^{-2}		Murphy et al. (1987)	M	12
	4.1×10^{-2}		Murphy et al. (1983a)	M	24
	1.3×10^{-2}		Atlas et al. (1982)	M	679
	1.1×10^{-2}	6000	Paasivirta and Sinkkonen (2009)	V	
	2.0×10^{-2}		Shiu and Mackay (1986)	V	
	3.0×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.0×10^{-1}		Duchowicz et al. (2020)	Q	184
	9.7×10^{-2}		Hilal et al. (2008)	Q	
	7.7×10^{-2}		Modarresi et al. (2007)	Q	67
	1.2×10^{-1}		Fang Lee (2007)	Q	721
	6.7×10^{-2}		Fang Lee (2007)	Q	722
		4600	Kühne et al. (2005)	Q	
	4.3×10^{-2}		Dunnivant et al. (1992)	Q	
	3.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	7.0×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		3400	Kühne et al. (2005)	?	
2,2',3,6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-45) [70362-45-7] VHGHZZTJMLTJX-UHFFFAOYSA-N	2.5×10^{-2}	2900	Bamford et al. (2002)	M	
	3.8×10^{-3}	6000	Paasivirta and Sinkkonen (2009)	V	
	9.9×10^{-3}		Burkhard et al. (1985)	V	
	6.7×10^{-2}		Fang Lee (2007)	Q	721
	5.1×10^{-2}		Fang Lee (2007)	Q	722
	2.8×10^{-2}		Dunnivant et al. (1992)	Q	
	3.1×10^{-2}		Sabljić and Güsten (1989)	Q	



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,6'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-46) [41464-47-5] CUGLICQCTXWQNF-UHFFFAOYSA-N	3.0×10^{-2}	3400	Bamford et al. (2002)	M	
	3.8×10^{-2}		Murphy et al. (1987)	M	12
	9.1×10^{-4}	5300	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-2}		Burkhard et al. (1985)	V	
	6.7×10^{-2}		Fang Lee (2007)	Q	721
	5.7×10^{-2}		Fang Lee (2007)	Q	722
	2.9×10^{-2}		Dunnivant et al. (1992)	Q	
	2.7×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',4,4'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-47) [2437-79-8] QORAVNMWUNPXAO-UHFFFAOYSA-N	2.1×10^{-1}		Lau et al. (2006)	M	719
	9.1×10^{-3}		Lau et al. (2006)	M	720
	1.8×10^{-1}	-6000	Charles and Destailats (2005)	M	
	5.2×10^{-2}		Brunner et al. (1990)	M	
	2.0×10^{-2}	6200	Paasivirta and Sinkkonen (2009)	V	
	5.7×10^{-2}		Mackay et al. (2006b)	V	
	5.8×10^{-2}		Mackay et al. (1992a)	V	
	2.0×10^{-3}		Hwang et al. (1992)	V	
	5.9×10^{-2}		Shiu and Mackay (1986)	V	
	2.3×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	6.6×10^{-2}		Duchowicz et al. (2020)	Q	299
	5.0×10^{-2}		Hilal et al. (2008)	Q	
	8.2×10^{-2}		Modarresi et al. (2007)	Q	67
	3.5×10^{-2}		Fang Lee (2007)	Q	721
4.8×10^{-2}		Fang Lee (2007)	Q	722	
2.7×10^{-2}		Dunnivant et al. (1992)	Q		
2.2×10^{-2}		Sabljić and Güsten (1989)	Q		
5.2×10^{-2}		Duchowicz et al. (2020)	?	185, 21	
2,2',4,5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-48) [70362-47-9] XBTHILIDLBRPM-UHFFFAOYSA-N	2.7×10^{-2}	3000	Bamford et al. (2002)	M	
	3.9×10^{-2}		Murphy et al. (1987)	M	12
	6.1×10^{-3}	6100	Paasivirta and Sinkkonen (2009)	V	
	2.5×10^{-2}		Burkhard et al. (1985)	V	
	6.3×10^{-2}		Fang Lee (2007)	Q	721
	5.3×10^{-2}		Fang Lee (2007)	Q	722
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
3.8×10^{-2}		Sabljić and Güsten (1989)	Q		
2,2',4,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-49) [41464-40-8] ZWPVHELAQPIZHO-UHFFFAOYSA-N	2.7×10^{-2}	3000	Bamford et al. (2002)	M	
	3.6×10^{-2}		Murphy et al. (1987)	M	12
	4.9×10^{-2}		Murphy et al. (1983a)	M	24
	8.3×10^{-3}	5900	Paasivirta and Sinkkonen (2009)	V	
	5.0×10^{-2}		Shiu and Mackay (1986)	V	
	2.1×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	6.1×10^{-2}		Duchowicz et al. (2020)	Q	299
	6.1×10^{-2}		Hilal et al. (2008)	Q	
	7.6×10^{-2}		Modarresi et al. (2007)	Q	67
7.0×10^{-2}		Fang Lee (2007)	Q	721	



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.5×10^{-2}		Fang Lee (2007)	Q	722
	2.8×10^{-2}		Dunnivant et al. (1992)	Q	
	2.6×10^{-2}		Sabljić and Güsten (1989)	Q	
	4.7×10^{-2}		Duchowicz et al. (2020)	?	185, 21
2,2',4,6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-50) [62796-65-0] VLLVVZDKBSYMGU-UHFFFAOYSA-N	1.6×10^{-2}	2900	Bamford et al. (2000)	M	
	1.3×10^{-2}		Atlas et al. (1982)	M	679
	9.9×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	1.3×10^{-2}		Shiu and Mackay (1986)	V	
	7.3×10^{-3}		Burkhard et al. (1985)	V	
	3.1×10^{-2}		Bhangare et al. (2019)	Q	
	3.9×10^{-2}		Fang Lee (2007)	Q	721
	2.8×10^{-2}		Fang Lee (2007)	Q	722
		3600	Kühne et al. (2005)	Q	
	1.6×10^{-2}		Dunnivant et al. (1992)	Q	
	1.7×10^{-2}		Sabljić and Güsten (1989)	Q	
		3100	Kühne et al. (2005)	?	
2,2',4,6'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-51) [68194-04-7] WVHNUGRFECMVLQ-UHFFFAOYSA-N	2.5×10^{-2}	6300	Paasivirta and Sinkkonen (2009)	V	
	9.9×10^{-3}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	6.6×10^{-2}		Duchowicz et al. (2020)	Q	184
	7.3×10^{-2}		Hilal et al. (2008)	Q	
	5.9×10^{-2}		Modarresi et al. (2007)	Q	67
	3.8×10^{-2}		Fang Lee (2007)	Q	721
	4.0×10^{-2}		Fang Lee (2007)	Q	722
	1.9×10^{-2}		Dunnivant et al. (1992)	Q	
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q	
	7.0×10^{-2}		Duchowicz et al. (2020)	?	185, 21
2,2',5,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-52) [35693-99-3] HCWZEPKLVWAEQV-UHFFFAOYSA-N	3.5×10^{-2}	6600	Li et al. (2003)	L	366
	4.0×10^{-2}	6800	Li et al. (2003)	L	367
	4.9×10^{-3}		Bhangare et al. (2019)	M	725
	2.9×10^{-2}		Bhangare et al. (2019)	M	726
	3.2×10^{-2}	3700	Bamford et al. (2000)	M	
	4.2×10^{-2}	6200	ten Hulscher et al. (1992)	M	
	4.9×10^{-2}		Brunner et al. (1990)	M	
	2.9×10^{-2}		Dunnivant et al. (1988)	M	
	2.9×10^{-2}		Dunnivant and Elzerman (1988)	M	723
	4.1×10^{-2}		Murphy et al. (1987)	M	12
	8.2×10^{-2}		Oliver (1985)	M	
	4.5×10^{-2}		Murphy et al. (1983a)	M	24
	1.1×10^{-2}		Atlas et al. (1982)	M	679
			Westcott et al. (1981)	M	727
	3.7×10^{-3}	5700	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-2}		Mackay et al. (2006b)	V	
	2.1×10^{-2}		Mackay et al. (1992a)	V	
	1.2×10^{-1}		McLachlan et al. (1990)	V	373
	2.1×10^{-2}		Shiu and Mackay (1986)	V	



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.9×10^{-2}		Burkhard et al. (1985)	V	
	1.2×10^{-2}	7700	Paasivirta et al. (1999)	T	
	3.8×10^{-2}		Murphy et al. (1983b)	X	724, 24
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	5.6×10^{-2}		Duchowicz et al. (2020)	Q	184
	7.9×10^{-2}		Hilal et al. (2008)	Q	
	6.5×10^{-2}		Modarresi et al. (2007)	Q	67
	9.7×10^{-2}		Fang Lee (2007)	Q	721
	4.6×10^{-2}		Fang Lee (2007)	Q	722
		4200	Kühne et al. (2005)	Q	
	3.1×10^{-2}		Dunnivant et al. (1992)	Q	
	4.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21
		4900	Kühne et al. (2005)	?	
2,2',5,6'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-53) [41464-41-9] SFTUSTXGTCCSHX-UHFFFAOYSA-N	2.4×10^{-2}		Dunnivant et al. (1988)	M	
	2.4×10^{-2}		Dunnivant and Elzerman (1988)	M	723
	3.5×10^{-2}		Murphy et al. (1987)	M	12
	3.3×10^{-2}		Murphy et al. (1983a)	M	24
	5.4×10^{-2}		Duchowicz et al. (2020)	V	186
	1.6×10^{-3}	5500	Paasivirta and Sinkkonen (2009)	V	
	3.3×10^{-2}		Shiu and Mackay (1986)	V	
	8.9×10^{-3}		Burkhard et al. (1985)	V	
	6.1×10^{-2}		Duchowicz et al. (2020)	Q	
	8.8×10^{-2}		Hilal et al. (2008)	Q	
	5.9×10^{-2}		Modarresi et al. (2007)	Q	67
	5.3×10^{-2}		Fang Lee (2007)	Q	721
	4.1×10^{-2}		Fang Lee (2007)	Q	722
	2.3×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',6,6'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-54) [15968-05-5] PXAGFNRKXSYIHU-UHFFFAOYSA-N	4.9×10^{-2}		Brunner et al. (1990)	M	
	1.8×10^{-2}		Dunnivant et al. (1988)	M	
	1.8×10^{-2}		Dunnivant and Elzerman (1988)	M	723
	1.0×10^{-4}	4800	Paasivirta and Sinkkonen (2009)	V	
	5.3×10^{-3}		Burkhard et al. (1985)	V	
	6.7×10^{-2}		Dunnivant et al. (1988)	C	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	6.6×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	6.5×10^{-2}		Modarresi et al. (2007)	Q	67
	3.3×10^{-2}		Fang Lee (2007)	Q	721
	2.7×10^{-2}		Fang Lee (2007)	Q	722
	5.2×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.7×10^{-2}		Dunnivant et al. (1992)	Q	
	4.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-55) [74338-24-2] ZKGSEEWIVLAUNH-UHFFFAOYSA-N	9.6×10^{-3}	5900	Paasivirta and Sinkkonen (2009)	V	
	8.7×10^{-2}		Burkhard et al. (1985)	V	
	9.9×10^{-2}		Fang Lee (2007)	Q	721
	9.3×10^{-2}		Fang Lee (2007)	Q	722
	5.4×10^{-2}		Dunnivant et al. (1992)	Q	
	4.3×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,3',4'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-56) [41464-43-1] UNCGJRRROFURDV-UHFFFAOYSA-N	3.8×10^{-2}	3800	Bamford et al. (2002)	M	
	6.1×10^{-2}		Murphy et al. (1987)	M	12
	4.9×10^{-3}	5400	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-1}		Burkhard et al. (1985)	V	
	7.5×10^{-2}		Fang Lee (2007)	Q	721
	9.7×10^{-2}		Fang Lee (2007)	Q	722
	6.5×10^{-2}		Dunnivant et al. (1992)	Q	
	7.5×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,3',5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-57) [70424-67-8] DHDBTLFALXRTLBUHFFFAOYSA-N	8.9×10^{-3}	6100	Paasivirta and Sinkkonen (2009)	V	
	5.1×10^{-2}		Burkhard et al. (1985)	V	
	1.4×10^{-1}		Fang Lee (2007)	Q	721
	7.8×10^{-2}		Fang Lee (2007)	Q	722
	3.6×10^{-2}		Dunnivant et al. (1992)	Q	
	2.7×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,3',5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-58) [41464-49-7] IOPBNBSKOPJKEG-UHFFFAOYSA-N	2.3×10^{-3}	5400	Paasivirta and Sinkkonen (2009)	V	
	6.2×10^{-2}		Burkhard et al. (1985)	V	
	1.5×10^{-1}		Fang Lee (2007)	Q	721
	8.1×10^{-2}		Fang Lee (2007)	Q	722
	3.9×10^{-2}		Dunnivant et al. (1992)	Q	
	2.4×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,3',6'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-59) [74472-33-6] WZNAMGYIQPAXDH-UHFFFAOYSA-N	4.4×10^{-2}	6600	Paasivirta and Sinkkonen (2009)	V	
	2.9×10^{-2}		Burkhard et al. (1985)	V	
	8.3×10^{-2}		Fang Lee (2007)	Q	721
	8.3×10^{-2}		Fang Lee (2007)	Q	722
	3.2×10^{-2}		Dunnivant et al. (1992)	Q	
	2.7×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,4,4'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-60) [33025-41-1] XLBTRJJKLKYTC-UHFFFAOYSA-N	6.1×10^{-2}	5500	Murphy et al. (1987)	M	12
	1.2×10^{-2}		Atlas et al. (1982)	M	679
	2.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	9.7×10^{-2}		Burkhard et al. (1985)	V	
	4.9×10^{-2}		Fang Lee (2007)	Q	721
	9.2×10^{-2}		Fang Lee (2007)	Q	722
	6.5×10^{-2}		Dunnivant et al. (1992)	Q	
6.5×10^{-2}	Sabljić and Güsten (1989)	Q			



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
2,3,4,5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-61) [33284-53-6] HLQDGCWIOSMDP-UHFFFAOYSA-N	4.9×10^{-2}	6600	Li et al. (2003)	L	366	
	5.0×10^{-2}	7200	Li et al. (2003)	L	367	
	9.6×10^{-3}		Duchowicz et al. (2020)	V	186	
	4.9×10^{-3}	5600	Paasivirta and Sinkkonen (2009)	V		
	8.7×10^{-2}		Burkhard et al. (1985)	V		
	9.6×10^{-2}		Duchowicz et al. (2020)	Q		
	9.0×10^{-2}		Fang Lee (2007)	Q	721	
	8.4×10^{-2}		Fang Lee (2007)	Q	722	
2,3,4,6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-62) [54230-22-7] HOBRTVXSIVSXIA-UHFFFAOYSA-N	4.7×10^{-2}		Brunner et al. (1990)	M		
	7.1×10^{-3}	6000	Paasivirta and Sinkkonen (2009)	V		
	3.3×10^{-2}		Burkhard et al. (1985)	V		
	4.5×10^{-2}		Keshavarz et al. (2022)	Q		
	5.7×10^{-2}		Duchowicz et al. (2020)	Q	299	
	4.0×10^{-2}		Hilal et al. (2008)	Q		
	1.8×10^{-1}		Modarresi et al. (2007)	Q	67	
	5.5×10^{-2}		Fang Lee (2007)	Q	721	
	6.4×10^{-2}		Fang Lee (2007)	Q	722	
	2.7×10^{-2}		Dunnivant et al. (1992)	Q		
2,3,4',5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-63) [74472-34-7] CITMYAMXIZQCJD-UHFFFAOYSA-N	2.5×10^{-2}	3000	Bamford et al. (2002)	M		
	3.4×10^{-2}		Murphy et al. (1987)	M	12	
	9.4×10^{-3}	6100	Paasivirta and Sinkkonen (2009)	V		
	5.6×10^{-2}		Burkhard et al. (1985)	V		
	6.8×10^{-2}		Fang Lee (2007)	Q	721	
	7.1×10^{-2}		Fang Lee (2007)	Q	722	
	4.1×10^{-2}		Dunnivant et al. (1992)	Q		
	3.4×10^{-2}		Sabljić and Güsten (1989)	Q		
	2,3,4',6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-64) [52663-58-8] FXRXQYZZALWWGA-UHFFFAOYSA-N	2.5×10^{-2}	2900	Bamford et al. (2002)	M	
		5.8×10^{-2}		Murphy et al. (1987)	M	12
7.9×10^{-3}		6000	Paasivirta and Sinkkonen (2009)	V		
3.2×10^{-2}			Burkhard et al. (1985)	V		
4.5×10^{-2}			Keshavarz et al. (2022)	Q		
7.7×10^{-2}			Duchowicz et al. (2020)	Q	299	
1.1×10^{-1}			Hilal et al. (2008)	Q		
1.3×10^{-1}			Modarresi et al. (2007)	Q	67	
4.2×10^{-2}			Fang Lee (2007)	Q	721	
7.7×10^{-2}			Fang Lee (2007)	Q	722	
3.6×10^{-2}			Dunnivant et al. (1992)	Q		
3.5×10^{-2}			Sabljić and Güsten (1989)	Q		
7.0×10^{-2}		Duchowicz et al. (2020)	?	185, 21		



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
2,3,5,6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-65) [33284-54-7] BLAYIQLVUNIICD-UHFFFAOYSA-N	4.9×10^{-3}	5800	Paasivirta and Sinkkonen (2009)	V		
	3.7×10^{-2}		Burkhard et al. (1985)	V		
	5.3×10^{-2}		Hilal et al. (2008)	Q		
	1.4×10^{-1}		Modarresi et al. (2007)	Q	67	
	7.6×10^{-2}		Fang Lee (2007)	Q	721	
	9.9×10^{-2}		Fang Lee (2007)	Q	722	
	2.9×10^{-2}		Dunnivant et al. (1992)	Q		
	3.2×10^{-2}	Sabljić and Güsten (1989)	Q			
2,3',4,4'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-66) [32598-10-0] RKLLTAEZIJBAU-UHFFFAOYSA-N	2.7×10^{-2}	3500	Bamford et al. (2000)	M		
	4.9×10^{-2}		Murphy et al. (1987)	M	12	
	3.0×10^{-3}	5300	Paasivirta and Sinkkonen (2009)	V		
	1.2×10^{-2}		Shiu and Mackay (1986)	V		
	7.3×10^{-2}		Burkhard et al. (1985)	V		
	2.4×10^{-1}		Keshavarz et al. (2022)	Q		
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	299	
	2.9×10^{-2}		Bhangare et al. (2019)	Q		
	2.1×10^{-1}		Hilal et al. (2008)	Q		
	8.5×10^{-2}		Modarresi et al. (2007)	Q	67	
	4.3×10^{-2}		Fang Lee (2007)	Q	721	
	6.8×10^{-2}		Fang Lee (2007)	Q	722	
			5200	Kühne et al. (2005)	Q	
	4.9×10^{-2}			Dunnivant et al. (1992)	Q	
3.9×10^{-2}	Sabljić and Güsten (1989)			Q		
	3800	Duchowicz et al. (2020)	?	185, 21		
8.2×10^{-2}		Kühne et al. (2005)	?			
2,3',4,5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-67) [73575-53-8] LQEGJNOKOZHBBZ-UHFFFAOYSA-N	9.9×10^{-2}	6200	Brunner et al. (1990)	M		
	1.6×10^{-2}		Paasivirta and Sinkkonen (2009)	V		
	5.2×10^{-2}		Burkhard et al. (1985)	V		
	4.5×10^{-2}		Keshavarz et al. (2022)	Q		
	7.7×10^{-2}		Duchowicz et al. (2020)	Q	299	
	1.9×10^{-1}		Hilal et al. (2008)	Q		
	1.2×10^{-1}		Modarresi et al. (2007)	Q	67	
	7.9×10^{-2}		Fang Lee (2007)	Q	721	
	6.8×10^{-2}		Fang Lee (2007)	Q	722	
	4.2×10^{-2}		Dunnivant et al. (1992)	Q		
3.4×10^{-2}	Sabljić and Güsten (1989)	Q				
		Duchowicz et al. (2020)	?	185, 21		
2,3',4,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-68) [73575-52-7] KTTXLLZIBIDUCR-UHFFFAOYSA-N	7.2×10^{-3}	5800	Paasivirta and Sinkkonen (2009)	V		
	4.3×10^{-2}		Burkhard et al. (1985)	V		
	8.7×10^{-2}		Fang Lee (2007)	Q	721	
	5.2×10^{-2}		Fang Lee (2007)	Q	722	
	2.6×10^{-2}		Dunnivant et al. (1992)	Q		
	1.8×10^{-2}		Sabljić and Güsten (1989)	Q		



Rolf Sander: Compilation of Henry's law constants

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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4,6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-69) [60233-24-1] CKUBKYSLNCKBOI-UHFFFAOYSA-N	1.9×10^{-2}	6500	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	5.0×10^{-2}		Duchowicz et al. (2020)	Q	
	7.9×10^{-2}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	67
	4.8×10^{-2}		Fang Lee (2007)	Q	721
	4.5×10^{-2}		Fang Lee (2007)	Q	722
	2.0×10^{-2}		Dunnivant et al. (1992)	Q	
1.6×10^{-2}	Sabljić and Güsten (1989)	Q			
4.7×10^{-2}	Duchowicz et al. (2020)	?	185, 21		
2,3',4',5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-70) [32598-11-1] KENZYIHFBRWMOD-UHFFFAOYSA-N	3.3×10^{-2}	3500	Bamford et al. (2002)	M	
	9.9×10^{-2}		Brunner et al. (1990)	M	
	5.2×10^{-2}		Murphy et al. (1987)	M	12
	1.1×10^{-1}	5400	Brownawell (1986)	M	294
	4.9×10^{-2}		Murphy et al. (1983a)	M	24
	4.0×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	5.0×10^{-2}	Shiu and Mackay (1986)	V		
	6.5×10^{-2}	Burkhard et al. (1985)	V		
	2.4×10^{-1}	Keshavarz et al. (2022)	Q		
	1.0×10^{-1}	Duchowicz et al. (2020)	Q	299	
	2.0×10^{-1}	Hilal et al. (2008)	Q		
	7.2×10^{-2}	Modarresi et al. (2007)	Q	67	
	6.0×10^{-2}	Fang Lee (2007)	Q	721	
	6.4×10^{-2}	Fang Lee (2007)	Q	722	
	4.9×10^{-2}	Dunnivant et al. (1992)	Q		
5.2×10^{-2}	Sabljić and Güsten (1989)	Q			
9.9×10^{-2}	Duchowicz et al. (2020)	?	185, 21		
2,3',4',6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-71) [41464-46-4] WYVBETQIUHPLFO-UHFFFAOYSA-N	1.8×10^{-2}	6000	Paasivirta and Sinkkonen (2009)	V	
	4.4×10^{-2}		Burkhard et al. (1985)	V	
	3.6×10^{-2}		Fang Lee (2007)	Q	721
	7.0×10^{-2}		Fang Lee (2007)	Q	722
	3.1×10^{-2}		Dunnivant et al. (1992)	Q	
	3.1×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3',5,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-72) [41464-42-0] WBTMFEPLVQOWFI-UHFFFAOYSA-N	4.0×10^{-3}	5700	Paasivirta and Sinkkonen (2009)	V	
	3.9×10^{-2}		Burkhard et al. (1985)	V	
	1.2×10^{-1}		Fang Lee (2007)	Q	721
	5.3×10^{-2}		Fang Lee (2007)	Q	722
	2.7×10^{-2}		Dunnivant et al. (1992)	Q	
	2.1×10^{-2}		Sabljić and Güsten (1989)	Q	



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',5',6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-73) [74338-23-1] HDULUCZRGGWMTZ-UHFFFAOYSA-N	6.4×10^{-3}	5900	Paasivirta and Sinkkonen (2009)	V	
	2.6×10^{-2}		Burkhard et al. (1985)	V	
	7.4×10^{-2}		Fang Lee (2007)	Q	721
	6.0×10^{-2}		Fang Lee (2007)	Q	722
	1.9×10^{-2}		Dunnivant et al. (1992)	Q	
	1.6×10^{-2}		Sabljić and Güsten (1989)	Q	
2,4,4',5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-74) [32690-93-0] TULCXSBAHCWCF-UHFFFAOYSA-N	2.6×10^{-2}	3000	Bamford et al. (2002)	M	
	9.9×10^{-2}		Brunner et al. (1990)	M	
	4.7×10^{-2}		Murphy et al. (1987)	M	12
	4.8×10^{-3}	5800	Paasivirta and Sinkkonen (2009)	V	
	5.8×10^{-2}		Burkhard et al. (1985)	V	
	4.5×10^{-2}		Keshavarz et al. (2022)	Q	
	7.7×10^{-2}		Duchowicz et al. (2020)	Q	184
	2.0×10^{-1}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	67
	3.9×10^{-2}		Fang Lee (2007)	Q	721
	6.5×10^{-2}		Fang Lee (2007)	Q	722
	4.6×10^{-2}		Dunnivant et al. (1992)	Q	
	4.7×10^{-2}		Sabljić and Güsten (1989)	Q	
9.9×10^{-2}	Duchowicz et al. (2020)	?	185, 21		
2,4,4',6-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-75) [32598-12-2] RZFZBHKDGHISHS-UHFFFAOYSA-N	2.1×10^{-2}	6400	Paasivirta and Sinkkonen (2009)	V	
	2.4×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-2}		Fang Lee (2007)	Q	721
	4.4×10^{-2}		Fang Lee (2007)	Q	722
	2.1×10^{-2}		Dunnivant et al. (1992)	Q	
	1.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3',4',5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-76) [70362-48-0] QILUYCYPNYWML-UHFFFAOYSA-N	7.7×10^{-2}	5500	Murphy et al. (1987)	M	12
	2.3×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	8.2×10^{-2}		Burkhard et al. (1985)	V	
	1.4×10^{-1}		Fang Lee (2007)	Q	721
	7.0×10^{-2}		Fang Lee (2007)	Q	722
	4.1×10^{-2}		Dunnivant et al. (1992)	Q	
	4.4×10^{-2}		Sabljić and Güsten (1989)	Q	
3,3',4,4'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-77) [32598-13-3] UQMGJOKDKQLIDP-UHFFFAOYSA-N	1.2×10^{-2}	13000	Bhangare et al. (2019)	M	725
	7.1×10^{-2}		Bhangare et al. (2019)	M	726
	3.1×10^{-2}		Lau et al. (2006)	M	719
	1.8×10^{-2}		Lau et al. (2006)	M	720
	9.1×10^{-2}		Fang et al. (2006)	M	
	2.9×10^{-2}		Charles and Destailats (2005)	M	33
	6.2×10^{-2}		Bamford et al. (2000)	M	
	1.0×10^{-1}		Dunnivant et al. (1988)	M	
	1.0×10^{-1}		Dunnivant and Elzerman (1988)	M	723
	6.0×10^{-4}		Paasivirta and Sinkkonen (2009)	V	
	5.8×10^{-2}		Mackay et al. (2006b)	V	
5.8×10^{-1}	Mackay et al. (1992a)	V			



Rolf Sander: Compilation of Henry's law constants

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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.9×10^{-1}	7400	Shiu and Mackay (1986)	V	
	2.3×10^{-1}		Burkhard et al. (1985)	V	
	8.3×10^{-3}		Paasivirta et al. (1999)	T	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.9×10^{-1}		Duchowicz et al. (2020)	Q	
	3.6×10^{-1}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	67
	9.4×10^{-2}		Fang Lee (2007)	Q	721
	8.0×10^{-2}		Fang Lee (2007)	Q	722
			6100	Kühne et al. (2005)	Q
	9.6×10^{-2}	Dunnivant et al. (1992)	Q		
	7.9×10^{-2}	Meylan and Howard (1991)	Q		
	1.0	Duchowicz et al. (2020)	?	185, 21	
		5600	Kühne et al. (2005)	?	
3,3',4,5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-78) [70362-49-1] SXFLURRQRFBNN-UHFFFAOYSA-N	5.1×10^{-3}	5600	Paasivirta and Sinkkonen (2009)	V	
	1.7×10^{-1}		Burkhard et al. (1985)	V	
	1.7×10^{-1}		Fang Lee (2007)	Q	721
	7.5×10^{-2}		Fang Lee (2007)	Q	722
	6.0×10^{-2}		Dunnivant et al. (1992)	Q	
	4.4×10^{-2}	Sabljić and Güsten (1989)	Q		
3,3',4,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-79) [41464-48-6] QLCTXEMDCZGPCG-UHFFFAOYSA-N	3.8×10^{-3}	5400	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-1}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	299
	2.5×10^{-1}		Hilal et al. (2008)	Q	
	8.2×10^{-2}		Modarresi et al. (2007)	Q	67
	1.9×10^{-1}		Fang Lee (2007)	Q	721
	6.3×10^{-2}		Fang Lee (2007)	Q	722
	5.0×10^{-2}		Dunnivant et al. (1992)	Q	
	2.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	1.1×10^{-1}	Duchowicz et al. (2020)	?	185, 21	
3,3',5,5'-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-80) [33284-52-5] UTMWFJSRHLRYPY-UHFFFAOYSA-N	9.4×10^{-4}	5100	Paasivirta and Sinkkonen (2009)	V	
	8.0×10^{-2}		Burkhard et al. (1985)	V	
	2.6×10^{-1}		Fang Lee (2007)	Q	721
	5.2×10^{-2}		Fang Lee (2007)	Q	722
	2.6×10^{-2}		Dunnivant et al. (1992)	Q	
	1.6×10^{-2}	Sabljić and Güsten (1989)	Q		
3,4,4',5-tetrachlorobiphenyl $C_{12}H_6Cl_4$ (PCB-81) [70362-50-4] BHWVLZJTVIYLIV-UHFFFAOYSA-N	8.8×10^{-2}	4000	Fang et al. (2006)	M	
	4.1×10^{-2}		Bamford et al. (2002)	M	
	2.0×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.9×10^{-1}		Burkhard et al. (1985)	V	
	8.6×10^{-2}		Fang Lee (2007)	Q	721
	7.2×10^{-2}		Fang Lee (2007)	Q	722
	6.9×10^{-2}		Dunnivant et al. (1992)	Q	
	6.7×10^{-2}	Sabljić and Güsten (1989)	Q		



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-82) [52663-62-4] AUGNBQPSMWGAJE-UHFFFAOYSA-N	2.7×10^{-2}	5100	Bamford et al. (2002)	M	
	8.4×10^{-2}		Murphy et al. (1987)	M	12
	4.9×10^{-2}	5800	Murphy et al. (1983a)	M	24
	3.2×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	5.0×10^{-2}		Shiu and Mackay (1986)	V	
	8.0×10^{-2}		Burkhard et al. (1985)	V	
	1.6×10^{-1}		Fang Lee (2007)	Q	721
	1.5×10^{-1}		Fang Lee (2007)	Q	722
6.7×10^{-2}	Dunnivant et al. (1992)	Q			
8.1×10^{-2}	Sabljić and Güsten (1989)	Q			
2,2',3,3',5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-83) [60145-20-2] SUBRHHYLRGOTHL-UHFFFAOYSA-N	2.3×10^{-2}	3600	Bamford et al. (2002)	M	
	6.0×10^{-2}		Murphy et al. (1987)	M	12
	7.7×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	4.7×10^{-2}		Burkhard et al. (1985)	V	
	2.2×10^{-1}		Fang Lee (2007)	Q	721
	1.4×10^{-1}		Fang Lee (2007)	Q	722
	4.7×10^{-2}		Dunnivant et al. (1992)	Q	
	3.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,3',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-84) [52663-60-2] QVWUJLANSKRAH-UHFFFAOYSA-N	5.7×10^{-2}	6000	Murphy et al. (1987)	M	12
	2.3×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.9×10^{-2}	6600	Burkhard et al. (1985)	V	
	1.3×10^{-1}		Fang Lee (2007)	Q	721
	1.2×10^{-1}		Fang Lee (2007)	Q	722
	3.9×10^{-2}		Dunnivant et al. (1992)	Q	
	4.3×10^{-2}		Sabljić and Güsten (1989)	Q	
	2,2',3,4,4'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-85) [65510-45-4] LACXVZHJMVESG-UHFFFAOYSA-N		2.3×10^{-2}	3100	Bamford et al. (2002)
1.5×10^{-1}		Brunner et al. (1990)	M		
6.0×10^{-2}		6600	Murphy et al. (1987)	M	12
2.8×10^{-2}			Paasivirta and Sinkkonen (2009)	V	
5.6×10^{-2}			Burkhard et al. (1985)	V	
2.4×10^{-1}			Keshavarz et al. (2022)	Q	
1.6×10^{-1}			Duchowicz et al. (2020)	Q	
9.2×10^{-2}			Hilal et al. (2008)	Q	
1.2×10^{-1}			Modarresi et al. (2007)	Q	67
7.8×10^{-2}			Fang Lee (2007)	Q	721
1.1×10^{-1}			Fang Lee (2007)	Q	722
5.1×10^{-2}			Dunnivant et al. (1992)	Q	
4.0×10^{-2}			Sabljić and Güsten (1989)	Q	
1.5×10^{-1}			Duchowicz et al. (2020)	?	185, 21



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
2,2',3,4,5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-86) [55312-69-1] AIURIRUDHVDRFQ-UHFFFAOYSA-N	3.2×10^{-3}	6500	Duchowicz et al. (2020)	V	186	
	8.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V		
	6.6×10^{-3}		Mackay et al. (2006b)	V		
	6.6×10^{-3}		Mackay et al. (1992a)	V		
	6.6×10^{-3}		Shiu and Mackay (1986)	V		
	1.2×10^{-2}		Burkhard et al. (1985)	V		
	1.4×10^{-1}		Duchowicz et al. (2020)	Q		
	7.5×10^{-2}		Hilal et al. (2008)	Q		
	1.4×10^{-1}		Fang Lee (2007)	Q		721
	1.2×10^{-1}		Fang Lee (2007)	Q		722
2,2',3,4,5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-87) [38380-02-8] OPKYDBFRKPCBS-UHFFFAOYSA-N	2.7×10^{-2}	3900	Bamford et al. (2000)	M		
	7.8×10^{-2}		Murphy et al. (1987)	M		
	1.4×10^{-1}		Brownawell (1986)	M		12
	3.0×10^{-2}	6000	Murphy et al. (1983a)	M		294
	4.1×10^{-3}		Paasivirta and Sinkkonen (2009)	V		
	4.0×10^{-2}		Mackay et al. (2006b)	V		
	4.0×10^{-2}		Mackay et al. (1992a)	V		
	4.0×10^{-2}		Shiu and Mackay (1986)	V		
	5.0×10^{-2}		Burkhard et al. (1985)	V		
	2.4×10^{-1}		Keshavarz et al. (2022)	Q		
	1.5×10^{-1}		Duchowicz et al. (2020)	Q		299
	2.3×10^{-2}		Bhangare et al. (2019)	Q		
	1.2×10^{-1}		Hilal et al. (2008)	Q		
	1.6×10^{-1}		Fang Lee (2007)	Q		721
	1.0×10^{-1}		Fang Lee (2007)	Q		722
5.4×10^{-2}	5000	Kühne et al. (2005)	Q			
5.4×10^{-2}		Dunnivant et al. (1992)	Q			
5.5×10^{-2}		Sabljić and Güsten (1989)	Q			
1.3×10^{-1}	4200	Duchowicz et al. (2020)	?	185, 21		
		Kühne et al. (2005)	?			
2,2',3,4,6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-88) [55215-17-3] QGDKRLQLFUJPP-UHFFFAOYSA-N	9.6×10^{-3}	6800	Paasivirta and Sinkkonen (2009)	V		
	7.3×10^{-3}		Burkhard et al. (1985)	V		
	1.2×10^{-1}		Fang Lee (2007)	Q		721
	7.8×10^{-2}		Fang Lee (2007)	Q		722
	2.6×10^{-2}		Dunnivant et al. (1992)	Q		
	2.9×10^{-2}		Sabljić and Güsten (1989)	Q		
2,2',3,4,6'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-89) [73575-57-2] GLOOIONSKMZYQZ-UHFFFAOYSA-N	2.2×10^{-2}	2500	Bamford et al. (2002)	M		
	4.3×10^{-3}		6100	Paasivirta and Sinkkonen (2009)		V
	2.4×10^{-2}	Burkhard et al. (1985)		V		
	8.7×10^{-2}	Fang Lee (2007)		Q		721
	9.8×10^{-2}	Fang Lee (2007)		Q		722
	3.3×10^{-2}	Dunnivant et al. (1992)		Q		
3.4×10^{-2}	Sabljić and Güsten (1989)	Q				



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4',5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-90) [68194-07-0] SUOAMBOBSWRMNQ-UHFFFAOYSA-N	2.1×10^{-2}	6600	Paasivirta and Sinkkonen (2009)	V	
	3.3×10^{-2}		Burkhard et al. (1985)	V	
	1.1×10^{-1}		Fang Lee (2007)	Q	721
	8.8×10^{-2}		Fang Lee (2007)	Q	722
	3.4×10^{-2}		Dunnivant et al. (1992)	Q	
	2.6×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-91) [68194-05-8] CXKIGWXPPVZSQK-UHFFFAOYSA-N	1.9×10^{-2}	1200	Bamford et al. (2002)	M	
	3.6×10^{-2}		Murphy et al. (1987)	M	12
	1.1×10^{-2}	6500	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-2}		Burkhard et al. (1985)	V	
	6.6×10^{-2}		Fang Lee (2007)	Q	721
	8.3×10^{-2}		Fang Lee (2007)	Q	722
	2.9×10^{-2}		Dunnivant et al. (1992)	Q	
	2.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,5,5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-92) [52663-61-3] CRCBRZBVCDKPGA-UHFFFAOYSA-N	2.2×10^{-2}	2900	Bamford et al. (2002)	M	
	1.2×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	3.0×10^{-2}	6500	Burkhard et al. (1985)	V	
	2.2×10^{-1}		Fang Lee (2007)	Q	721
	9.5×10^{-2}		Fang Lee (2007)	Q	722
	3.8×10^{-2}		Dunnivant et al. (1992)	Q	
	3.1×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,5,6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-93) [73575-56-1] BMXRLHMJGHJGLR-UHFFFAOYSA-N	4.1×10^{-3}	6500	Paasivirta and Sinkkonen (2009)	V	
	8.3×10^{-3}		Burkhard et al. (1985)	V	
	1.2×10^{-1}		Fang Lee (2007)	Q	721
	1.3×10^{-1}		Fang Lee (2007)	Q	722
	2.9×10^{-2}		Dunnivant et al. (1992)	Q	
	3.5×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,5,6'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-94) [73575-55-0] FJUVPYNSDTRQV-UHFFFAOYSA-N	4.5×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-2}		Burkhard et al. (1985)	V	
	1.2×10^{-1}		Fang Lee (2007)	Q	721
	9.1×10^{-2}		Fang Lee (2007)	Q	722
	2.5×10^{-2}		Dunnivant et al. (1992)	Q	
	2.3×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,5',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-95) [38379-99-6] GXNNLIMMEXHBKV-UHFFFAOYSA-N	2.1×10^{-2}	2500	Bamford et al. (2002)	M	
	5.0×10^{-2}		Murphy et al. (1987)	M	12
	3.3×10^{-3}	6200	Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	7.9×10^{-2}		Duchowicz et al. (2020)	Q	
	1.3×10^{-1}		Fang Lee (2007)	Q	721
	9.0×10^{-2}		Fang Lee (2007)	Q	722
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
	3.4×10^{-2}		Sabljić and Güsten (1989)	Q	
8.2×10^{-2}	Duchowicz et al. (2020)	?	185, 21		



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,6,6'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-96) [73575-54-9] QQFGAXUIQVKBU-UHFFFAOYSA-N	8.7×10^{-4}	5800	Paasivirta and Sinkkonen (2009)	V	
	7.2×10^{-3}		Burkhard et al. (1985)	V	
	7.4×10^{-2}		Fang Lee (2007)	Q	721
	6.5×10^{-2}		Fang Lee (2007)	Q	722
	2.4×10^{-2}		Dunnivant et al. (1992)	Q	
	2.6×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4',5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-97) [41464-51-1] JTUSORDQZVOEAZ-UHFFFAOYSA-N	2.3×10^{-2}	3600	Bamford et al. (2002)	M	
	1.3×10^{-1}		Brunner et al. (1990)	M	
	6.6×10^{-2}		Murphy et al. (1987)	M	12
	8.6×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	4.8×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.5×10^{-1}		Duchowicz et al. (2020)	Q	
	1.5×10^{-1}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	67
	1.2×10^{-1}		Fang Lee (2007)	Q	721
	1.1×10^{-1}		Fang Lee (2007)	Q	722
	5.5×10^{-2}		Dunnivant et al. (1992)	Q	
	5.5×10^{-2}		Sabljić and Güsten (1989)	Q	
1.3×10^{-1}	Duchowicz et al. (2020)	?	185, 21		
2,2',3,4',6'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-98) [60233-25-2] GOFFZTAPOOICFT-UHFFFAOYSA-N	5.5×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	1.5×10^{-2}		Burkhard et al. (1985)	V	
	7.6×10^{-2}		Fang Lee (2007)	Q	721
	6.5×10^{-2}		Fang Lee (2007)	Q	722
	2.5×10^{-2}		Dunnivant et al. (1992)	Q	
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',4,4',5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-99) [38380-01-7] LMQJBFRGXHMNOX-UHFFFAOYSA-N	2.2×10^{-2}	8700	Lau et al. (2006)	M	719
	4.2×10^{-3}		Lau et al. (2006)	M	720
	8.8×10^{-3}	1900	Charles and Destailats (2005)	M	33
	2.1×10^{-2}		Bamford et al. (2002)	M	
	1.3×10^{-1}	6600	Brunner et al. (1990)	M	
	4.6×10^{-2}		Murphy et al. (1987)	M	12
	2.1×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	3.4×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	8.6×10^{-2}		Duchowicz et al. (2020)	Q	299
	6.2×10^{-2}		Fang Lee (2007)	Q	721
	7.9×10^{-2}		Fang Lee (2007)	Q	722
	4.0×10^{-2}		Dunnivant et al. (1992)	Q	
	3.3×10^{-2}		Sabljić and Güsten (1989)	Q	
1.3×10^{-1}	Duchowicz et al. (2020)	?	185, 21		



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,4',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-100) [39485-83-1] RKUAZJIXKHPRK-UHFFFAOYSA-N	9.7×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-2}		Burkhard et al. (1985)	V	
	3.8×10^{-2}		Fang Lee (2007)	Q	721
	4.6×10^{-2}		Fang Lee (2007)	Q	722
	1.8×10^{-2}		Dunnivant et al. (1992)	Q	
	1.6×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',4,5,5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-101) [37680-73-2] LAHWLEDBADHJGA-UHFFFAOYSA-N	3.2×10^{-2}	6800	Li et al. (2003)	L	366
	4.1×10^{-2}	7500	Li et al. (2003)	L	367
	6.9×10^{-3}		Bhangare et al. (2019)	M	725
	2.0×10^{-2}		Bhangare et al. (2019)	M	726
	2.4×10^{-2}	3600	Bamford et al. (2000)	M	
	3.9×10^{-2}		Dunnivant et al. (1988)	M	
	3.9×10^{-2}		Dunnivant and Elzerman (1988)	M	723
	5.5×10^{-2}		Murphy et al. (1987)	M	12
	1.4×10^{-1}		Oliver (1985)	M	
			Westcott et al. (1981)	M	728
	8.9×10^{-3}	6400	Paasivirta and Sinkkonen (2009)	V	
	2.8×10^{-2}		Mackay et al. (2006b)	V	
	2.8×10^{-2}		Mackay et al. (1992a)	V	
	2.9×10^{-2}		Shiu and Mackay (1986)	V	
	3.1×10^{-2}		Burkhard et al. (1985)	V	
	2.0×10^{-2}	8100	Paasivirta et al. (1999)	T	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	7.9×10^{-2}		Duchowicz et al. (2020)	Q	184
	1.2×10^{-1}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	67
1.3×10^{-1}		Fang Lee (2007)	Q	721	
7.9×10^{-2}		Fang Lee (2007)	Q	722	
	4600	Kühne et al. (2005)	Q		
1.2×10^{-1}		Yaffe et al. (2003)	Q	248, 249	
6.1×10^{-2}		English and Carroll (2001)	Q	230, 231	
4.0×10^{-2}		Dunnivant et al. (1992)	Q		
1.1×10^{-1}		Meylan and Howard (1991)	Q		
1.1×10^{-1}		Duchowicz et al. (2020)	?	185, 21	
	3900	Kühne et al. (2005)	?		
2,2',4,5,6'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-102) [68194-06-9] BWWVXHRLMPBDCCK-UHFFFAOYSA-N	1.1×10^{-1}		Brunner et al. (1990)	M	
	6.3×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	1.5×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	8.6×10^{-2}		Duchowicz et al. (2020)	Q	
	8.8×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-1}		Modarresi et al. (2007)	Q	67
	6.9×10^{-2}		Fang Lee (2007)	Q	721
	7.7×10^{-2}		Fang Lee (2007)	Q	722
	2.7×10^{-2}		Dunnivant et al. (1992)	Q	
	2.8×10^{-2}		Sabljić and Güsten (1989)	Q	



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4',5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-107) [70424-68-9] PVYBHVJTMRRXLG-UHFFFAOYSA-N	4.3×10^{-2}	2200	Bamford et al. (2002)	M	
	1.7×10^{-1}		Murphy et al. (1987)	M	12
	9.1×10^{-3}	6200	Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-1}		Burkhard et al. (1985)	V	
	2.0×10^{-1}		Fang Lee (2007)	Q	721
	1.2×10^{-1}		Fang Lee (2007)	Q	722
2,3,3',4,5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-108) [70362-41-3] MPCDNZSLJWJDNW-UHFFFAOYSA-N	4.1×10^{-3}	5800	Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-1}		Burkhard et al. (1985)	V	
	1.1×10^{-1}		Fang Lee (2007)	Q	721
	1.1×10^{-1}		Fang Lee (2007)	Q	722
	5.6×10^{-2}		Dunnivant et al. (1992)	Q	
	2.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,3',4,6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-109) [74472-35-8] XGQBSVVYMWILEL-UHFFFAOYSA-N	1.5×10^{-2}	6600	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-2}		Burkhard et al. (1985)	V	
	1.4×10^{-1}		Fang Lee (2007)	Q	721
	1.2×10^{-1}		Fang Lee (2007)	Q	722
	3.5×10^{-2}		Dunnivant et al. (1992)	Q	
	2.5×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,3',4',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-110) [38380-03-9] ARXHJMGSIYYRZ-UHFFFAOYSA-N	2.3×10^{-2}	5200	Bamford et al. (2002)	M	
	9.3×10^{-2}		Murphy et al. (1987)	M	12
	2.7×10^{-2}		Murphy et al. (1983a)	M	24
	1.8×10^{-2}	6400	Paasivirta and Sinkkonen (2009)	V	
	5.8×10^{-2}		Burkhard et al. (1985)	V	
	8.3×10^{-2}		Fang Lee (2007)	Q	721
	1.4×10^{-1}		Fang Lee (2007)	Q	722
	5.0×10^{-2}	5000	Kühne et al. (2005)	Q	
	5.0×10^{-2}		Dunnivant et al. (1992)	Q	
	5.2×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,3',5,5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-111) [39635-32-0] QMUDLTGWHILKHH-UHFFFAOYSA-N	6.5×10^{-3}	6200	Paasivirta and Sinkkonen (2009)	V	
	6.2×10^{-2}		Burkhard et al. (1985)	V	
	2.7×10^{-1}		Fang Lee (2007)	Q	721
	7.8×10^{-2}		Fang Lee (2007)	Q	722
	3.7×10^{-2}		Dunnivant et al. (1992)	Q	
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,3',5,6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-112) [74472-36-9] NTKSJAPQYKCFPP-UHFFFAOYSA-N	7.8×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V	
	2.4×10^{-2}		Burkhard et al. (1985)	V	
	1.5×10^{-1}		Fang Lee (2007)	Q	721
	2.0×10^{-1}		Fang Lee (2007)	Q	722
	3.7×10^{-2}		Dunnivant et al. (1992)	Q	
	3.0×10^{-2}		Sabljić and Güsten (1989)	Q	



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',5',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-113) [68194-10-5] YDGFMDPEJGJZEV-UHFFFAOYSA-N	1.5×10^{-2}	6500	Paasivirta and Sinkkonen (2009)	V	
	3.5×10^{-2}		Burkhard et al. (1985)	V	
	1.7×10^{-1}		Fang Lee (2007)	Q	721
	1.2×10^{-1}		Fang Lee (2007)	Q	722
	3.0×10^{-2}		Dunnivant et al. (1992)	Q	
	2.1×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,4,4',5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-114) [74472-37-0] SXZSFWHOSHAKMN-UHFFFAOYSA-N	5.3×10^{-2}	6400	Fang et al. (2006)	M	
	1.4×10^{-1}		Murphy et al. (1987)	M	12
	1.2×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	2.8×10^{-2}		Burkhard et al. (1985)	V	
	8.9×10^{-2}		Fang Lee (2007)	Q	721
	1.3×10^{-1}		Fang Lee (2007)	Q	722
	6.9×10^{-2}		Dunnivant et al. (1992)	Q	
	8.7×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,4,4',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-115) [74472-38-1] IOVARPVVZDOPGQ-UHFFFAOYSA-N	2.6×10^{-2}	6900	Paasivirta and Sinkkonen (2009)	V	
	2.3×10^{-2}		Burkhard et al. (1985)	V	
	5.4×10^{-2}		Fang Lee (2007)	Q	721
	1.1×10^{-1}		Fang Lee (2007)	Q	722
	4.0×10^{-2}		Dunnivant et al. (1992)	Q	
	3.2×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,4,5,6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-116) [18259-05-7] GGMPTLAAIUQMIE-UHFFFAOYSA-N	4.3×10^{-3}	6500	Paasivirta and Sinkkonen (2009)	V	
	5.5×10^{-2}		Burkhard et al. (1985)	V	
	9.9×10^{-2}		Fang Lee (2007)	Q	721
	1.8×10^{-1}		Fang Lee (2007)	Q	722
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
	4.3×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3,4',5,6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-117) [68194-11-6] ZDDZPDTVCZLFFC-UHFFFAOYSA-N	1.5×10^{-3}	5900	Paasivirta and Sinkkonen (2009)	V	
	2.7×10^{-2}		Burkhard et al. (1985)	V	
	7.5×10^{-2}		Fang Lee (2007)	Q	721
	1.7×10^{-1}		Fang Lee (2007)	Q	722
	4.1×10^{-2}		Dunnivant et al. (1992)	Q	
	4.0×10^{-2}		Sabljić and Güsten (1989)	Q	
2,3',4,4',5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-118) [31508-00-6] IUTPYMGCWINGEY-UHFFFAOYSA-N	3.1×10^{-2}	6800	Li et al. (2003)	L	366
	6.9×10^{-2}	7600	Li et al. (2003)	L	367
	4.6×10^{-3}		Bhangare et al. (2019)	M	725
	1.9×10^{-2}		Bhangare et al. (2019)	M	726
	1.1×10^{-2}		Lau et al. (2006)	M	719
	5.6×10^{-3}		Lau et al. (2006)	M	720
	5.7×10^{-2}		Fang et al. (2006)	M	
	1.8×10^{-2}	14000	Charles and Destailats (2005)	M	33
	2.8×10^{-2}	6000	Bamford et al. (2000)	M	
	1.2×10^{-1}		Murphy et al. (1987)	M	12
	2.5×10^{-2}		Murphy et al. (1983a)	M	24
	3.4×10^{-2}		Duchowicz et al. (2020)	V	186
6.6×10^{-3}	6000	Paasivirta and Sinkkonen (2009)	V		



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
	1.1×10^{-1}	8100	Burkhard et al. (1985)	V		
	2.6×10^{-2}		Paasivirta et al. (1999)	T		
	1.5×10^{-1}		Duchowicz et al. (2020)	Q		
	7.8×10^{-2}		Fang Lee (2007)	Q	721	
	1.0×10^{-1}		Fang Lee (2007)	Q	722	
			5600	Kühne et al. (2005)	Q	
	7.9×10^{-2}		Dunnivant et al. (1992)	Q		
	8.5×10^{-2}		Sabljić and Güsten (1989)	Q		
			6300	Kühne et al. (2005)	?	
	2,3',4,4',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-119) [56558-17-9] OAEQTHQGPZKTQP-UHFFFAOYSA-N		1.5×10^{-2}	4600	Bamford et al. (2002)	M
1.5×10^{-2}		6500	Paasivirta and Sinkkonen (2009)	V		
4.4×10^{-2}			Burkhard et al. (1985)	V		
2.4×10^{-1}			Keshavarz et al. (2022)	Q		
9.4×10^{-2}			Duchowicz et al. (2020)	Q	184	
1.6×10^{-1}			Hilal et al. (2008)	Q		
1.4×10^{-1}			Modarresi et al. (2007)	Q	67	
4.7×10^{-2}			Fang Lee (2007)	Q	721	
7.4×10^{-2}			Fang Lee (2007)	Q	722	
3.2×10^{-2}			Dunnivant et al. (1992)	Q		
2.2×10^{-2}			Sabljić and Güsten (1989)	Q		
1.3×10^{-1}		Duchowicz et al. (2020)	?	185, 21		
2,3',4,5,5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-120) [68194-12-7] ZLGYJAIAPVPCNF-UHFFFAOYSA-N	1.8×10^{-1}	6000	Brunner et al. (1990)	M		
	3.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V		
	6.4×10^{-2}		Burkhard et al. (1985)	V		
	2.4×10^{-1}		Keshavarz et al. (2022)	Q		
	8.6×10^{-2}		Duchowicz et al. (2020)	Q	299	
	2.5×10^{-1}		Hilal et al. (2008)	Q		
	1.2×10^{-1}		Modarresi et al. (2007)	Q	67	
	1.6×10^{-1}		Fang Lee (2007)	Q	721	
	8.3×10^{-2}		Fang Lee (2007)	Q	722	
	4.0×10^{-2}		Dunnivant et al. (1992)	Q		
	2.4×10^{-2}		Sabljić and Güsten (1989)	Q		
1.8×10^{-1}	Duchowicz et al. (2020)	?	185, 21			
2,3',4,5',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-121) [56558-18-0] XBVSGJGMWSKAKL-UHFFFAOYSA-N	8.5×10^{-3}	6500	Paasivirta and Sinkkonen (2009)	V		
	2.6×10^{-2}		Burkhard et al. (1985)	V		
	9.6×10^{-2}		Fang Lee (2007)	Q	721	
	6.2×10^{-2}		Fang Lee (2007)	Q	722	
	1.8×10^{-2}		Dunnivant et al. (1992)	Q		
	1.3×10^{-2}		Sabljić and Güsten (1989)	Q		



Rolf Sander: Compilation of Henry's law constants

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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4',5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-122) [76842-07-4] GWOWBISZHLPEK-UHFFFAOYSA-N	1.6×10^{-1}	5800	Murphy et al. (1987)	M	12
	4.3×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.6×10^{-1}		Burkhard et al. (1985)	V	
	2.8×10^{-1}		Fang Lee (2007)	Q	721
	1.4×10^{-1}		Fang Lee (2007)	Q	722
	7.9×10^{-2}		Dunnivant et al. (1992)	Q	
	7.2×10^{-2}	Sabljić and Güsten (1989)	Q		
2,3',4,4',5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-123) [65510-44-3] YAHNWSFXMVPOU-UHFFFAOYSA-N	4.6×10^{-2}	5800	Fang et al. (2006)	M	
	3.7×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-1}		Burkhard et al. (1985)	V	
	1.4×10^{-1}		Fang Lee (2007)	Q	721
	9.3×10^{-2}		Fang Lee (2007)	Q	722
	5.7×10^{-2}		Dunnivant et al. (1992)	Q	
	3.8×10^{-2}	Sabljić and Güsten (1989)	Q		
2,3',4',5,5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-124) [70424-70-3] PIVBPZFQXKMHBD-UHFFFAOYSA-N	1.9×10^{-1}	5900	Murphy et al. (1987)	M	12
	4.5×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-1}		Burkhard et al. (1985)	V	
	2.8×10^{-1}		Fang Lee (2007)	Q	721
	9.4×10^{-2}		Fang Lee (2007)	Q	722
	5.8×10^{-2}		Dunnivant et al. (1992)	Q	
	5.1×10^{-2}	Sabljić and Güsten (1989)	Q		
2,3',4',5',6-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-125) [74472-39-2] WAZUWHGJMMZVHH-UHFFFAOYSA-N	2.3×10^{-3}	5800	Paasivirta and Sinkkonen (2009)	V	
	6.7×10^{-2}		Burkhard et al. (1985)	V	
	1.5×10^{-1}		Fang Lee (2007)	Q	721
	1.1×10^{-1}		Fang Lee (2007)	Q	722
	3.4×10^{-2}		Dunnivant et al. (1992)	Q	
	3.0×10^{-2}		Sabljić and Güsten (1989)	Q	
3,3',4,4',5-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-126) [57465-28-8] REHONNLQRWTFIF-UHFFFAOYSA-N	1.0×10^{-1}	12000	Fang et al. (2006)	M	
	4.8×10^{-2}		Bamford et al. (2000)	M	
	1.6×10^{-3}	5400	Paasivirta and Sinkkonen (2009)	V	
	3.6×10^{-1}		Burkhard et al. (1985)	V	
	6.5×10^{-2}	8800	Paasivirta et al. (1999)	T	
	1.8×10^{-2}		Bhangare et al. (2019)	Q	
	1.7×10^{-1}		Fang Lee (2007)	Q	721
	1.0×10^{-1}		Fang Lee (2007)	Q	722
	1.2×10^{-1}		Dunnivant et al. (1992)	Q	
	1.8×10^{-1}		Sabljić and Güsten (1989)	Q	
3,3',4,5,5'-pentachlorobiphenyl $C_{12}H_5Cl_5$ (PCB-127) [39635-33-1] MXVAYXIPRGORY-UHFFFAOYSA-N	2.2×10^{-3}	5600	Paasivirta and Sinkkonen (2009)	V	
	2.2×10^{-1}		Burkhard et al. (1985)	V	
	3.4×10^{-1}		Fang Lee (2007)	Q	721
	8.4×10^{-2}		Fang Lee (2007)	Q	722
	6.3×10^{-2}		Dunnivant et al. (1992)	Q	
	2.9×10^{-2}		Sabljić and Güsten (1989)	Q	



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-128) [38380-07-3] BTAGRXXWGMYPBY-UHFFFAOYSA-N	2.8×10^{-2}	14000	Bamford et al. (2000)	M	
	7.6×10^{-1}		Brunner et al. (1990)	M	
	3.3×10^{-1}		Dunnivant et al. (1988)	M	
	3.3×10^{-1}		Dunnivant and Elzerman (1988)	M	723
	1.7×10^{-1}		Murphy et al. (1987)	M	12
	2.0×10^{-2}		Murphy et al. (1983a)	M	24
	6.9×10^{-3}	6100	Paasivirta and Sinkkonen (2009)	V	
	8.4×10^{-2}		Mackay et al. (2006b)	V	
	8.4×10^{-2}		Mackay et al. (1992a)	V	
	8.3×10^{-2}		Shiu and Mackay (1986)	V	
	1.5×10^{-1}		Burkhard et al. (1985)	V	
	2.0×10^{-2}		Murphy et al. (1983b)	X	724, 24
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	3.8×10^{-1}		Duchowicz et al. (2020)	Q	299
	1.5×10^{-2}		Bhangare et al. (2019)	Q	
	1.8×10^{-1}		Hilal et al. (2008)	Q	
2.1×10^{-1}	Modarresi et al. (2007)	Q	67		
1.5×10^{-1}	Fang Lee (2007)	Q	721		
2.4×10^{-1}	Fang Lee (2007)	Q	722		
1.2×10^{-1}	English and Carroll (2001)	Q	230, 231		
9.5×10^{-2}	Dunnivant et al. (1992)	Q			
7.6×10^{-1}	Duchowicz et al. (2020)	?	185, 21		
2,2',3,3',4,5-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-129) [55215-18-4] VQQKIXKPMJTUMP-UHFFFAOYSA-N	3.4×10^{-1}	6400	Brunner et al. (1990)	M	
	6.4×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	2.5×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.7×10^{-1}		Duchowicz et al. (2020)	Q	
	1.6×10^{-1}		Hilal et al. (2008)	Q	
	2.2×10^{-1}		Modarresi et al. (2007)	Q	67
	2.9×10^{-1}		Fang Lee (2007)	Q	721
	2.6×10^{-1}		Fang Lee (2007)	Q	722
	7.1×10^{-2}		Dunnivant et al. (1992)	Q	
	1.2×10^{-1}		Sabljić and Güsten (1989)	Q	
3.4×10^{-1}		Duchowicz et al. (2020)	?	185, 21	
2,2',3,3',4,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-130) [52663-66-8] YFSLABAYQDPWPF-UHFFFAOYSA-N	2.7×10^{-1}	6500	Brunner et al. (1990)	M	
	9.2×10^{-2}		Murphy et al. (1987)	M	12
	5.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	8.7×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	
	1.9×10^{-1}		Hilal et al. (2008)	Q	
	2.0×10^{-1}		Modarresi et al. (2007)	Q	67
	3.1×10^{-1}		Fang Lee (2007)	Q	721
	2.1×10^{-1}		Fang Lee (2007)	Q	722
	6.5×10^{-2}		Dunnivant et al. (1992)	Q	
5.1×10^{-2}		Sabljić and Güsten (1989)	Q		



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.7×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,3',4,6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-131) [61798-70-7] WDLTVNWWWEZJMPF-UHFFFAOYSA-N	1.5×10^{-1} 3.0×10^{-3} 1.6×10^{-2} 2.4×10^{-1} 1.6×10^{-1} 1.6×10^{-1} 2.1×10^{-1} 1.7×10^{-1} 1.9×10^{-1} 4.1×10^{-2} 3.8×10^{-2} 2.5×10^{-1}	6500	Murphy et al. (1987) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Sabljic and Gsten (1989) Duchowicz et al. (2020)	M V V Q Q Q Q Q Q Q Q ?	12 299 67 721 722 185, 21
2,2',3,3',4,6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-132) [38380-05-1] OKBJVIVEFXPEOU-UHFFFAOYSA-N	4.0×10^{-2} 2.2×10^{-1} 4.1×10^{-3} 3.6×10^{-2} 2.4×10^{-1} 2.1×10^{-1} 2.2×10^{-1} 1.6×10^{-1} 1.7×10^{-1} 2.1×10^{-1} 2.3×10^{-1} 4.9×10^{-2} 6.1×10^{-2} 2.2×10^{-1}	2400 6400	Bamford et al. (2002) Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007) Fang Lee (2007) Yaffe et al. (2003) Dunnivant et al. (1992) Sabljic and Gsten (1989) Duchowicz et al. (2020)	M M V V Q Q Q Q Q Q Q Q Q ?	299 67 721 722 248, 249 185, 21
2,2',3,3',5,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-133) [35694-04-3] AJKLIKINFZLWHQE-UHFFFAOYSA-N	4.1×10^{-3} 5.2×10^{-2} 1.8×10^{-1} 4.3×10^{-1} 2.0×10^{-1} 4.8×10^{-2} 3.0×10^{-2}	6500	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Hilal et al. (2008) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Sabljic and Gsten (1989)	V V Q Q Q Q Q	721 722
2,2',3,3',5,6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-134) [52704-70-8] RVWLHPJFOKUPNM-UHFFFAOYSA-N	1.2×10^{-2} 2.0×10^{-1} 1.0×10^{-1} 1.7×10^{-2} 2.8×10^{-3} 1.8×10^{-2} 2.4×10^{-1} 1.5×10^{-1} 2.0×10^{-1} 2.1×10^{-1} 2.4×10^{-1}	7300 6400	Bamford et al. (2002) Brunner et al. (1990) Murphy et al. (1987) Murphy et al. (1983a) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007)	M M M M V V Q Q Q Q Q	12 24 299 67 721



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.2×10^{-1}		Fang Lee (2007)	Q	722
	4.3×10^{-2}		Dunnivant et al. (1992)	Q	
	4.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	2.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,3',5,6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-135) [52744-13-5] UUTNFLRSJBQQJM-UHFFFAOYSA-N	1.5×10^{-2}	5500	Bamford et al. (2002)	M	
	1.8×10^{-1}		Brunner et al. (1990)	M	
	7.0×10^{-2}		Murphy et al. (1987)	M	12
	4.8×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	184
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	1.9×10^{-1}		Modarresi et al. (2007)	Q	67
	2.4×10^{-1}		Fang Lee (2007)	Q	721
	2.1×10^{-1}		Fang Lee (2007)	Q	722
	3.7×10^{-2}		Dunnivant et al. (1992)	Q	
	3.2×10^{-2}		Sabljić and Güsten (1989)	Q	
	1.8×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,3',6,6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-136) [38411-22-2] FZFUUSROAHKTF-UHFFFAOYSA-N	9.0×10^{-3}	5400	Bamford et al. (2002)	M	
	1.1×10^{-1}		Brunner et al. (1990)	M	
	4.4×10^{-2}		Murphy et al. (1987)	M	12
	1.6×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	299
	2.7×10^{-1}		Hilal et al. (2008)	Q	
	1.5×10^{-1}		Modarresi et al. (2007)	Q	67
	1.4×10^{-1}		Fang Lee (2007)	Q	721
	1.6×10^{-1}		Fang Lee (2007)	Q	722
	3.1×10^{-2}		Dunnivant et al. (1992)	Q	
	3.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,4,4',5-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-137) [35694-06-5] CKLLRBPBZLTGDJ-UHFFFAOYSA-N	4.5×10^{-2}	3200	Bamford et al. (2002)	M	
	1.5×10^{-1}		Murphy et al. (1987)	M	12
	2.1×10^{-2}		Murphy et al. (1983a)	M	24
	1.8×10^{-2}	6800	Paasivirta and Sinkkonen (2009)	V	
	1.8×10^{-2}		Burkhard et al. (1985)	V	
	1.4×10^{-1}		Fang Lee (2007)	Q	721
	1.7×10^{-1}		Fang Lee (2007)	Q	722
	5.3×10^{-2}		Dunnivant et al. (1992)	Q	
	4.7×10^{-2}		Sabljić and Güsten (1989)	Q	



Rolf Sander: Compilation of Henry's law constants

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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-138) [35065-28-2] RPUMZMSNLZHIGZ-UHFFFAOYSA-N	2.5×10^{-2}	7100	Li et al. (2003)	L	366
	3.3×10^{-2}	7700	Li et al. (2003)	L	367
	2.2×10^{-2}	10000	Bamford et al. (2000)	M	
	4.7×10^{-1}		Brunner et al. (1990)	M	
	1.3×10^{-1}		Murphy et al. (1987)	M	12
	1.4×10^{-1}		Brownawell (1986)	M	294
	2.1×10^{-2}		Murphy et al. (1983a)	M	24
	1.8×10^{-2}	6800	Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-2}		Shiu and Mackay (1986)	V	
	9.1×10^{-2}		Burkhard et al. (1985)	V	
	4.7×10^{-2}	8700	Paasivirta et al. (1999)	T	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	184
	1.5×10^{-2}		Bhangare et al. (2019)	Q	
	1.8×10^{-1}		Hilal et al. (2008)	Q	
2.2×10^{-1}		Modarresi et al. (2007)	Q	67	
1.6×10^{-1}		Fang Lee (2007)	Q	721	
1.8×10^{-1}		Fang Lee (2007)	Q	722	
5.2×10^{-1}		Yaffe et al. (2003)	Q	248, 249	
7.6×10^{-2}		Dunnivant et al. (1992)	Q		
9.2×10^{-2}		Sabljić and Güsten (1989)	Q		
4.7×10^{-1}		Duchowicz et al. (2020)	?	185, 21	
2,2',3,4,4',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-139) [56030-56-9] SPOPSCCFZQFGDL-UHFFFAOYSA-N	1.4×10^{-2}	6900	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Burkhard et al. (1985)	V	
	8.6×10^{-2}		Fang Lee (2007)	Q	721
	1.3×10^{-1}		Fang Lee (2007)	Q	722
	3.0×10^{-2}		Dunnivant et al. (1992)	Q	
	2.6×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4,4',6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-140) [59291-64-4] XBBRGUHRZBZMPP-UHFFFAOYSA-N	1.7×10^{-2}	7000	Paasivirta and Sinkkonen (2009)	V	
	2.7×10^{-2}		Burkhard et al. (1985)	V	
	8.5×10^{-2}		Fang Lee (2007)	Q	721
	1.1×10^{-1}		Fang Lee (2007)	Q	722
	3.2×10^{-2}		Dunnivant et al. (1992)	Q	
	2.3×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4,5,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-141) [52712-04-6] UCLKLGIYGBLTSM-UHFFFAOYSA-N	2.0×10^{-2}	8400	Bamford et al. (2002)	M	
	4.3×10^{-1}		Brunner et al. (1990)	M	
	1.0×10^{-1}		Murphy et al. (1987)	M	12
	2.5×10^{-2}		Murphy et al. (1983a)	M	24
	1.0×10^{-2}	6700	Paasivirta and Sinkkonen (2009)	V	
	2.5×10^{-2}		Shiu and Mackay (1986)	V	
	1.6×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.5×10^{-1}		Duchowicz et al. (2020)	Q	184
	1.3×10^{-1}		Hilal et al. (2008)	Q	
	2.0×10^{-1}		Modarresi et al. (2007)	Q	67
2.9×10^{-1}		Fang Lee (2007)	Q	721	



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8×10^{-1}		Fang Lee (2007)	Q	722
	5.7×10^{-2}		Dunnivant et al. (1992)	Q	
	6.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	4.3×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,4,5,6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-142) [41411-61-4] RUEIBQJFGMERJD-UHFFFAOYSA-N	4.0×10^{-3}	6900	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-2}		Burkhard et al. (1985)	V	
	1.6×10^{-1}		Fang Lee (2007)	Q	721
	2.4×10^{-1}		Fang Lee (2007)	Q	722
	3.1×10^{-2}		Dunnivant et al. (1992)	Q	
	4.7×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4,5,6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-143) [68194-15-0] UQPQKLGBEKEZBV-UHFFFAOYSA-N	6.5×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V	
	7.8×10^{-3}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.6×10^{-1}		Duchowicz et al. (2020)	Q	184
	1.6×10^{-1}		Hilal et al. (2008)	Q	
	1.7×10^{-1}		Modarresi et al. (2007)	Q	67
	1.6×10^{-1}		Fang Lee (2007)	Q	721
	1.9×10^{-1}		Fang Lee (2007)	Q	722
	3.4×10^{-2}		Dunnivant et al. (1992)	Q	
	3.9×10^{-2}		Sabljić and Güsten (1989)	Q	
	2.5×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,4,5',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-144) [68194-14-9] CXXRQFQKRZAJA-UHFFFAOYSA-N	7.0×10^{-2}	7000	Murphy et al. (1987)	M	12
	1.6×10^{-2}		Murphy et al. (1983a)	M	24
	1.2×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	1.7×10^{-2}		Shiu and Mackay (1986)	V	
	1.0×10^{-2}		Burkhard et al. (1985)	V	
	1.8×10^{-1}		Fang Lee (2007)	Q	721
	1.4×10^{-1}		Fang Lee (2007)	Q	722
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
	3.1×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4,6,6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-145) [74472-40-5] JZFZCLFEPXCRCA-UHFFFAOYSA-N	1.5×10^{-3}	6400	Paasivirta and Sinkkonen (2009)	V	
	5.9×10^{-3}		Burkhard et al. (1985)	V	
	9.6×10^{-2}		Fang Lee (2007)	Q	721
	1.1×10^{-1}		Fang Lee (2007)	Q	722
	2.1×10^{-2}		Dunnivant et al. (1992)	Q	
	2.4×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4',5,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-146) [51908-16-8] BQHCOAQLTQQFJZ-UHFFFAOYSA-N	1.7×10^{-2}	7100	Bamford et al. (2002)	M	
	3.9×10^{-1}		Brunner et al. (1990)	M	
	1.1×10^{-1}		Murphy et al. (1987)	M	12
	1.2×10^{-2}	6800	Paasivirta and Sinkkonen (2009)	V	
	5.4×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	184
	2.0×10^{-1}		Hilal et al. (2008)	Q	
	2.2×10^{-1}		Modarresi et al. (2007)	Q	67



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-1}		Fang Lee (2007)	Q	721
	1.6×10^{-1}		Fang Lee (2007)	Q	722
	5.3×10^{-2}		Dunnivant et al. (1992)	Q	
	4.0×10^{-2}		Sabljić and Güsten (1989)	Q	
	3.9×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,4',5,6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-147) [68194-13-8] AQONCPKMJSBHQT-UHFFFAOYSA-N	1.9×10^{-1}	6500	Brunner et al. (1990)	M	
	3.1×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	1.3×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	8.7×10^{-2}		Duchowicz et al. (2020)	Q	299
	1.8×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	67
	1.2×10^{-1}		Fang Lee (2007)	Q	721
	2.1×10^{-1}		Fang Lee (2007)	Q	722
	3.1×10^{-2}		Dunnivant et al. (1992)	Q	
	3.1×10^{-2}		Sabljić and Güsten (1989)	Q	
	1.9×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,4',5,6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-148) [74472-41-6] CTVRBEKNQHJPLX-UHFFFAOYSA-N	1.2×10^{-2}	7000	Paasivirta and Sinkkonen (2009)	V	
	1.6×10^{-2}		Burkhard et al. (1985)	V	
	1.2×10^{-1}		Fang Lee (2007)	Q	721
	1.0×10^{-1}		Fang Lee (2007)	Q	722
	2.3×10^{-2}		Dunnivant et al. (1992)	Q	
	1.7×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4',5',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-149) [38380-04-0] LKHLFUVHXXCNJH-UHFFFAOYSA-N	1.5×10^{-2}	5500	Bamford et al. (2002)	M	
	6.7×10^{-2}		Murphy et al. (1987)	M	12
	3.3×10^{-2}		Murphy et al. (1983a)	M	24
	7.2×10^{-3}		Duchowicz et al. (2020)	V	186
	1.0×10^{-2}	6800	Paasivirta and Sinkkonen (2009)	V	
	3.3×10^{-2}		Shiu and Mackay (1986)	V	
	2.2×10^{-2}		Burkhard et al. (1985)	V	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	
	1.3×10^{-1}		Fang Lee (2007)	Q	721
	1.7×10^{-1}		Fang Lee (2007)	Q	722
	2.1×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	4.2×10^{-2}		Dunnivant et al. (1992)	Q	
	4.5×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',3,4',6,6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-150) [68194-08-1] RPPNJBJZNXQKNM-UHFFFAOYSA-N	6.5×10^{-3}	6900	Paasivirta and Sinkkonen (2009)	V	
	8.2×10^{-3}		Burkhard et al. (1985)	V	
	7.2×10^{-2}		Fang Lee (2007)	Q	721
	8.0×10^{-2}		Fang Lee (2007)	Q	722
	2.0×10^{-2}		Dunnivant et al. (1992)	Q	
	1.9×10^{-2}		Sabljić and Güsten (1989)	Q	



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,5,5',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-151) [52663-63-5] UHCLFIWDCYOTOL-UHFFFAOYSA-N	1.4×10^{-2}	4500	Bamford et al. (2002)	M	
	1.7×10^{-1}		Brunner et al. (1990)	M	
	6.3×10^{-2}		Murphy et al. (1987)	M	12
	3.3×10^{-2}	6700	Murphy et al. (1983a)	M	24
	5.2×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	3.3×10^{-2}		Shiu and Mackay (1986)	V	
	1.2×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	7.9×10^{-2}		Duchowicz et al. (2020)	Q	
	1.6×10^{-1}		Hilal et al. (2008)	Q	
	2.1×10^{-1}		Modarresi et al. (2007)	Q	67
	2.4×10^{-1}		Fang Lee (2007)	Q	721
	2.4×10^{-1}		Fang Lee (2007)	Q	722
3.5×10^{-2}	Dunnivant et al. (1992)	Q			
3.8×10^{-2}	Sabljić and Güsten (1989)	Q			
1.7×10^{-1}	Duchowicz et al. (2020)	?	185, 21		
2,2',3,5,6,6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-152) [68194-09-2] CLODVDBWVQLGO-UHFFFAOYSA-N	1.3×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	6.8×10^{-3}		Burkhard et al. (1985)	V	
	1.3×10^{-1}	6300	Fang Lee (2007)	Q	721
	1.9×10^{-1}		Fang Lee (2007)	Q	722
	2.3×10^{-2}		Dunnivant et al. (1992)	Q	
	2.8×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',4,4',5,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-153) [35065-27-1] MWWHGTYKUMDIHL-UHFFFAOYSA-N	4.0×10^{-2}	7100	Li et al. (2003)	L	366
	5.1×10^{-2}	7900	Li et al. (2003)	L	367
	1.9×10^{-2}	8000	Bamford et al. (2000)	M	
	4.3×10^{-1}		Brunner et al. (1990)	M	
	7.5×10^{-2}	6700	Dunnivant et al. (1988)	M	
	7.5×10^{-2}		Dunnivant and Elzerman (1988)	M	723
	1.0×10^{-1}		Murphy et al. (1987)	M	12
	1.6×10^{-1}		Oliver (1985)	M	
	2.8×10^{-2}		Murphy et al. (1983a)	M	24
	1.1×10^{-2}		Paasivirta and Sinkkonen (2009)	V	
	2.3×10^{-2}		Mackay et al. (2006b)	V	
	2.3×10^{-2}		Mackay et al. (1992a)	V	
	2.3×10^{-2}		Shiu and Mackay (1986)	V	
	5.6×10^{-2}		Burkhard et al. (1985)	V	
	1.7×10^{-2}	8400	Paasivirta et al. (1999)	T	
	2.8×10^{-2}		Murphy et al. (1983b)	X	724, 24
	8.0×10^{-2}		Dunnivant et al. (1988)	C	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	299
	1.7×10^{-2}		Bhangare et al. (2019)	Q	
1.8×10^{-1}	Hilal et al. (2008)		Q		
2.4×10^{-1}	Modarresi et al. (2007)		Q	67	
1.2×10^{-1}	Fang Lee (2007)	Q	721		
1.4×10^{-1}	Fang Lee (2007)	Q	722		



Rolf Sander: Compilation of Henry's law constants

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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.9×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	6.0×10^{-2}		Dunnivant et al. (1992)	Q	
	4.3×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',4,4',5,6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-154) [60145-22-4] QXZHEJWDLVUFFB-UHFFFAOYSA-N	1.3×10^{-2}	5600	Bamford et al. (2000)	M	
	1.7×10^{-2}	7100	Paasivirta and Sinkkonen (2009)	V	
	1.7×10^{-2}		Burkhard et al. (1985)	V	
	1.8×10^{-2}		Bhangare et al. (2019)	Q	
	6.8×10^{-2}		Fang Lee (2007)	Q	721
	8.7×10^{-2}		Fang Lee (2007)	Q	722
	2.6×10^{-2}		Dunnivant et al. (1992)	Q	
	2.0×10^{-2}		Sabljić and Güsten (1989)	Q	
2,2',4,4',6,6'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-155) [33979-03-2] ICOAEPDGFWLUTI-UHFFFAOYSA-N	1.3×10^{-2}	7100	Li et al. (2003)	L	366
	1.1×10^{-2}	7600	Li et al. (2003)	L	367
	1.3×10^{-2}		Dunnivant et al. (1988)	M	
	1.3×10^{-2}		Dunnivant and Elzerman (1988)	M	723
	3.9×10^{-3}		Duchowicz et al. (2020)	V	186
	4.6×10^{-3}	6900	Paasivirta and Sinkkonen (2009)	V	
	1.2×10^{-2}		Mackay et al. (2006b)	V	
	1.2×10^{-2}		Mackay et al. (1992a)	V	
	1.2×10^{-3}		Shiu and Mackay (1986)	V	
	6.4×10^{-3}		Burkhard et al. (1985)	V	
	8.6×10^{-2}		Dunnivant et al. (1988)	C	
	4.8×10^{-2}		Duchowicz et al. (2020)	Q	
	4.2×10^{-2}		Fang Lee (2007)	Q	721
	4.2×10^{-2}		Fang Lee (2007)	Q	722
	1.2×10^{-2}		Dunnivant et al. (1992)	Q	
2,3,3',4,4',5-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-156) [38380-08-4] LCXMEXLGMKFLQO-UHFFFAOYSA-N	6.8×10^{-2}		Fang et al. (2006)	M	
	2.9×10^{-2}	13000	Bamford et al. (2002)	M	
	1.1×10^{-2}		Murphy et al. (1983a)	M	24
	6.9×10^{-2}		Duchowicz et al. (2020)	V	186
	5.9×10^{-3}	6200	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Shiu and Mackay (1986)	V	
	5.7×10^{-2}		Burkhard et al. (1985)	V	
	2.7×10^{-1}		Duchowicz et al. (2020)	Q	
	1.8×10^{-1}		Fang Lee (2007)	Q	721
	2.0×10^{-1}		Fang Lee (2007)	Q	722
	1.1×10^{-1}		Dunnivant et al. (1992)	Q	
	4.5×10^{-1}		Sabljić and Güsten (1989)	Q	
2,3,3',4,4',5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-157) [69782-90-7] YTWXDQVNPCIEOX-UHFFFAOYSA-N	6.0×10^{-2}		Fang et al. (2006)	M	
	3.4×10^{-2}	16000	Bamford et al. (2002)	M	
	1.7×10^{-2}		Murphy et al. (1983a)	M	24
	2.3×10^{-3}	5900	Paasivirta and Sinkkonen (2009)	V	
	1.7×10^{-2}		Shiu and Mackay (1986)	V	
	3.0×10^{-1}		Burkhard et al. (1985)	V	
	1.9×10^{-1}		Fang Lee (2007)	Q	721



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
	2.0×10^{-1}	6300	Fang Lee (2007)	Q	722	
	1.2×10^{-1}		Kühne et al. (2005)	Q		
	1.5×10^{-1}		Dunnivant et al. (1992)	Q		
			Sabljić and Güsten (1989)	Q		
			Kühne et al. (2005)	?		
2,3,3',4,4',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-158) [74472-42-7] ZQUPQXINXTWCQR-UHFFFAOYSA-N	2.1×10^{-2}	6600	Bamford et al. (2002)	M	12 24	
	2.3×10^{-1}		Murphy et al. (1987)	M		
	1.5×10^{-2}		Murphy et al. (1983a)	M		
	9.2×10^{-3}		Paasivirta and Sinkkonen (2009)	V		
	1.5×10^{-2}		Shiu and Mackay (1986)	V		
	4.8×10^{-2}		Burkhard et al. (1985)	V		
	1.1×10^{-1}		Fang Lee (2007)	Q		721
	1.9×10^{-1}		Fang Lee (2007)	Q		722
	6.0×10^{-2}		Dunnivant et al. (1992)	Q		
	4.6×10^{-2}	Sabljić and Güsten (1989)	Q			
2,3,3',4,5,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-159) [39635-35-3] YZKLGRAIIGOHB-UHFFFAOYSA-N	4.9×10^{-1}	6100	Brunner et al. (1990)	M	184 67 721 722	
	2.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V		
	3.4×10^{-2}		Burkhard et al. (1985)	V		
	2.4×10^{-1}		Keshavarz et al. (2022)	Q		
	1.6×10^{-1}		Duchowicz et al. (2020)	Q		184
	2.6×10^{-1}		Hilal et al. (2008)	Q		
	1.9×10^{-1}		Modarresi et al. (2007)	Q		67
	3.6×10^{-1}		Fang Lee (2007)	Q		721
	1.8×10^{-1}		Fang Lee (2007)	Q		722
	6.3×10^{-2}		Dunnivant et al. (1992)	Q		
	3.2×10^{-2}		Sabljić and Güsten (1989)	Q		
	4.9×10^{-1}		Duchowicz et al. (2020)	?		185, 21
2,3,3',4,5,6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-160) [41411-62-5] JHJMZCXLJXRCHK-UHFFFAOYSA-N	4.9×10^{-1}	7100	Brunner et al. (1990)	M	184 67 721 722	
	7.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V		
	4.0×10^{-2}		Burkhard et al. (1985)	V		
	2.4×10^{-1}		Keshavarz et al. (2022)	Q		
	1.1×10^{-1}		Duchowicz et al. (2020)	Q		184
	1.2×10^{-1}		Hilal et al. (2008)	Q		
	3.8×10^{-1}		Modarresi et al. (2007)	Q		67
	2.0×10^{-1}		Fang Lee (2007)	Q		721
	3.3×10^{-1}		Fang Lee (2007)	Q		722
	4.6×10^{-2}		Dunnivant et al. (1992)	Q		
	3.9×10^{-2}		Sabljić and Güsten (1989)	Q		
	4.9×10^{-1}		Duchowicz et al. (2020)	?		185, 21
2,3,3',4,5',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-161) [74472-43-8] UNPTZXSJGZTGJJ-UHFFFAOYSA-N	9.2×10^{-3}		6800	Paasivirta and Sinkkonen (2009)		V
	2.9×10^{-2}	Burkhard et al. (1985)		V		
	2.2×10^{-1}	Fang Lee (2007)		Q	721	
	1.7×10^{-1}	Fang Lee (2007)		Q	722	
	3.5×10^{-2}	Dunnivant et al. (1992)		Q		
	2.0×10^{-2}	Sabljić and Güsten (1989)		Q		



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4',5,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-162) [39635-34-2] AHZUOPSGLWYCNF-UHFFFAOYSA-N	3.7×10^{-3} 1.8×10^{-1} 2.7×10^{-1} 1.8×10^{-1} 7.5×10^{-2} 4.8×10^{-2}	6200	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Sabljic and Güsten (1989)	V V Q Q Q Q	 721 722
2,3,3',4',5,6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-163) [74472-44-9] ZAGRQXMMWRUYRB-UHFFFAOYSA-N	2.1×10^{-2} 6.6×10^{-1} 4.9×10^{-3} 5.4×10^{-2} 2.4×10^{-1} 1.5×10^{-1} 2.5×10^{-1} 2.6×10^{-1} 1.5×10^{-1} 3.1×10^{-1} 6.0×10^{-2} 6.3×10^{-2} 6.6×10^{-1}	9700 6400	Bamford et al. (2002) Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Sabljic and Güsten (1989) Duchowicz et al. (2020)	M M V V Q Q Q Q Q Q Q Q ?	 299 67 721 722 185, 21
2,3,3',4',5',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-164) [74472-45-0] HAZQOLYHFUUJUN-UHFFFAOYSA-N	9.5×10^{-3} 1.0×10^{-1} 1.6×10^{-1} 2.3×10^{-1} 5.6×10^{-2} 5.0×10^{-2}	6500	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Sabljic and Güsten (1989)	V V Q Q Q Q	 721 722
2,3,3',5,5',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-165) [74472-46-1] ZEATXTCWXKQPHO-UHFFFAOYSA-N	3.4×10^{-1} 2.5×10^{-3} 3.2×10^{-2} 2.4×10^{-1} 8.7×10^{-2} 1.6×10^{-1} 2.1×10^{-1} 3.0×10^{-1} 2.9×10^{-1} 3.6×10^{-2} 2.2×10^{-2} 3.4×10^{-1}	6400	Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Sabljic and Güsten (1989) Duchowicz et al. (2020)	M V V Q Q Q Q Q Q Q Q ?	 67 721 722 185, 21
2,3,4,4',5,6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-166) [41411-63-6] BTOCFWAZMMTNB-UHFFFAOYSA-N	3.5×10^{-3} 4.4×10^{-2} 1.2×10^{-1} 3.1×10^{-1} 9.8×10^{-2} 2.9×10^{-1} 5.4×10^{-2}	6500 4100	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007) Fang Lee (2007) Kühne et al. (2005) Dunnivant et al. (1992)	V V Q Q Q Q Q Q	 67 721 722



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.7×10^{-2}	5800	Sabljić and Güsten (1989) Kühne et al. (2005)	Q ?	
2,3',4,4',5,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-167) [52663-72-6] AZXHAWRMEPZSSV-UHFFFAOYSA-N	7.8×10^{-2} 2.7×10^{-2} 7.3×10^{-3} 1.9×10^{-1} 1.6×10^{-1} 1.4×10^{-1} 9.0×10^{-2} 8.0×10^{-2}	13000 6400	Fang et al. (2006) Bamford et al. (2002) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	M M V V Q Q Q Q	721 722
2,3',4,4',5',6-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-168) [59291-65-5] PITHIPNORFGJPI-UHFFFAOYSA-N	1.1×10^{-2} 7.7×10^{-2} 9.4×10^{-2} 1.2×10^{-1} 3.6×10^{-2} 2.1×10^{-2}	6700	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	V V Q Q Q Q	721 722
3,3',4,4',5,5'-hexachlorobiphenyl $C_{12}H_4Cl_6$ (PCB-169) [32774-16-6] ZHLCIBPIXDOFFG-UHFFFAOYSA-N	8.1×10^{-2} 4.7×10^{-2} 4.0×10^{-4} 6.4×10^{-1} 2.3×10^{-2} 3.4×10^{-1} 1.3×10^{-1} 1.5×10^{-1} 1.7×10^{-1}	19000 5100 9000	Fang et al. (2006) Bamford et al. (2002) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Paasivirta et al. (1999) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Sabljić and Güsten (1989)	M M V V T Q Q Q Q	721 722
2,2',3,3',4,4',5-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-170) [35065-30-6] RMPWIKNWPVWNG-UHFFFAOYSA-N	4.8×10^{-2} 1.1 6.6×10^{-1} 7.8×10^{-3} 5.2×10^{-2} 2.4×10^{-1} 3.9×10^{-1} 1.5×10^{-2} 2.1×10^{-1} 3.2×10^{-1} 2.8×10^{-1} 4.0×10^{-1} 1.1×10^{-1} 1.1	20000 6600	Bamford et al. (2000) Brunner et al. (1990) Murphy et al. (1987) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Bhangare et al. (2019) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Duchowicz et al. (2020)	M M M V V Q Q Q Q Q Q Q Q Q ?	12 184 67 721 722



Rolf Sander: Compilation of Henry’s law constants

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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4',6-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-171) [52663-71-5] TZMHVHLTPWKZCI-UHFFFAOYSA-N	2.9×10^{-2} 1.3×10^{-2} 1.9×10^{-1} 1.9×10^{-1} 3.4×10^{-2} 2.3×10^{-1} 2.1×10^{-1} 2.8×10^{-1} 1.7×10^{-1} 3.1×10^{-1} 5.7×10^{-2}	7100	Duchowicz et al. (2020) Paasivirta and Sinkkonen (2009) Mackay et al. (2006b) Mackay et al. (1992a) Shiu and Mackay (1986) Burkhard et al. (1985) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992)	V V V V V Q Q Q Q Q Q	186 67 721 722
2,2',3,3',4,5,5'-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-172) [52663-74-8] HOPMUCXYRNOABF-UHFFFAOYSA-N	7.6×10^{-1} 8.3×10^{-3} 3.1×10^{-2} 2.4×10^{-1} 2.1×10^{-1} 3.2×10^{-1} 5.6×10^{-1} 3.8×10^{-1} 8.3×10^{-2} 7.6	6800	Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Modarresi et al. (2007) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Duchowicz et al. (2020)	M V V Q Q Q Q Q Q ?	 184 67 721 722 185, 21
2,2',3,3',4,5,6-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-173) [68194-16-1] PAYFWJAKKLILIT-UHFFFAOYSA-N	7.0×10^{-1} 1.3×10^{-3} 3.3×10^{-2} 2.4×10^{-1} 2.1×10^{-1} 1.8×10^{-1} 3.5×10^{-1} 3.1×10^{-1} 5.9×10^{-1} 5.4×10^{-2} 7.0×10^{-1}	6500	Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Duchowicz et al. (2020)	M V V Q Q Q Q Q Q Q ?	 67 721 722 185, 21
2,2',3,3',4,5,6'-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-174) [38411-25-5] ZDLMBNHYTPHDLF-UHFFFAOYSA-N	2.2×10^{-2} 7.0×10^{-1} 2.0×10^{-1} 5.4×10^{-3} 1.3×10^{-2} 2.4×10^{-1} 2.1×10^{-1} 2.6×10^{-1} 3.3×10^{-1} 3.1×10^{-1}	14000 6700	Bamford et al. (2002) Brunner et al. (1990) Murphy et al. (1987) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007)	M M M V V Q Q Q Q Q	 12 299 67 721



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.3×10^{-1}		Fang Lee (2007)	Q	722
	5.8×10^{-2}		Dunnivant et al. (1992)	Q	
	7.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,3',4,5',6'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-175) [40186-70-7] KJBDZJFSYQUNJT-UHFFFAOYSA-N	1.0×10^{-2}	7200	Paasivirta and Sinkkonen (2009)	V	
	2.0×10^{-2}		Burkhard et al. (1985)	V	
	3.4×10^{-1}		Fang Lee (2007)	Q	721
	3.0×10^{-1}		Fang Lee (2007)	Q	722
	4.4×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,3',4,6,6'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-176) [52663-65-7] HGMYRFJAJNYBRX-UHFFFAOYSA-N	1.1×10^{-1}		Murphy et al. (1987)	M	12
	8.5×10^{-3}	7200	Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-2}		Burkhard et al. (1985)	V	
	1.9×10^{-1}		Fang Lee (2007)	Q	721
	2.6×10^{-1}		Fang Lee (2007)	Q	722
	3.3×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,3',4,5',6'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-177) [52663-70-4] CXOYNJAHPUASHN-UHFFFAOYSA-N	2.1×10^{-2}	13000	Bamford et al. (2002)	M	
	3.0×10^{-1}		Murphy et al. (1987)	M	12
	4.5×10^{-3}		Murphy et al. (1983a)	M	24
	3.4×10^{-3}	6600	Paasivirta and Sinkkonen (2009)	V	
	3.8×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Fang Lee (2007)	Q	721
	5.3×10^{-1}		Fang Lee (2007)	Q	722
	6.0×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,3',5,5',6'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-178) [52663-67-9] WCIBKXHMIXUQHK-UHFFFAOYSA-N	1.5×10^{-2}	11000	Bamford et al. (2002)	M	
	4.3×10^{-1}		Brunner et al. (1990)	M	
	1.5×10^{-1}		Murphy et al. (1987)	M	12
	1.0×10^{-2}	7200	Paasivirta and Sinkkonen (2009)	V	
	2.3×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.2×10^{-1}		Duchowicz et al. (2020)	Q	184
	2.7×10^{-1}		Hilal et al. (2008)	Q	
	3.0×10^{-1}		Modarresi et al. (2007)	Q	67
	4.8×10^{-1}		Fang Lee (2007)	Q	721
	5.6×10^{-1}		Fang Lee (2007)	Q	722
	4.6×10^{-2}		Dunnivant et al. (1992)	Q	
	4.3×10^{-1}		Duchowicz et al. (2020)	?	185, 21



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',5,6,6'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-179) [52663-64-6] XYHVYEUZLSYHDP-UHFFFAOYSA-N	4.1×10^{-1}		Brunner et al. (1990)	M	
	4.2×10^{-3}	7000	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.2×10^{-1}		Duchowicz et al. (2020)	Q	299
	3.1×10^{-1}		Hilal et al. (2008)	Q	
	3.1×10^{-1}		Modarresi et al. (2007)	Q	67
	2.6×10^{-1}		Fang Lee (2007)	Q	721
	4.8×10^{-1}		Fang Lee (2007)	Q	722
	3.6×10^{-2}		Dunnivant et al. (1992)	Q	
	4.1×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,4,4',5,5'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-180) [35065-29-3] WBHQEUPUMONIKF-UHFFFAOYSA-N	1.7×10^{-1}	7300	Li et al. (2003)	L	366
	1.2×10^{-1}	7900	Li et al. (2003)	L	367
	2.7×10^{-2}	17000	Bamford et al. (2000)	M	
	9.9×10^{-1}		Brunner et al. (1990)	M	
	3.1×10^{-1}		Murphy et al. (1987)	M	12
	1.5×10^{-2}	6900	Paasivirta and Sinkkonen (2009)	V	
	3.3×10^{-2}		Burkhard et al. (1985)	V	
	2.5×10^{-2}	9000	Paasivirta et al. (1999)	T	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.1×10^{-1}		Duchowicz et al. (2020)	Q	299
	1.4×10^{-2}		Bhangare et al. (2019)	Q	
	2.1×10^{-1}		Hilal et al. (2008)	Q	
	3.5×10^{-1}		Modarresi et al. (2007)	Q	67
	2.8×10^{-1}		Fang Lee (2007)	Q	721
	3.0×10^{-1}		Fang Lee (2007)	Q	722
	9.2×10^{-2}		Dunnivant et al. (1992)	Q	
	9.9×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,4,4',5,6-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-181) [74472-47-2] DJEUXBQAKBLKPO-UHFFFAOYSA-N	1.2×10^{-2}	7200	Paasivirta and Sinkkonen (2009)	V	
	2.4×10^{-2}		Burkhard et al. (1985)	V	
	1.6×10^{-1}		Fang Lee (2007)	Q	721
	3.8×10^{-1}		Fang Lee (2007)	Q	722
	4.3×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,4,4',5,6'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-182) [60145-23-5] RXRLRYZUMSYVLS-UHFFFAOYSA-N	1.7×10^{-2}	12000	Bamford et al. (2002)	M	
	1.7×10^{-2}	7200	Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-2}		Burkhard et al. (1985)	V	
	1.5×10^{-1}		Fang Lee (2007)	Q	721
	2.1×10^{-1}		Fang Lee (2007)	Q	722
	3.8×10^{-2}		Dunnivant et al. (1992)	Q	



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',5',6'-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-183) [52663-69-1] KQBFUDNJKCZEDQ-UHFFFAOYSA-N	1.7×10^{-2}	12000	Bamford et al. (2002)	M	
	1.5×10^{-1}		Murphy et al. (1987)	M	12
	1.6×10^{-2}		Murphy et al. (1983a)	M	24
	2.4×10^{-2}	7400	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-2}		Burkhard et al. (1985)	V	
	1.7×10^{-1}		Fang Lee (2007)	Q	721
	2.5×10^{-1}		Fang Lee (2007)	Q	722
	4.9×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,4,4',6,6'-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-184) [74472-48-3] OBIIJJSQKPGKME-UHFFFAOYSA-N	8.1×10^{-3}	7200	Paasivirta and Sinkkonen (2009)	V	
	7.9×10^{-3}		Burkhard et al. (1985)	V	
	9.4×10^{-2}		Fang Lee (2007)	Q	721
	1.3×10^{-1}		Fang Lee (2007)	Q	722
	2.2×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,4,5,5',6'-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-185) [52712-05-7] PYZHTZHEQHHEH-UHFFFAOYSA-N	6.2×10^{-1}	7000	Brunner et al. (1990)	M	
	4.9×10^{-3}		Paasivirta and Sinkkonen (2009)	V	
	2.2×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.1×10^{-1}		Duchowicz et al. (2020)	Q	299
	1.5×10^{-1}		Hilal et al. (2008)	Q	
	3.4×10^{-1}		Modarresi et al. (2007)	Q	67
	3.1×10^{-1}		Fang Lee (2007)	Q	721
	4.3×10^{-1}		Fang Lee (2007)	Q	722
	4.6×10^{-2}		Dunnivant et al. (1992)	Q	
	6.2×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,4,5,6,6'-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-186) [74472-49-4] FGDPOTMRBQHPJK-UHFFFAOYSA-N	9.6×10^{-4}	6500	Paasivirta and Sinkkonen (2009)	V	
	1.3×10^{-2}		Burkhard et al. (1985)	V	
	1.7×10^{-1}		Fang Lee (2007)	Q	721
	3.7×10^{-1}		Fang Lee (2007)	Q	722
	2.7×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,4',5,5',6'-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-187) [52663-68-0] UDMZPLROONOSEF-UHFFFAOYSA-N	1.6×10^{-2}	12000	Bamford et al. (2000)	M	
	1.2×10^{-1}		Murphy et al. (1987)	M	12
	1.3×10^{-2}	7200	Paasivirta and Sinkkonen (2009)	V	
	2.4×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Fang Lee (2007)	Q	721
	4.3×10^{-1}		Fang Lee (2007)	Q	722
	4.9×10^{-2}		Dunnivant et al. (1992)	Q	



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4',5,6,6'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-188) [74487-85-7] MMTJWDQKGUNSDK-UHFFFAOYSA-N	8.8×10^{-3}	7500	Bamford et al. (2000)	M	
	4.8×10^{-3}	7100	Paasivirta and Sinkkonen (2009)	V	
	8.8×10^{-3}		Burkhard et al. (1985)	V	
	1.6×10^{-2}		Bhangare et al. (2019)	Q	
	1.3×10^{-1}		Fang Lee (2007)	Q	721
	2.3×10^{-1}		Fang Lee (2007)	Q	722
	2.2×10^{-2}		Dunnivant et al. (1992)	Q	
2,3,3',4,4',5,5'- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-189) [39635-31-9] XUAWBXBYHDRROL-UHFFFAOYSA-N	8.4×10^{-2}		Fang et al. (2006)	M	
	4.1×10^{-3}	6300	Paasivirta and Sinkkonen (2009)	V	
	1.1×10^{-1}		Burkhard et al. (1985)	V	
	3.4×10^{-1}		Fang Lee (2007)	Q	721
	3.0×10^{-1}		Fang Lee (2007)	Q	722
	1.5×10^{-1}		Dunnivant et al. (1992)	Q	
2,3,3',4,4',5,6-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-190) [41411-64-7] TYEDCFVCFDKSBK-UHFFFAOYSA-N	1.5×10^{-2}	7000	Paasivirta and Sinkkonen (2009)	V	
	9.9×10^{-2}		Burkhard et al. (1985)	V	
	1.9×10^{-1}		Fang Lee (2007)	Q	721
	5.3×10^{-1}		Fang Lee (2007)	Q	722
	8.8×10^{-2}		Dunnivant et al. (1992)	Q	
2,3,3',4,4',5',6- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-191) [74472-50-7] TVFXBXWAXIMLAQ-UHFFFAOYSA-N	2.1×10^{-2}	7200	Paasivirta and Sinkkonen (2009)	V	
	5.8×10^{-2}		Burkhard et al. (1985)	V	
	2.1×10^{-1}		Fang Lee (2007)	Q	721
	3.2×10^{-1}		Fang Lee (2007)	Q	722
	7.4×10^{-2}		Dunnivant et al. (1992)	Q	
2,3,3',4,5,5',6-heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-192) [74472-51-8] ZUTDUGMNRUBOX-UHFFFAOYSA-N	4.9×10^{-3}	6900	Paasivirta and Sinkkonen (2009)	V	
	6.1×10^{-2}		Burkhard et al. (1985)	V	
	3.8×10^{-1}		Fang Lee (2007)	Q	721
	5.0×10^{-1}		Fang Lee (2007)	Q	722
	5.2×10^{-2}		Dunnivant et al. (1992)	Q	
2,3,3',4',5,5',6- heptachlorobiphenyl $C_{12}H_3Cl_7$ (PCB-193) [69782-91-8] SSTJUBQGYXNFFP-UHFFFAOYSA-N	3.2×10^{-2}	17000	Bamford et al. (2002)	M	
	7.5×10^{-3}	6800	Paasivirta and Sinkkonen (2009)	V	
	1.0×10^{-1}		Burkhard et al. (1985)	V	
	2.9×10^{-1}		Fang Lee (2007)	Q	721
	5.6×10^{-1}		Fang Lee (2007)	Q	722
	7.3×10^{-2}		Dunnivant et al. (1992)	Q	



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4',5,5'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-194) [35694-08-7] DTMRKGRREZAYAP-UHFFFAOYSA-N	1.5×10^{-1}	7500	Li et al. (2003)	L	366
	2.3×10^{-1}	8200	Li et al. (2003)	L	367
	1.0×10^{-1}	20000	Bamford et al. (2002)	M	
	9.9×10^{-1}		Brunner et al. (1990)	M	
	8.0×10^{-3}	6900	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	4.0×10^{-1}		Duchowicz et al. (2020)	Q	184
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	4.8×10^{-1}		Modarresi et al. (2007)	Q	67
	5.6×10^{-1}		Fang Lee (2007)	Q	721
	7.1×10^{-1}		Fang Lee (2007)	Q	722
		6500	Kühne et al. (2005)	Q	
	1.5×10^{-1}		Dunnivant et al. (1992)	Q	
	9.9×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		6600	Kühne et al. (2005)	?	
2,2',3,3',4,4',5,6- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-195) [52663-78-2] JAHJITLJSDRCG-UHFFFAOYSA-N	7.1×10^{-2}	20000	Bamford et al. (2000)	M	
	9.0×10^{-1}		Brunner et al. (1990)	M	
	7.1×10^{-3}	7100	Paasivirta and Sinkkonen (2009)	V	
	7.8×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	3.1×10^{-1}		Duchowicz et al. (2020)	Q	299
	2.4×10^{-1}		Hilal et al. (2008)	Q	
	4.5×10^{-1}		Modarresi et al. (2007)	Q	67
	3.1×10^{-1}		Fang Lee (2007)	Q	721
	1.0		Fang Lee (2007)	Q	722
	8.3×10^{-2}		Dunnivant et al. (1992)	Q	
	9.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,3',4,4',5,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-196) [42740-50-1] BQFCCUSDZLKBJG-UHFFFAOYSA-N	9.9×10^{-1}		Brunner et al. (1990)	M	
	1.8×10^{-2}	7400	Paasivirta and Sinkkonen (2009)	V	
	1.4×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	2.4×10^{-1}		Duchowicz et al. (2020)	Q	
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	5.0×10^{-1}		Modarresi et al. (2007)	Q	67
	3.4×10^{-1}		Fang Lee (2007)	Q	721
	6.2×10^{-1}		Fang Lee (2007)	Q	722
	7.6×10^{-2}		Dunnivant et al. (1992)	Q	
	9.9×10^{-1}		Duchowicz et al. (2020)	?	185, 21



Rolf Sander: Compilation of Henry's law constants

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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4',6,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-197) [33091-17-7] YPDBBDKYNWRFMF-UHFFFAOYSA-N	1.3×10^{-2} 1.1×10^{-2} 1.9×10^{-1} 4.2×10^{-1} 3.9×10^{-2}	7600	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992)	V V Q Q Q	 721 722
2,2',3,3',4,5,5',6- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-198) [68194-17-2] FJHBSPRZHUOIAS-UHFFFAOYSA-N	7.0×10^{-1} 3.5×10^{-3} 4.8×10^{-2} 2.4×10^{-1} 1.7×10^{-1} 2.5×10^{-1} 4.5×10^{-1} 6.2×10^{-1} 1.0 6.4×10^{-2} 7.0×10^{-1}	7000	Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Duchowicz et al. (2020)	M V V Q Q Q Q Q Q Q ?	 299 67 721 722 185, 21
2,2',3,3',4,5,5',6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-199) [52663-75-9] HJBYDWKNARZTMJ-UHFFFAOYSA-N	9.9×10^{-1} 3.4×10^{-3} 2.3×10^{-2} 2.4×10^{-1} 2.2×10^{-1} 2.7×10^{-1} 4.7×10^{-1} 6.2×10^{-1} 9.1×10^{-1} 4.3×10^{-2} 9.9×10^{-1}	7000	Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992) Duchowicz et al. (2020)	M V V Q Q Q Q Q Q Q ?	 299 67 721 722 185, 21
2,2',3,3',4,5,6,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-200) [52663-73-7] HHXNVASVVVNNDG-UHFFFAOYSA-N	7.6×10^{-3} 1.5×10^{-2} 3.4×10^{-1} 7.7×10^{-1} 4.1×10^{-2}	7200	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992)	V V Q Q Q	 721 722
2,2',3,3',4,5',6,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-201) [40186-71-8] LJQOBLZTUSEJA-UHFFFAOYSA-N	1.0×10^{-2} 5.8×10^{-1} 1.2×10^{-2} 1.5×10^{-2} 2.4×10^{-1} 1.3×10^{-1} 1.3×10^{-2} 2.9×10^{-1}	17000 7500	Bamford et al. (2000) Brunner et al. (1990) Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Keshavarz et al. (2022) Duchowicz et al. (2020) Bhangare et al. (2019) Hilal et al. (2008)	M M V V Q Q Q Q	 184



Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	5.1×10^{-1}		Modarresi et al. (2007)	Q	67
	3.7×10^{-1}		Fang Lee (2007)	Q	721
	1.1		Fang Lee (2007)	Q	722
	7.6×10^{-2}		Dunnivant et al. (1992)	Q	
	5.8×10^{-1}		Duchowicz et al. (2020)	?	185, 21
2,2',3,3',5,5',6,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-202) [2136-99-4] JPOPEORRMSDUIP-UHFFFAOYSA-N	5.5×10^{-1}		Brunner et al. (1990)	M	
	5.0×10^{-3}	7300	Paasivirta and Sinkkonen (2009)	V	
	2.6×10^{-2}		Mackay et al. (2006b)	V	
	2.6×10^{-2}		Mackay et al. (1992a)	V	
	2.7×10^{-2}		Shiu and Mackay (1986)	V	
	1.3×10^{-2}		Burkhard et al. (1985)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	1.2×10^{-1}		Duchowicz et al. (2020)	Q	
	3.7×10^{-1}		Hilal et al. (2008)	Q	
	5.5×10^{-1}		Modarresi et al. (2007)	Q	67
	5.3×10^{-1}		Fang Lee (2007)	Q	721
	1.4		Fang Lee (2007)	Q	722
	4.4×10^{-2}	4700	Kühne et al. (2005)	Q	
	5.5×10^{-1}		Dunnivant et al. (1992)	Q	
	5.5×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	5.5×10^{-1}	5000	Kühne et al. (2005)	?	
2,2',3,4,4',5,5',6- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-203) [52663-76-0] DCPDZFRGNJDWPP-UHFFFAOYSA-N	3.2×10^{-2}	7800	Paasivirta and Sinkkonen (2009)	V	
	5.0×10^{-2}		Burkhard et al. (1985)	V	
	1.3×10^{-2}		Bhangare et al. (2019)	Q	
	3.1×10^{-1}		Fang Lee (2007)	Q	721
	7.7×10^{-1}		Fang Lee (2007)	Q	722
	7.0×10^{-2}		Dunnivant et al. (1992)	Q	
2,2',3,4,4',5,6,6'- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-204) [74472-52-9] JDZUWXRNKHXZFE-UHFFFAOYSA-N	1.1×10^{-2}	7800	Paasivirta and Sinkkonen (2009)	V	
	1.9×10^{-2}		Burkhard et al. (1985)	V	
	1.3×10^{-2}		Bhangare et al. (2019)	Q	
	1.7×10^{-1}		Fang Lee (2007)	Q	721
	4.5×10^{-1}		Fang Lee (2007)	Q	722
	2.9×10^{-2}		Dunnivant et al. (1992)	Q	
2,3,3',4,4',5,5',6- octachlorobiphenyl $C_{12}H_2Cl_8$ (PCB-205) [74472-53-0] VXXBCDUYUQKWCK-UHFFFAOYSA-N	4.4×10^{-3}	6800	Paasivirta and Sinkkonen (2009)	V	
	2.1×10^{-1}		Burkhard et al. (1985)	V	
	1.2×10^{-2}		Bhangare et al. (2019)	Q	
	3.8×10^{-1}		Fang Lee (2007)	Q	721
	9.1×10^{-1}		Fang Lee (2007)	Q	722
	1.1×10^{-1}		Dunnivant et al. (1992)	Q	



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Table A6.3: Polychlorinated biphenyls (PCBs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4',5,5',6- nonachlorobiphenyl $C_{12}HCl_9$ (PCB-206) [40186-72-9] JFIMDKGRGPNRQ-UHFFFAOYSA-N	2.1×10^{-3} 1.2 1.2×10^{-2} 3.6×10^{-2} 1.1×10^{-2} 6.2×10^{-1} 2.0 1.1×10^{-1}	7300	Paasivirta and Sinkkonen (2009) Mackay et al. (2006b) Mackay et al. (1992a) Burkhard et al. (1985) Bhangare et al. (2019) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992)	V V V V Q Q Q Q	721 722
2,2',3,3',4,4',5,6,6'- nonachlorobiphenyl $C_{12}HCl_9$ (PCB-207) [52663-79-3] YGDPIDTZOQGPAX-UHFFFAOYSA-N	1.8×10^{-3} 2.8×10^{-2} 1.1×10^{-2} 3.3×10^{-1} 1.4 5.8×10^{-2}	7500	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Bhangare et al. (2019) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992)	V V Q Q Q Q	721 722
2,2',3,3',4,5,5',6,6'- nonachlorobiphenyl $C_{12}HCl_9$ (PCB-208) [52663-77-1] XIFFTDRFWYFAPO-UHFFFAOYSA-N	3.0×10^{-3} 3.1×10^{-2} 1.2×10^{-2} 6.7×10^{-1} 2.5 5.9×10^{-2}	7700	Paasivirta and Sinkkonen (2009) Burkhard et al. (1985) Bhangare et al. (2019) Fang Lee (2007) Fang Lee (2007) Dunnivant et al. (1992)	V V Q Q Q Q	721 722
decachlorobiphenyl $C_{12}Cl_{10}$ (PCB-209) [2051-24-3] ONXPZLFXDMAPRO-UHFFFAOYSA-N	1.0×10^{-3} 6.7×10^{-4} 4.8×10^{-2} 4.8×10^{-2} 8.0×10^{-2} 2.6×10^{-1} 1.0×10^{-2} 3.1×10^{-1} 6.7×10^{-1} 5.0 8.8×10^{-2}	7200 6100 7300	Duchowicz et al. (2020) Paasivirta and Sinkkonen (2009) Mackay et al. (2006b) Mackay et al. (1992a) Shiu and Mackay (1986) Burkhard et al. (1985) Duchowicz et al. (2020) Bhangare et al. (2019) Hilal et al. (2008) Fang Lee (2007) Fang Lee (2007) Kühne et al. (2005) Dunnivant et al. (1992) Kühne et al. (2005)	V V V V V Q Q Q Q Q Q Q Q ?	186 683 721 722



A6.4 Oxygenated chlorocarbons (C, H, O, Cl)

Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phosgene CCl ₂ O [75-44-5] YGYAWVDWMABLBF-UHFFFAOYSA-N	5.9×10^{-4} 6.8×10^{-4} 7.0×10^{-4} 5.3×10^{-4}	3800 4200	De Bruyn et al. (1995a) Manogue and Pigford (1960) Yaws (2003) Hayer et al. (2022)	M M X Q	 237 20
	8.8×10^{-3} 6.1×10^{-2} 3.7×10^{-1} 1.4×10^{-2} 1.1×10^{-4} 6.8×10^{-4} 5.9×10^{-4} 7.1×10^{-4}		Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Gharagheizi et al. (2010) Duchowicz et al. (2020) Yaws (1999)	Q Q Q Q Q Q ? ?	 80, 238 80, 239 80, 240 246 185, 21 21
MCM:CCL3OOH CHO ₂ Cl ₃ DUBMHDTUZCIGCY-UHFFFAOYSA-N	2.1×10^1 4.9 3.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH2CLOOH CH ₃ O ₂ Cl DUNYOPWYTOSXOC-UHFFFAOYSA-N	1.8×10^1 6.2×10^1 1.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHCL2OOH CH ₂ O ₂ Cl ₂ TUIIYMKEIGYDJB-UHFFFAOYSA-N	4.7×10^1 1.3×10^2 5.6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CCL3OH CHOC ₃ GYLIOGDFGLKMOL-UHFFFAOYSA-N	4.7 8.1×10^{-1} 4.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH2CLOH CH ₃ OCl BCUPGIHTCQJCSI-UHFFFAOYSA-N	1.9 1.9×10^1 1.1×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHCL2OH CH ₂ OCl ₂ GJYVZUKSNFSLCL-UHFFFAOYSA-N	6.6 1.2×10^1 2.8×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHOCL CHOC ₁ GFAUNYMRSKVDJL-UHFFFAOYSA-N	2.2×10^{-1} 2.0×10^{-2} 3.0×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CLCO2H CHO ₂ Cl AOGYCOYQMAVAFD-UHFFFAOYSA-N	3.2×10^1 8.5 9.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dichloroacetaldehyde $\text{C}_2\text{H}_2\text{Cl}_2\text{O}$ [79-02-7] NWQWQKUXRJRJYXFH-UHFFFAOYSA-N	4.7×10^{-1} 7.4×10^{-1} 1.1×10^{-2} 1.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	80, 238 80, 239 80, 240 99
chloroacetyl chloride $\text{C}_2\text{H}_2\text{Cl}_2\text{O}$ [79-04-9] VGCXGMAHQTYDJK-UHFFFAOYSA-N	2.9×10^{-1} 1.3×10^{-1} 4.3×10^{-2} 4.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	80, 238 80, 239 80, 240 99
chloral hydrate $\text{C}_2\text{H}_3\text{Cl}_3\text{O}_2$ [302-17-0] RNFNDJAIBTYOQL-UHFFFAOYSA-N	2.4×10^3		HSDB (2015)	V	
chloroacetaldehyde $\text{C}_2\text{H}_3\text{ClO}$ [107-20-0] QSKPIOLLIHINAC-UHFFFAOYSA-N	1.9×10^{-1} 2.3 3.5 4.1×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	80, 238 80, 239 80, 240 99
2-chloroethanol $\text{C}_2\text{H}_5\text{ClO}$ [107-07-3] SZIFAVKTNFCBPC-UHFFFAOYSA-N	1.3×10^1 3.3 1.1 1.3×10^1 4.7 9.5×10^1 2.8×10^1 1.4×10^1 1.7×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	V Q Q Q Q Q Q Q Q	186 80, 238 80, 239 80, 240 99 67 248, 249
2,2-dichloroethanol $\text{C}_2\text{H}_4\text{Cl}_2\text{O}$ [598-38-9] IDJOCJAIQSKSOP-UHFFFAOYSA-N	3.7×10^{-1} 3.7×10^{-1} 3.7×10^{-1} 3.2 2.6×10^1 6.9		Burkholder et al. (2019) Burkholder et al. (2015) O'Farrell and Waghorne (2010) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	L L M Q Q Q	 80, 238 80, 239 80, 240
2-chloroethanol-d4 $\text{ClC}_2\text{D}_4\text{OH}$ [117067-62-6] SZIFAVKTNFCBPC-LNLMKGTHTSA-N	5.0	8700	Hiatt (2013)	M	
MCM:CCL2CL2OOH $\text{C}_2\text{H}_2\text{O}_2\text{Cl}_4$ SWNDCAXLXSSRFN-UHFFFAOYSA-N	3.9×10^2 7.1×10^1 1.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CCL3CH2OOH $\text{C}_2\text{H}_3\text{O}_2\text{Cl}_3$ RJIYMLTECJZCN-UHFFFAOYSA-N	1.7×10^1 1.8×10^1 2.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CCL3CO3H	2.6×10^2		Wang et al. (2017)	Q	80, 238
C ₂ H ₃ O ₃ Cl ₃	5.9		Wang et al. (2017)	Q	80, 239
DRTNVNKYVPOWCY-UHFFFAOYSA-N	1.4		Wang et al. (2017)	Q	80, 240
MCM:CH2CL3OOH	1.2×10^2		Wang et al. (2017)	Q	80, 238
C ₂ H ₃ O ₂ Cl ₃	3.8×10^1		Wang et al. (2017)	Q	80, 239
CHVIFDTZRLKJET-UHFFFAOYSA-N	1.3×10^1		Wang et al. (2017)	Q	80, 240
MCM:CH2CLCOOH	1.6×10^1		Wang et al. (2017)	Q	80, 238
C ₂ H ₅ O ₂ Cl	6.3×10^1		Wang et al. (2017)	Q	80, 239
PIXGNJBYAUTOCI-UHFFFAOYSA-N	5.1×10^1		Wang et al. (2017)	Q	80, 240
MCM:CH3CCL2OOH	1.2×10^1		Wang et al. (2017)	Q	80, 238
C ₂ H ₄ O ₂ Cl ₂	1.0×10^1		Wang et al. (2017)	Q	80, 239
YUVMNUKOYYKNS-UHFFFAOYSA-N	8.9		Wang et al. (2017)	Q	80, 240
MCM:CH3CHCLOOH	1.9×10^1		Wang et al. (2017)	Q	80, 238
C ₂ H ₅ O ₂ Cl	2.0×10^1		Wang et al. (2017)	Q	80, 239
MCYQTMWYXIRIL-UHFFFAOYSA-N	5.6		Wang et al. (2017)	Q	80, 240
MCM:CHCL2CO3H	5.1×10^2		Wang et al. (2017)	Q	80, 238
C ₂ H ₂ O ₃ Cl ₂	4.3×10^1		Wang et al. (2017)	Q	80, 239
VWNSYHZUZUFFDM-UHFFFAOYSA-N	8.9		Wang et al. (2017)	Q	80, 240
MCM:CHCL2COOH	3.9×10^1		Wang et al. (2017)	Q	80, 238
C ₂ H ₄ O ₂ Cl ₂	1.1×10^2		Wang et al. (2017)	Q	80, 239
GJBKLBBJOKITMY-UHFFFAOYSA-N	2.7×10^1		Wang et al. (2017)	Q	80, 240
MCM:CHCL3OOH	4.3×10^2		Wang et al. (2017)	Q	80, 238
C ₂ H ₃ O ₂ Cl ₃	1.2×10^2		Wang et al. (2017)	Q	80, 239
AMASFZACKVPSTN-UHFFFAOYSA-N	4.1×10^1		Wang et al. (2017)	Q	80, 240
MCM:CLETO3H	2.1×10^2		Wang et al. (2017)	Q	80, 238
C ₂ H ₃ O ₃ Cl	5.5×10^1		Wang et al. (2017)	Q	80, 239
JSQPGNJFQUOEP-UHFFFAOYSA-N	1.4×10^1		Wang et al. (2017)	Q	80, 240
MCM:DICLETO2H	1.3×10^2		Wang et al. (2017)	Q	80, 238
C ₂ H ₄ O ₂ Cl ₂	7.3×10^1		Wang et al. (2017)	Q	80, 239
UPXDMONURWDHKL-UHFFFAOYSA-N	4.8×10^1		Wang et al. (2017)	Q	80, 240
MCM:C2CL2OH2	1.4×10^5		Wang et al. (2017)	Q	80, 238
C ₂ H ₄ O ₂ Cl ₂	1.3×10^4		Wang et al. (2017)	Q	80, 239
HHQQTVMXFKGIICR-UHFFFAOYSA-N	1.2×10^2		Wang et al. (2017)	Q	80, 240
MCM:C2CL2OHOOH	2.8×10^6		Wang et al. (2017)	Q	80, 238
C ₂ H ₄ O ₃ Cl ₂	1.7×10^4		Wang et al. (2017)	Q	80, 239
NCBKAYIJWMIXBU-UHFFFAOYSA-N	1.4×10^4		Wang et al. (2017)	Q	80, 240
MCM:C2CL32OH	1.9×10^5		Wang et al. (2017)	Q	80, 238
C ₂ H ₃ O ₂ Cl ₃	5.1×10^3		Wang et al. (2017)	Q	80, 239
MYDJEUINZIFHKK-UHFFFAOYSA-N	2.8×10^7		Wang et al. (2017)	Q	80, 240



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:C2CL3HOOOH $\text{C}_2\text{H}_3\text{O}_3\text{Cl}_3$ KHLAQOPQQHOMKQ-UHFFFAOYSA-N	3.1×10^6 1.0×10^4 4.3×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:C2CL3OHOOH $\text{C}_2\text{H}_3\text{O}_3\text{Cl}_3$ CEKNFZNLTXCLL-UHFFFAOYSA-N	2.6×10^6 1.1×10^4 1.1×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
trichloroethanol $\text{C}_2\text{H}_3\text{OCl}_3$ [115-20-8] KPWDGTGXUYRARH-UHFFFAOYSA-N	1.7 3.9 3.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CCLOHCOOH $\text{C}_2\text{H}_5\text{O}_3\text{Cl}$ MIFGQALJIBIDZDW-UHFFFAOYSA-N	1.9×10^5 9.6×10^3 1.0×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH2CL3OH $\text{C}_2\text{H}_3\text{OCl}_3$ HYCHPIPDVAXCCJ-UHFFFAOYSA-N	2.9×10^1 1.3×10^1 1.5×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH2OHCCLOH $\text{C}_2\text{H}_5\text{O}_2\text{Cl}$ VVKFXODVPQSIHU-UHFFFAOYSA-N	4.2×10^3 4.2×10^3 9.3×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH3CCL2OH $\text{C}_2\text{H}_4\text{OCl}_2$ DNBABSPIEDTPHK-UHFFFAOYSA-N	1.6 2.4 8.1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH3CHCLOH $\text{C}_2\text{H}_5\text{OCl}$ KJESGYZFCVIMDE-UHFFFAOYSA-N	1.8 8.1 4.6×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHCL2CL2OH $\text{C}_2\text{H}_2\text{OCl}_4$ LQINPQOSBLVJBS-UHFFFAOYSA-N	1.1×10^2 2.2×10^1 3.7×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHCL3OH $\text{C}_2\text{H}_3\text{OCl}_3$ NIBKDWIGIKUFKL-UHFFFAOYSA-N	9.1×10^1 5.6×10^1 3.4×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CL2OHCH2OH $\text{C}_2\text{H}_4\text{O}_2\text{Cl}_2$ ZOZPDNLNQCVSW-UHFFFAOYSA-N	4.5×10^3 1.6×10^3 1.6×10^4		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CL2OHCO3H $\text{C}_2\text{H}_2\text{O}_4\text{Cl}_2$ MACSTFWYVGNISK-UHFFFAOYSA-N	9.3×10^4 4.7 5.9		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CL2OHOOH $\text{C}_2\text{H}_4\text{O}_3\text{Cl}_2$ WOJAYLCSWSBEJV-UHFFFAOYSA-N	1.7×10^5 4.0×10^3 4.1×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CLOHCO3H	1.0×10^5		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_3\text{O}_4\text{Cl}$	2.5×10^2		Wang et al. (2017)	Q	80, 239
IODLIDNNOHQSDW-UHFFFAOYSA-N	1.3×10^3		Wang et al. (2017)	Q	80, 240
MCM:COHCCLOOH	1.2×10^5		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_5\text{O}_3\text{Cl}$	5.0×10^3		Wang et al. (2017)	Q	80, 239
WXPZQCJULOKCY-UHFFFAOYSA-N	4.4×10^3		Wang et al. (2017)	Q	80, 240
MCM:DICLETOH	2.6×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_4\text{OCl}_2$	3.8×10^1		Wang et al. (2017)	Q	80, 239
QXBDGZHAAOUBY-UHFFFAOYSA-N	3.1×10^1		Wang et al. (2017)	Q	80, 240
MCM:TCE2OH	2.9×10^5		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_2\text{O}_2\text{Cl}_4$	2.0×10^3		Wang et al. (2017)	Q	80, 239
BVBMRJKFECUARX-UHFFFAOYSA-N	4.2×10^6		Wang et al. (2017)	Q	80, 240
MCM:TCEOHOOH	3.4×10^6		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_2\text{O}_3\text{Cl}_4$	4.3×10^3		Wang et al. (2017)	Q	80, 239
YKIXQGIQZGTABG-UHFFFAOYSA-N	1.4×10^6		Wang et al. (2017)	Q	80, 240
MCM:CCLOHCHO	8.3×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_3\text{O}_2\text{Cl}$	8.9×10^1		Wang et al. (2017)	Q	80, 239
RYRGLFUQPWFVXSD-UHFFFAOYSA-N	4.4		Wang et al. (2017)	Q	80, 240
MCM:CL2OHCHO	7.6×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_2\text{O}_2\text{Cl}_2$	1.0		Wang et al. (2017)	Q	80, 239
LCOUNIIIIWZOM-UHFFFAOYSA-N	6.0×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:CH3COCL	1.5×10^{-1}		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_3\text{OCl}$	2.6×10^{-2}		Wang et al. (2017)	Q	80, 239
WETWJCDKMRHUPV-UHFFFAOYSA-N	8.7×10^{-3}		Wang et al. (2017)	Q	80, 240
MCM:CHCL2COCL	6.8×10^{-1}		Wang et al. (2017)	Q	80, 238
C_2HOCl_3	6.6×10^{-2}		Wang et al. (2017)	Q	80, 239
FBCCMZVIWDFMO-UHFFFAOYSA-N	3.6×10^{-3}		Wang et al. (2017)	Q	80, 240
MCM:CLCOCH2OOH	1.1×10^4		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_3\text{O}_3\text{Cl}$	2.1×10^2		Wang et al. (2017)	Q	80, 239
ARKKUYXZQNAAF-UHFFFAOYSA-N	8.0		Wang et al. (2017)	Q	80, 240
MCM:CLCOCL2OOH	1.6×10^4		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{HO}_3\text{Cl}_3$	3.1×10^1		Wang et al. (2017)	Q	80, 239
FXUYMCPKRPYDCU-UHFFFAOYSA-N	2.1		Wang et al. (2017)	Q	80, 240
MCM:CLCOCLOOH	2.5×10^4		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_2\text{O}_3\text{Cl}_2$	3.9×10^2		Wang et al. (2017)	Q	80, 239
WROSSTYSMNZXC-UHFFFAOYSA-N	2.6×10^1		Wang et al. (2017)	Q	80, 240
MCM:CLGLYOX	2.2×10^2		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{O}_2\text{Cl}_2$	1.3×10^{-1}		Wang et al. (2017)	Q	80, 239
CTSLXHKWHWQRSH-UHFFFAOYSA-N	3.6×10^{-4}		Wang et al. (2017)	Q	80, 240



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CCL2OHCOCCL $\text{C}_2\text{HO}_2\text{Cl}_3$ WBBOIYQGQVKNEO-UHFFFAOYSA-N	1.3×10^2 1.2 1.7×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CCLOHCOCCL $\text{C}_2\text{H}_2\text{O}_2\text{Cl}_2$ NABBVDLPITPRF-UHFFFAOYSA-N	1.4×10^2 5.6×10^1 3.5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH2OHCOCCL $\text{C}_2\text{H}_3\text{O}_2\text{Cl}$ LCIMJULVQOQTEZ-UHFFFAOYSA-N	2.1×10^1 1.1×10^2 4.2×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CL1GLYOX $\text{C}_2\text{HO}_2\text{Cl}$ ZNBGBHISQKMEPA-UHFFFAOYSA-N	1.4×10^2 1.5 4.2×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CLOHCO2H $\text{C}_2\text{H}_3\text{O}_3\text{Cl}$ SORBEIKZIPTJRS-UHFFFAOYSA-N	8.5×10^4 3.6×10^4 1.4×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1,1,1-trichloro-2-propanone $\text{C}_3\text{H}_3\text{Cl}_3\text{O}$ [918-00-3] SMZHKGXSEAGRTI-UHFFFAOYSA-N	4.5		HSDB (2015)	Q	99
1,1-dichloro-2-propanone $\text{C}_3\text{H}_4\text{Cl}_2\text{O}$ (1,1-dichloroacetone) [513-88-2] CSVFWMMPUJDVKH-UHFFFAOYSA-N	3.3×10^{-1} 3.3×10^{-1} 3.3×10^{-1} 1.6		Burkholder et al. (2019) Burkholder et al. (2015) O'Farrell and Waghorne (2010) HSDB (2015)	L L M Q	 99
carbonochloridic acid, 2-chloroethyl ester $\text{C}_3\text{H}_4\text{Cl}_2\text{O}_2$ (chloroethyl chloroformate) [627-11-2] SVDDJQGVFZBNX-UHFFFAOYSA-N	9.0×10^{-3}		HSDB (2015)	Q	99
carbonochloridic acid, ethyl ester $\text{C}_3\text{H}_5\text{ClO}_2$ (ethyl chloroformate) [541-41-3] RIFGWPKJUGCATF-UHFFFAOYSA-N	3.2×10^{-3}		HSDB (2015)	Q	99
2-chloropropanoic acid $\text{C}_3\text{H}_5\text{ClO}_2$ [598-78-7] GAWAYYRGGQZKCR-UHFFFAOYSA-N	3.8×10^1		HSDB (2015)	Q	99



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dichloro-1-propanol $\text{C}_3\text{H}_6\text{Cl}_2\text{O}$ [616-23-9] ZXCYIJGIGSDJQQ-UHFFFAOYSA-N	7.8 6.9×10^1 1.3×10^1 3.3×10^3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) HSDB (2015)	Q Q Q Q	80, 238 80, 239 80, 240 99
1,3-dichloro-2-propanol $\text{C}_3\text{H}_6\text{Cl}_2\text{O}$ [96-23-1] DEWLEGDTCGBNGU-UHFFFAOYSA-N	5.8 1.6×10^1 2.0×10^1 4.9×10^1 1.6×10^1 2.6×10^1 3.0×10^1 1.7×10^1		Meylan and Howard (1991) HSDB (2015) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991)	V Q Q Q Q Q Q Q	99 271, 243 244 245 67 99
3-chloro-1,2-propanediol $\text{C}_3\text{H}_7\text{ClO}_2$ [96-24-2] SSZWWUDQMAHNAQ-UHFFFAOYSA-N	1.6×10^2		HSDB (2015)	Q	99
1-chloro-2-propanol $\text{C}_3\text{H}_7\text{ClO}$ [127-00-4] YYTSGNJTASLUOY-UHFFFAOYSA-N	5.8		HSDB (2015)	Q	99
2-chloro-1-propanol $\text{C}_3\text{H}_7\text{ClO}$ [78-89-7] VZIQXGLTRZLBEX-UHFFFAOYSA-N	5.8		HSDB (2015)	Q	99
3-chloro-1-propanol $\text{C}_3\text{H}_7\text{ClO}$ [627-30-5] LAMUXTNQCICZQX-UHFFFAOYSA-N	1.3×10^1		Ebert et al. (2023)	?	316
trichloroethanal CCl_3CHO (trichloroacetaldehyde; chloral) [75-87-6] HFFLGKNGCAIQMO-UHFFFAOYSA-N	3.4×10^3 3.4×10^3 3.4×10^3 2.2×10^3 1.3×10^{-1} 2.1×10^{-1} 1.6×10^{-2} 3.2×10^{-3} 1.2×10^3 3.1×10^2 3.1	3500 3500 3500	Burkholder et al. (2019) Burkholder et al. (2015) Betterton and Hoffmann (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Kühne et al. (2005) Meylan and Howard (1991) Duchowicz et al. (2020) Kühne et al. (2005)	L L M Q Q Q Q Q Q Q Q Q Q ?	460 460 460 80, 238 80, 239 80, 240 242, 243 244 245 185, 21 ?



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chloro-2-propanone <chem>CH2ClCOCH3</chem> (chloroacetone) [78-95-5] BULLHNJGPPUOX-UHFFFAOYSA-N	5.8×10^{-1}	5400	Burkholder et al. (2019)	L	
	5.8×10^{-1}	5400	Burkholder et al. (2015)	L	
	5.8×10^{-1}	5400	Sander et al. (2011)	L	
	5.8×10^{-1}	5400	Betterton (1991)	M	
	1.2×10^{-1}		Keshavarz et al. (2022)	Q	
	8.8×10^{-2}		Duchowicz et al. (2020)	Q	299
	1.3×10^{-1}		Wang et al. (2017)	Q	80, 238
	2.0		Wang et al. (2017)	Q	80, 239
	1.2		Wang et al. (2017)	Q	80, 240
	1.6		Raventos-Duran et al. (2010)	Q	271, 243
	1.2		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-1}		Raventos-Duran et al. (2010)	Q	245
	8.8×10^{-1}		Hilal et al. (2008)	Q	
	6.8×10^{-1}		Modarresi et al. (2007)	Q	67
		4400	Kühne et al. (2005)	Q	
	6.0×10^{-1}		Duchowicz et al. (2020)	?	185, 21
		5500	Kühne et al. (2005)	?	
chloroethanoic acid <chem>CH2ClCOOH</chem> (chloroacetic acid) [79-11-8] FOCAUTSVDIKZOP-UHFFFAOYSA-N	1.1×10^3	9700	Burkholder et al. (2019)	L	
	1.1×10^3	9700	Burkholder et al. (2015)	L	
	1.1×10^3	9700	Sander et al. (2011)	L	
	1.1×10^3	9700	Bowden et al. (1998a)	M	
	1.1×10^3		Keshavarz et al. (2022)	Q	
	1.3×10^2		Duchowicz et al. (2020)	Q	
	2.0×10^2		Wang et al. (2017)	Q	80, 238
	3.6×10^3		Wang et al. (2017)	Q	80, 239
	1.1×10^3		Wang et al. (2017)	Q	80, 240
	1.2×10^3		Raventos-Duran et al. (2010)	Q	271, 243
	1.6×10^3		Raventos-Duran et al. (2010)	Q	244
	4.9×10^1		Raventos-Duran et al. (2010)	Q	245
	8.8×10^2		Hilal et al. (2008)	Q	
	3.1×10^2		Modarresi et al. (2007)	Q	67
		8100	Kühne et al. (2005)	Q	
	1.1×10^3		Duchowicz et al. (2020)	?	185, 21
		9400	Kühne et al. (2005)	?	
dichloroethanoic acid <chem>CHCl2COOH</chem> (dichloroacetic acid) [79-43-6] JXTHNDFMNIQAHM-UHFFFAOYSA-N	1.2×10^3	8000	Burkholder et al. (2019)	L	
	1.2×10^3	8000	Burkholder et al. (2015)	L	
	1.2×10^3	8000	Sander et al. (2011)	L	
	1.2×10^3	8000	Bowden et al. (1998a)	M	
	5.6×10^2		Keshavarz et al. (2022)	Q	
	3.9×10^2		Duchowicz et al. (2020)	Q	299
	6.6×10^2		Wang et al. (2017)	Q	80, 238
	1.4×10^3		Wang et al. (2017)	Q	80, 239
	3.8×10^2		Wang et al. (2017)	Q	80, 240
	2.5×10^3		Raventos-Duran et al. (2010)	Q	271, 243
	6.2×10^2		Raventos-Duran et al. (2010)	Q	244
	1.6×10^2		Raventos-Duran et al. (2010)	Q	245



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.9×10^2		Hilal et al. (2008)	Q	
	8.5×10^2		Modarresi et al. (2007)	Q	67
		8400	Kühne et al. (2005)	Q	
	2.6×10^1		Katritzky et al. (1998)	Q	
	1.2×10^3		Duchowicz et al. (2020)	?	185, 21
		8000	Kühne et al. (2005)	?	
trichloroethanoic acid CCl ₃ COOH (trichloroacetic acid) [76-03-9] YNJBWRMUSHSURL-UHFFFAOYSA-N	7.3×10^2	8700	Burkholder et al. (2019)	L	
	7.3×10^2	8700	Burkholder et al. (2015)	L	
	7.3×10^2	8700	Sander et al. (2011)	L	
	7.3×10^2	8700	Bowden et al. (1998b)	M	
	5.6×10^2		Keshavarz et al. (2022)	Q	
	2.3×10^2		Duchowicz et al. (2020)	Q	
	9.9×10^2		Raventos-Duran et al. (2010)	Q	271, 243
	3.9		Raventos-Duran et al. (2010)	Q	244
	3.9×10^2		Raventos-Duran et al. (2010)	Q	245
	4.7		Hilal et al. (2008)	Q	
	7.6×10^2		Modarresi et al. (2007)	Q	67
		8800	Kühne et al. (2005)	Q	
	7.3×10^2		Duchowicz et al. (2020)	?	185, 21
		8600	Kühne et al. (2005)	?	
2,2-dichloro-propanoic acid C ₃ H ₄ Cl ₂ O ₂ [75-99-0] NDUPDOJHUQKPAG-UHFFFAOYSA-N	1.7×10^2		Duchowicz et al. (2020)	V	186
	3.5×10^8		Mackay et al. (2006d)	V	
	1.8×10^2		Duchowicz et al. (2020)	Q	
trichloroacetylchloride CCl ₃ COCl [76-02-8] PVFOMCVHYWHZJE-UHFFFAOYSA-N	2.0×10^{-2}		Mirabel et al. (1996)	M	
	2.0×10^{-2}		De Bruyn et al. (1995a)	M	449
	2.0×10^{-2}		George et al. (1994a)	M	
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	7.3×10^{-2}		Duchowicz et al. (2020)	Q	184
	3.4×10^{-1}		HSDB (2015)	Q	99
	1.9×10^{-2}		Duchowicz et al. (2020)	?	185, 21
hexachloroacetone C ₃ Cl ₆ O [116-16-5] DOJXGHGHTWFZHK-UHFFFAOYSA-N	1.0×10^2		Zhang et al. (2010)	Q	287, 288
	9.0×10^{-4}		Zhang et al. (2010)	Q	287, 289
	6.2×10^{-2}		Zhang et al. (2010)	Q	287, 290
	1.8×10^{-1}		Zhang et al. (2010)	Q	287, 291
(chloromethyl)-oxirane C ₃ H ₅ ClO (epichlorohydrin) [106-89-8] BRLQWZUYTZBJKN-UHFFFAOYSA-N	2.9×10^{-1}		Welke et al. (1998)	M	
	3.2×10^{-1}		Duchowicz et al. (2020)	V	186
	3.3×10^{-1}		HSDB (2015)	V	
	3.0×10^{-1}		Mackay et al. (2006c)	V	
	3.0×10^{-1}		Mackay et al. (1993)	V	
	2.8×10^{-1}		Goldstein (1982)	X	446
	2.8×10^{-1}	3700	Goldstein (1982)	X	298
	1.3×10^{-1}		Duchowicz et al. (2020)	Q	
	9.9×10^{-2}		Hilal et al. (2008)	Q	
	1.7×10^{-1}		Modarresi et al. (2007)	Q	67



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl chloroethanoate	4.9×10^{-1}	5600	Brockbank (2013)	L	1
$\text{C}_3\text{H}_5\text{ClO}_2$	4.2×10^{-1}		Duchowicz et al. (2020)	V	186
[96-34-4]	4.1×10^{-2}		HSDB (2015)	V	
QABLOFMHHSOFRJ-UHFFFAOYSA-N	3.3×10^{-1}		Duchowicz et al. (2020)	Q	
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	1.2×10^{-1}		Modarresi et al. (2007)	Q	67
MCM:CL12CO3H	1.6×10^3		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_4\text{O}_3\text{Cl}_2$	1.1×10^2		Wang et al. (2017)	Q	80, 239
VMJCNPRTZBGZGF-UHFFFAOYSA-N	2.3		Wang et al. (2017)	Q	80, 240
MCM:CL12PRAOOH	1.0×10^2		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_6\text{O}_2\text{Cl}_2$	2.5×10^2		Wang et al. (2017)	Q	80, 239
WGVINOMLJVZPKZ-UHFFFAOYSA-N	1.5×10^2		Wang et al. (2017)	Q	80, 240
MCM:CL12PRBOOH	7.1×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_6\text{O}_2\text{Cl}_2$	1.8×10^1		Wang et al. (2017)	Q	80, 239
OMIMXWULHYQJIC-UHFFFAOYSA-N	9.3		Wang et al. (2017)	Q	80, 240
MCM:CL12PRCOOH	1.2×10^2		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_6\text{O}_2\text{Cl}_2$	3.8×10^1		Wang et al. (2017)	Q	80, 239
ULSSYZIMOSSQB-UHFFFAOYSA-N	3.8×10^1		Wang et al. (2017)	Q	80, 240
MCM:CL12PRBOH	1.4×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_6\text{OCl}_2$	1.5×10^1		Wang et al. (2017)	Q	80, 239
QEZDCTNHTRSND-UHFFFAOYSA-N	2.6×10^1		Wang et al. (2017)	Q	80, 240
MCM:CL12PRCOH	2.3×10^1		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_6\text{OCl}_2$	1.8×10^1		Wang et al. (2017)	Q	80, 239
FLTSEOGWHPJWRV-UHFFFAOYSA-N	4.9×10^1		Wang et al. (2017)	Q	80, 240
MCM:CL12PRCHO	1.3		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_4\text{OCl}_2$	3.5		Wang et al. (2017)	Q	80, 239
IZRKUJREXIKAQM-UHFFFAOYSA-N	5.5×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:CH3CLCOCL	2.7×10^{-1}		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_4\text{OCl}_2$	3.8×10^{-2}		Wang et al. (2017)	Q	80, 239
JEQDSBVHLKBEIZ-UHFFFAOYSA-N	1.1×10^{-2}		Wang et al. (2017)	Q	80, 240
MCM:CH3COCLOOH	1.0×10^4		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_5\text{O}_3\text{Cl}$	3.5×10^2		Wang et al. (2017)	Q	80, 239
HLLYIZVQRAGDFF-UHFFFAOYSA-N	1.0×10^2		Wang et al. (2017)	Q	80, 240
MCM:CLCOCLMOOH	1.4×10^4		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_4\text{O}_3\text{Cl}_2$	6.0×10^1		Wang et al. (2017)	Q	80, 239
RUPGTCZALLJKQM-UHFFFAOYSA-N	1.3		Wang et al. (2017)	Q	80, 240
MCM:CL12CO2H	1.3×10^3		Wang et al. (2017)	Q	80, 238
$\text{C}_3\text{H}_4\text{O}_2\text{Cl}_2$	3.5×10^3		Wang et al. (2017)	Q	80, 239
GKFWNPPZHDYVLI-UHFFFAOYSA-N	8.1×10^2		Wang et al. (2017)	Q	80, 240



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-chloro-2-butanone C_4H_7ClO [4091-39-8] OIMRLHCSLQUXLL-UHFFFAOYSA-N	9.5×10^{-2}		Ebert et al. (2023)	?	316
ethyl chloroethanoate $C_4H_7ClO_2$ [105-39-5] VEUUMBGMNQHGO-UHFFFAOYSA-N	2.6×10^{-1} 2.4×10^{-1} 1.5×10^{-1} 1.2×10^{-1} 1.1×10^{-1} 1.1×10^{-1} 2.4×10^{-1}	6100	Brockbank (2013) Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007) Bartelt-Hunt et al. (2008)	L V Q Q Q Q ?	1 186 99 67 21
carbonochloridic acid, 1-methylethyl ester $C_4H_7ClO_2$ [108-23-6] IVRIRQXJSNCSQP-UHFFFAOYSA-N	2.4×10^{-3}		HSDB (2015)	Q	99
chloroacetic acid anhydride $C_4H_4Cl_2O_3$ [541-88-8] PNVFNXKRAUBJGW-UHFFFAOYSA-N	2.2		HSDB (2015)	Q	99
chlorobutanol C_4H_9ClO [1320-66-7] OSASVXMJTNOKOY-UHFFFAOYSA-N	4.5		HSDB (2015)	Q	99
methyl 2-chloroacetoacetate $C_5H_7ClO_3$ [4755-81-1] GYQRIAVRKLKQKP-UHFFFAOYSA-N	2.3		Ebert et al. (2023)	?	318
3-chloro-4-(dichloromethyl)-2-(5H)-furanone $C_5H_3Cl_3O_2$ [122551-89-7] WNQKLIFDPFSPIZ-UHFFFAOYSA-N	1.5		HSDB (2015)	Q	99
3-chloro-4-(dichloromethyl)-5-hydroxy-2-(5H)-furanone $C_5H_3Cl_3O_3$ [77439-76-0] WNTRMRXAGJOLCU-UHFFFAOYSA-N	3.9×10^4		HSDB (2015)	Q	99
1,2,4-trichloro-2-methyl-3-pentanone $C_6H_9Cl_3O$ [145556-04-3] KAUWEMQJFDRELR-UHFFFAOYSA-N	1.9 1.9 1.1×10^2 4.1×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bis(2-chloroisopropyl) ether $C_6H_{12}Cl_2O$ [39638-32-9] BULHJTXRZFEUDQ-UHFFFAOYSA-N	3.0×10^{-2} 3.3×10^{-4} 9.5×10^{-1} 1.6×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
butyl 2,2,3,4,4-pentachloro-3-butenolate $C_8H_9Cl_5O_2$ [75147-20-5] JZJILZVTMMGAR-UHFFFAOYSA-N	3.9×10^{-1} 3.9×10^{-2} 7.9×10^{-2} 1.8×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carbonyl chloride $C_8H_9Cl_3O$ [52314-67-7] CHLAOFANYRDCPD-UHFFFAOYSA-N	1.6×10^{-2} 9.7×10^{-3} 1.6×10^{-1} 8.8×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid $C_8H_{10}Cl_2O_2$ [55701-05-8] LLMLSUSAKZVFOA-UHFFFAOYSA-N	1.9×10^1 9.0×10^1 6.1×10^4 6.1×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
hexanoic acid, 3,3-dimethyl-4,6,6,6-tetrachloro, methyl ester $C_9H_{14}Cl_4O_2$ [64667-33-0] POFHGKISWXYKLB-UHFFFAOYSA-N	6.7×10^{-1} 2.7×10^{-1} 6.1×10^2 1.8×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
methyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate $C_9H_{12}Cl_2O_2$ [61898-95-1] QJJOIMSFUIFKX-UHFFFAOYSA-N	6.1×10^{-2} 5.2×10^{-2} 1.3×10^{-1} 1.7×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
oxychlordan $C_{10}H_4Cl_8O$ [27304-13-8] VWGNQYSIWFHEQU-UHFFFAOYSA-N	6.0×10^{-2} 1.1×10^2	4300	Paasivirta et al. (1999) HSDB (2015)	T Q	 99
kepone $C_{10}Cl_{10}O$ [143-50-0] LHHGDZSESBACKH-UHFFFAOYSA-N	1.8×10^2 1.8×10^2 2.0×10^2 1.5×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bis-(chloromethyl) ether $C_2H_4Cl_2O$ [542-88-1] HRQGCQVOJVTVLU-UHFFFAOYSA-N	2.3×10^{-3}		Duchowicz et al. (2020)	V	186
	4.8×10^{-2}		Mackay et al. (2006c)	V	
	4.8×10^{-2}		Mackay et al. (1993)	V	
	4.7×10^{-3}		Ryan et al. (1988)	C	
	1.9×10^{-2}		Duchowicz et al. (2020)	Q	
	4.3×10^{-2}		Modarresi et al. (2007)	Q	67
1,5-dichloro-3-oxapentane $C_4H_8Cl_2O$ (bis-(2-chloroethyl)-ether) [111-44-4] ZNSMNVMLTJELDZ-UHFFFAOYSA-N	4.8×10^{-1}	6200	Brockbank (2013)	L	1
	5.8×10^{-1}		Duchowicz et al. (2020)	V	186
	3.4×10^{-1}		HSDB (2015)	V	
	3.5×10^{-1}		Mackay et al. (2006c)	V	
	3.4×10^{-2}		Lide and Frederikse (1995)	V	
	3.5×10^{-1}		Mackay et al. (1993)	V	
	4.6×10^{-1}		Goldstein (1982)	X	446
	4.7×10^{-1}	4100	Goldstein (1982)	X	298
	3.7×10^{-1}		Harrison et al. (1993)	C	
	8.6		Ryan et al. (1988)	C	
	3.4×10^{-2}		Duchowicz et al. (2020)	Q	
	5.2×10^{-2}		Zhang et al. (2010)	Q	287, 288
	2.8×10^{-1}		Zhang et al. (2010)	Q	287, 289
	4.4×10^{-2}		Zhang et al. (2010)	Q	287, 290
4.6×10^{-3}		Zhang et al. (2010)	Q	287, 291	
2.9×10^{-1}		Hilal et al. (2008)	Q		
3.7×10^{-1}		Modarresi et al. (2007)	Q	67	
	6000	Kühne et al. (2005)	Q		
	6000	Kühne et al. (2005)	?		
2-chloro-1,1-dimethoxyethane $C_4H_9ClO_2$ [97-97-2] CRZJPEIBPQWDGJ-UHFFFAOYSA-N	3.2×10^{-1}		Ebert et al. (2023)	?	318
(2-chloroethoxy)-ethene C_4H_7ClO (2-chloroethylvinylether) [110-75-8] DNJRKFKAFOXSE-UHFFFAOYSA-N	1.1×10^{-3}		Duchowicz et al. (2020)	V	186
	1.1×10^{-3}		HSDB (2015)	V	
	3.9×10^{-2}		Mackay et al. (2006c)	V	
	3.9×10^{-2}		Mackay et al. (1993)	V	
	1.1×10^{-3}		Goldstein (1982)	X	446
	3.1×10^{-2}	2500	Goldstein (1982)	X	298
	4.0×10^{-2}		Ryan et al. (1988)	C	
	4.9×10^{-2}		Duchowicz et al. (2020)	Q	
	2.3×10^{-3}		Hilal et al. (2008)	Q	
2.1×10^{-2}		Modarresi et al. (2007)	Q	67	



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
bis-(2-chloroethoxy)-methane $C_5H_{10}Cl_2O_2$ [111-91-1] NLXGURFLBLRZRO-UHFFFAOYSA-N	2.6		Duchowicz et al. (2020)	V	186	
	2.5		HSDB (2015)	V		
	2.2×10^1		Mackay et al. (2006c)	V		
	2.2		Mackay et al. (1993)	V		
	8.8		Goldstein (1982)	X	446	
	2.6×10^1	5500	Goldstein (1982)	X	298	
	3.7×10^1		Ryan et al. (1988)	C		
bis-(2-chloroisopropyl) ether $C_6H_{12}Cl_2O$ (DCIP) [108-60-1] QCFYJCYNJLBDRT-UHFFFAOYSA-N	2.9×10^{-1}		Duchowicz et al. (2020)	Q		
	3.4		Hilal et al. (2008)	Q		
	4.2×10^{-1}		Kawamoto and Urano (1989)	M		
	1.3×10^{-1}		HSDB (2015)	V		
	9.6×10^{-2}		Mackay et al. (2006c)	V		
	9.6×10^{-2}		Mackay et al. (1993)	V		
	6.5×10^{-2}	2800	Goldstein (1982)	X	446	
6.4×10^{-2}		Goldstein (1982)	X	298		
1,2-bis(2-chloroethoxy)ethane $C_6H_{12}Cl_2O_2$ [112-26-5] AGYUOJIYYGGHKV-UHFFFAOYSA-N	8.6×10^{-3}		Ryan et al. (1988)	C		
	7.2×10^{-2}		Hilal et al. (2008)	Q		
	2.9×10^{-1}		Modarresi et al. (2007)	Q	67	
	1.3×10^1		HSDB (2015)	V		
	4.7		Modarresi et al. (2007)	Q	67	
	2-hydroxychlorobenzene C_6H_5ClO (<i>o</i> -chlorophenol) [95-57-8] ISPYQTSUDJAMAB-UHFFFAOYSA-N	1.5		Sheikheldin et al. (2001)	M	12
		3.6	5700	Tabai et al. (1997)	M	11
1.5			Mackay et al. (2006c)	V		
1.2			Fogg and Sangster (2003)	V	729	
1.8×10^1			Lide and Frederikse (1995)	V		
1.5			Mackay et al. (1995)	V		
1.5			Shiu et al. (1994)	V		
8.8×10^{-1}			Abraham et al. (1994a)	R		
1.2			Goldstein (1982)	X	446	
1.2		4600	Goldstein (1982)	X	298	
1.8×10^1			Howard (1989)	X	418	
2.1			Ryan et al. (1988)	C		
2.2			Keshavarz et al. (2022)	Q		
8.2			Duchowicz et al. (2020)	Q	299	
4.2			Hilal et al. (2008)	Q		
2-hydroxychlorobenzene C_6H_5ClO (<i>o</i> -chlorophenol) [95-57-8] ISPYQTSUDJAMAB-UHFFFAOYSA-N	4.6		Modarresi et al. (2007)	Q	67	
		6200	Kühne et al. (2005)	Q		
	9.2×10^{-1}		Yaffe et al. (2003)	Q	248, 249	
	1.8×10^2		Nirmalakhandan et al. (1997)	Q		
	8.8×10^{-1}		Duchowicz et al. (2020)	?	185, 21	
	8.8×10^{-1}		HSDB (2015)	?	419	
		5600	Kühne et al. (2005)	?		
2.6×10^{-1}		Yaws (1999)	?	21		
1.0		Chiou et al. (1980)	?	79		



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
3-hydroxychlorobenzene	7.2	6400	Chao et al. (2017)	M		
C ₆ H ₅ ClO	3.4×10^1		Tabai et al. (1997)	M	11	
(<i>m</i> -chlorophenol)	4.9		Mackay et al. (2006c)	V		
[108-43-0]	7.3		Fogg and Sangster (2003)	V		
HORNXRXXVQWOLPJ-UHFFFAOYSA-N	1.8×10^1		Lide and Frederikse (1995)	V		
	4.9		Mackay et al. (1995)	V		
	4.9		Shiu et al. (1994)	V		
	2.9×10^1		Abraham et al. (1994a)	R		
	1.8×10^1		Howard (1989)	X	418	
	4.3		Keshavarz et al. (2022)	Q		
	9.9×10^1		Duchowicz et al. (2020)	Q	299	
	1.6×10^1		Hilal et al. (2008)	Q		
	2.5×10^1		Modarresi et al. (2007)	Q	67	
	3.0×10^1		Kühne et al. (2005)	Q		
	1.3×10^1		Yaffe et al. (2003)	Q	248, 249	
	2.4×10^1		English and Carroll (2001)	Q	230, 231	
	2.4×10^1		Katritzky et al. (1998)	Q		
	1.8×10^2		Nirmalakhandan et al. (1997)	Q		
	2.9×10^1		Duchowicz et al. (2020)	?	185, 21	
	2.9×10^1		HSDB (2015)	?	419	
		6100	Kühne et al. (2005)	?		
	4.8	Yaws (1999)	?	21, 12		
4-hydroxychlorobenzene	6.7	11000	Chao et al. (2017)	M		
C ₆ H ₅ ClO	1.4×10^3		Tabai et al. (1997)	M	11	
(<i>p</i> -chlorophenol)	1.6×10^1		HSDB (2015)	V		
[106-48-9]	1.1×10^1		Mackay et al. (2006c)	V		
WXNZTHHGJRFKXQ-UHFFFAOYSA-N	1.2×10^1		Fogg and Sangster (2003)	V		
	1.8×10^1		Lide and Frederikse (1995)	V		
	1.1×10^1		Mackay et al. (1995)	V		
	1.1×10^1		Shiu et al. (1994)	V		
	5.8×10^1		Abraham et al. (1994a)	R		
	1.8×10^1		Howard (1989)	X	418	
	4.3		Keshavarz et al. (2022)	Q		
	1.5×10^2		Duchowicz et al. (2020)	Q	184	
	2.4×10^1		Li et al. (2014)	Q	241	
	1.3×10^1		Hilal et al. (2008)	Q		
	9.8		Modarresi et al. (2007)	Q	67	
	5.8×10^1		6200	Kühne et al. (2005)	Q	
	3.4×10^1		Yaffe et al. (2003)	Q	248, 249	
	3.4×10^1		Yao et al. (2002)	Q	229	
	2.3×10^1		English and Carroll (2001)	Q	230, 260	
	3.0×10^1		Katritzky et al. (1998)	Q		
	1.8×10^2	Nirmalakhandan et al. (1997)	Q			
	1.6×10^1	Duchowicz et al. (2020)	?	185, 21		
		6400	Kühne et al. (2005)	?		
	7.8	Yaws (1999)	?	21, 12		



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.1×10^1		Chiou et al. (1980)	?	79
2,3-dichlorophenol $C_6H_4Cl_2O$ [576-24-9] UMPSXRYVXUPCOS-UHFFFAOYSA-N	2.9		HSDB (2015)	V	
2,4-dichlorophenol $C_6H_4Cl_2O$ [120-83-2] HFZWRUODUSTPEG-UHFFFAOYSA-N	3.4 6.6 2.3 2.8 2.3 2.3 2.3 9.0 1.5 1.5 1.8 2.2×10^1 3.2×10^1 8.0 1.1 4.6 8.2 4.4	6800 4900 6300 7400	Sheikheldin et al. (2001) Tabai et al. (1997) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Mackay et al. (1995) Shiu et al. (1994) Leuenberger et al. (1985) Goldstein (1982) Goldstein (1982) Ryan et al. (1988) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	M M V V V V V V X X C Q Q Q Q Q Q Q Q ?	12 11 186 416 446 298 287, 288 287, 289 287, 290 287, 291 67
2,5-dichlorophenol $C_6H_4Cl_2O$ [583-78-8] RANCECPPZPIPNO-UHFFFAOYSA-N	1.6		HSDB (2015)	V	
2,6-dichlorophenol $C_6H_4Cl_2O$ [87-65-0] HOLHYSJJBXSLMV-UHFFFAOYSA-N	3.7 3.7 1.3 3.3 1.2 3.8 2.5×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Mackay et al. (1995) Duchowicz et al. (2020) Yaffe et al. (2003) Katritzky et al. (1998)	V V V V Q Q Q	186 248, 249
3,4-dichlorophenol $C_6H_4Cl_2O$ [95-77-2] WDNBURPWRNALGP-UHFFFAOYSA-N	2.1×10^1		HSDB (2015)	Q	99



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dichlorophenol $C_6H_4Cl_2O$ [591-35-5] VPOMSPZBQMDLTM-UHFFFAOYSA-N	4.0×10^1		Duchowicz et al. (2020)	V	186
	4.1×10^1		HSDB (2015)	V	
	1.8×10^2		Duchowicz et al. (2020)	Q	
	4.6×10^1		Hilal et al. (2008)	Q	
	1.4×10^1		Modarresi et al. (2007)	Q	67
2,3,4-trichlorophenol $C_6H_3Cl_3O$ [15950-66-0] HSQFVBWFPBKHEB-UHFFFAOYSA-N	2.5		Mackay et al. (2006c)	V	
	2.5		Mackay et al. (1995)	V	
2,3,5-trichlorophenol $C_6H_3Cl_3O$ [933-78-8] WWGQHTJIFQOAOOC-UHFFFAOYSA-N	2.5		Mackay et al. (2006c)	V	
	2.5		Mackay et al. (1995)	V	
2,4,5-trichlorophenol $C_6H_3Cl_3O$ [95-95-4] LHJGJYXLEPZJPM-UHFFFAOYSA-N	6.1		Duchowicz et al. (2020)	V	186
	6.2		HSDB (2015)	V	
	1.9		Mackay et al. (2006c)	V	
	4.6×10^{-1}		Fogg and Sangster (2003)	V	
	1.9		Mackay et al. (1995)	V	
	7.6		Leuenberger et al. (1985)	V	416
	4.6×10^1		Duchowicz et al. (2020)	Q	
	2.0×10^1		Hilal et al. (2008)	Q	
5.7		Modarresi et al. (2007)	Q	67	
2,3,6-trichlorophenol $C_6H_3Cl_3O$ [933-75-5] XGCHAIDDPMPFRLJ-UHFFFAOYSA-N	4.3×10^1		HSDB (2015)	Q	99
2,4,6-trichlorophenol $C_6H_3Cl_3O$ [88-06-2] LINPIYWFGCPVIE-UHFFFAOYSA-N	1.9×10^1		Chao et al. (2017)	M	
	2.0		Yoshida et al. (1987)	M	730, 12
	3.8		Duchowicz et al. (2020)	V	186
	3.8		HSDB (2015)	V	
	1.8		Mackay et al. (2006c)	V	
	1.6×10^2		Lide and Frederikse (1995)	V	
	1.8		Mackay et al. (1995)	V	
	7.6		Leuenberger et al. (1985)	V	416
	1.4	5000	Goldstein (1982)	X	298
	1.6×10^1		Howard (1989)	X	418
	2.4		Ryan et al. (1988)	C	
	2.5		Duchowicz et al. (2020)	Q	
	4.3×10^1		Zhang et al. (2010)	Q	287, 288
	2.8×10^{-2}		Zhang et al. (2010)	Q	287, 289
	8.8×10^{-1}		Zhang et al. (2010)	Q	287, 290
9.7×10^{-1}		Zhang et al. (2010)	Q	287, 291	
2.2		Hilal et al. (2008)	Q		
3.3		Modarresi et al. (2007)	Q	67	
	6400	Kühne et al. (2005)	Q		



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.8		Yaffe et al. (2003)	Q	248, 249
	1.8×10^1		Katritzky et al. (1998)	Q	
		6500	Kühne et al. (2005)	?	
3,4,5-trichlorophenol $C_6H_3Cl_3O$ [609-19-8] GBNHQBQXJVDXSW-UHFFFAOYSA-N	4.3×10^1		HSDB (2015)	Q	99
2,3,4,5-tetrachlorophenol $C_6H_2Cl_4O$ [4901-51-3] RULKYXXCGZZKDZ-UHFFFAOYSA-N	7.2 7.2 2.8×10^1		Mackay et al. (2006c) Mackay et al. (1995) HSDB (2015)	V V Q	 99
2,3,4,6-tetrachlorophenol $C_6H_2Cl_4O$ [58-90-2] VGVRFPIEJUYOFN-UHFFFAOYSA-N	1.1 7.6 2.8 2.8 6.6 5.8×10^1 4.1×10^{-2} 3.9 3.1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006c) Mackay et al. (1995) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V V V V Q Q Q Q	186 287, 288 287, 289 287, 290 287, 291
2,3,5,6-tetrachlorophenol $C_6H_2Cl_4O$ [935-95-5] KEWNKZNRZIAK-UHFFFAOYSA-N	4.3 4.3 2.8×10^1		Mackay et al. (2006c) Mackay et al. (1995) HSDB (2015)	V V Q	 99
hydroxypentachlorobenzene C_6HCl_5O (pentachlorophenol) [87-86-5] IZUPVBVPLAPZRR-UHFFFAOYSA-N	4.1×10^2 1.3×10^1 1.1×10^{-2} 1.3×10^1 2.3×10^1 2.3×10^1 2.2×10^{-1} 1.1×10^{-1} 4.7 3.4 7.9×10^1 6.0×10^{-2} 6.5 4.0 2.5×10^{-1} 1.3×10^1 7.9×10^1 1.8		Hellmann (1987) Mackay et al. (2006c) Mackay et al. (2006d) Fogg and Sangster (2003) Mackay et al. (1995) Riederer (1990) Suntio et al. (1988) Barcelo and Hennion (1997) Goldstein (1982) McCarty (1980) Ryan et al. (1988) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Goodarzi et al. (2010) Modarresi et al. (2007) Kühne et al. (2005) Meylan and Howard (1991) Fogg and Sangster (2003) Kühne et al. (2005)	M V V V V V V X X X C Q Q Q Q Q Q Q Q Q E ?	87 558 12 567 298 368 287, 288 287, 289 287, 290 287, 291 568, 569 67 7800 7400



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4,5-trichloro-1,2-benzenediol $C_6H_3Cl_3O_2$ (3,4,5-trichlorocatechol) [56961-20-7] FUTDYIMYZIMPBJ-UHFFFAOYSA-N	2.4×10^2		Lei et al. (1999)	V	
4,5-dichloro-1,2-benzenediol $C_6H_4Cl_2O_2$ (4,5-dichlorocatechol) [3428-24-8] ACCHWUWBKYGKNM-UHFFFAOYSA-N	1.3×10^3		Lei et al. (1999)	V	
3,4,5,6-tetrachloro-1,2-benzenediol $C_6H_2Cl_4O_2$ (tetrachlorocatechol) [1198-55-6] RRBMVWQICIXSEO-UHFFFAOYSA-N	2.9×10^1		Lei et al. (1999)	V	
2,3,5,6-tetrachloro- <i>p</i> -benzoquinone $C_6Cl_4O_2$ (chloranil) [118-75-2] UGNWTBMOAKPKBL-UHFFFAOYSA-N	1.5×10^3		HSDB (2015)	V	
2-chloro-5-methylphenol C_7H_7ClO [615-74-7] SMFHPCZZAAMJJO-UHFFFAOYSA-N	2.1×10^1		HSDB (2015)	Q	99
4-chloro-2-methylphenol C_7H_7ClO [1570-64-5] RHPUJHQBPORFGV-UHFFFAOYSA-N	8.7 9.0 8.5×10^1 1.6×10^1 1.5		Duchowicz et al. (2020) Woodrow et al. (1990) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	186 67
4-chloro-3-methylphenol C_7H_7ClO [59-50-7] CFKMVGJLGLGKFI-UHFFFAOYSA-N	4.0 4.1 3.9×10^1 4.0 8.5×10^1 2.2×10^1 1.3×10^1 2.8×10^1 9.2×10^1 1.2×10^1 8.8 3.9×10^1 1.7×10^1 1.3×10^2		Duchowicz et al. (2020) HSDB (2015) Abraham et al. (1994a) Ryan et al. (1988) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Nirmalakhandan et al. (1997)	V V R C Q Q Q Q Q Q Q Q Q Q	186 287, 288 287, 289 287, 290 287, 291 67 248, 249 230, 231



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-2-methoxybenzene C_7H_7ClO (2-chloroanisole) [766-51-8] QGRPVMLEBTFGQDQ-UHFFFAOYSA-N	1.0×10^{-1} 1.1×10^{-1} 1.8×10^{-1}		Pfeifer et al. (2001) Duchowicz et al. (2020) Duchowicz et al. (2020)	M V Q	731 186
1-chloro-3-methoxybenzene C_7H_7ClO (3-chloroanisole) [2845-89-8] YUKILTJWFRTXGB-UHFFFAOYSA-N	4.5×10^{-2}		Pfeifer et al. (2001)	M	731
1-chloro-4-methoxybenzene C_7H_7ClO (4-chloroanisole) [623-12-1] YRGAYAGBVIXNAQ-UHFFFAOYSA-N	5.8×10^{-2}		Pfeifer et al. (2001)	M	731
1,2-dichloro-3-methoxybenzene $C_7H_6Cl_2O$ (2,3-dichloroanisole) [1984-59-4] HFEASCCDHUVYKU-UHFFFAOYSA-N	2.2×10^{-2}		Pfeifer et al. (2001)	M	731
1,5-dichloro-2-methoxybenzene $C_7H_6Cl_2O$ (2,4-dichloroanisole) [553-82-2] CICQUFBZCADHXX-UHFFFAOYSA-N	1.2×10^{-2}		Pfeifer et al. (2001)	M	731
1,4-dichloro-2-methoxybenzene $C_7H_6Cl_2O$ (2,5-dichloroanisole) [1984-58-3] QKMNFFSBZRGHDJ-UHFFFAOYSA-N	2.1×10^{-2} 5.7×10^{-2} 1.4×10^{-2} 1.4×10^{-1} 4.8×10^{-2}		Pfeifer et al. (2001) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M Q Q Q Q	731 287, 288 287, 289 287, 290 287, 291
1,3-dichloro-2-methoxybenzene $C_7H_6Cl_2O$ (2,6-dichloroanisole) [1984-65-2] KZLMCDNAVJJPX-UHFFFAOYSA-N	8.8×10^{-3}		Pfeifer et al. (2001)	M	731
1,2-dichloro-4-methoxybenzene $C_7H_6Cl_2O$ (3,4-dichloroanisole) [36404-30-5] VISJRVXHPNMYRH-UHFFFAOYSA-N	9.2×10^{-3}		Pfeifer et al. (2001)	M	731



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-dichloro-5-methoxybenzene $C_7H_6Cl_2O$ (3,5-dichloroanisole) [33719-74-3] SSNXMYMLSSOMJLU-UHFFFAOYSA-N	2.3×10^{-3}		Pfeifer et al. (2001)	M	731
1,2,3-trichloro-4-methoxybenzene $C_7H_5Cl_3O$ (2,3,4-trichloroanisole) [54135-80-7] FRQUNVLMWIYOLV-UHFFFAOYSA-N	1.3×10^{-2}		Pfeifer et al. (2001)	M	731
1,2,5-trichloro-3-methoxybenzene $C_7H_5Cl_3O$ (2,3,5-trichloroanisole) [54135-81-8] MKERQGLKSFEKAE-UHFFFAOYSA-N	7.6×10^{-3}		Pfeifer et al. (2001)	M	731
1,2,4-trichloro-3-methoxybenzene $C_7H_5Cl_3O$ (2,3,6-trichloroanisole) [50375-10-5] OTFNCXLUCRUNCH-UHFFFAOYSA-N	1.1×10^{-2} 9.8×10^{-3} 1.8×10^{-2} 2.0×10^{-2} 7.6×10^{-2}	4500	Diaz et al. (2005) Pfeifer et al. (2001) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991)	M M Q Q Q	731 67
1,2,4-trichloro-5-methoxybenzene $C_7H_5Cl_3O$ (2,4,5-trichloroanisole) [6130-75-2] SXKBHOQOGRFJF-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	731
1,3,5-trichloro-2-methoxybenzene $C_7H_5Cl_3O$ (2,4,6-trichloroanisole) [87-40-1] WCVOGSZTONGSQY-UHFFFAOYSA-N	2.3×10^{-2} 4.4×10^{-3} 4.6×10^{-3}	5500 640	Wu et al. (2022a) Diaz et al. (2005) Pfeifer et al. (2001)	M M M	731
1,2,3-trichloro-5-methoxybenzene $C_7H_5Cl_3O$ (3,4,5-trichloroanisole) [54135-82-9] GUCFBWGWRCILHN-UHFFFAOYSA-N	4.4×10^{-3}		Pfeifer et al. (2001)	M	731
1,2,3,4-tetrachloro-5-methoxybenzene $C_7H_4Cl_4O$ (2,3,4,5-tetrachloroanisole) [938-86-3] FUUHMSUPRUNWRQ-UHFFFAOYSA-N	6.5×10^{-3}		Pfeifer et al. (2001)	M	731



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,5-tetrachloro-4-methoxybenzene $C_7H_4Cl_4O$ (2,3,4,6-tetrachloroanisole) [938-22-7] ITXDBGLYYSJNPK-UHFFFAOYSA-N	3.1×10^{-3}		Pfeifer et al. (2001)	M	731
1,2,4,5-tetrachloro-3-methoxybenzene $C_7H_4Cl_4O$ (2,3,5,6-tetrachloroanisole) [6936-40-9] WMMFIDNWZNCBCT-UHFFFAOYSA-N	3.2×10^{-3}		Pfeifer et al. (2001)	M	731
pentachloromethoxybenzene $C_7H_3Cl_5O$ (pentachloroanisole) [1825-21-4] BBABSCYTNHOKOG-UHFFFAOYSA-N	2.1×10^{-3} 5.1×10^{-3}		Pfeifer et al. (2001) HSDB (2015)	M Q	731 99
4,5-dichloro-2-methoxyphenol $C_7H_6Cl_2O_2$ (4,5-dichloroguaiacol) [2460-49-3] HAAFFTHBNFBVKY-UHFFFAOYSA-N	5.2 2.3		Mackay et al. (2006c) Lei et al. (1999)	V V	
3,4,5-trichloro-2-methoxyphenol $C_7H_5Cl_3O_2$ (3,4,5-trichloroguaiacol) [57057-83-7] RKEHLKXRUVUBJN-UHFFFAOYSA-N	1.1×10^1 8.3 9.7×10^1		Duchowicz et al. (2020) Mackay et al. (2006c) Lei et al. (1999) Duchowicz et al. (2020)	V V V Q	186 420
4,5,6-trichloro-2-methoxyphenol $C_7H_5Cl_3O_2$ (4,5,6-trichloroguaiacol) [2668-24-8] NIAJPNQTKGWEOI-UHFFFAOYSA-N	7.4 7.1		Mackay et al. (2006c) Lei et al. (1999)	V V	
2,3,4,5-tetrachloro-6-methoxyphenol $C_7H_4Cl_4O_2$ (tetrachloroguaiacol) [2539-17-5] YZZVKLJKDFFSFL-UHFFFAOYSA-N	1.4 6.2 6.7 8.4		Duchowicz et al. (2020) Mackay et al. (2006c) Lei et al. (1999) Duchowicz et al. (2020)	V V V Q	186
2-chlorobenzoic acid $C_7H_5ClO_2$ [118-91-2] IKCLCGXPQILATA-UHFFFAOYSA-N	1.5×10^2 1.3×10^2 3.5×10^2 1.4×10^2		Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2010)	V X Q Q	186 237 246



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-chlorobenzoic acid $C_7H_5ClO_2$ [535-80-8] LULAYUGMBFYEX-UHFFFAOYSA-N	5.7×10^1 2.5×10^2		Abraham et al. (2019) HSDB (2015)	Q Q	545
4-chlorobenzoic acid $C_7H_5ClO_2$ [74-11-3] XRHGYZYPHTUJZ-UHFFFAOYSA-N	2.5×10^1		Abraham et al. (2019)	Q	
3,4-dichlorobenzoic acid $C_7H_4Cl_2O_2$ [51-44-5] VPHHJAOJUHJKD-UHFFFAOYSA-N	2.1×10^1		Abraham et al. (2019)	Q	
2,3,6-trichlorobenzoic acid $C_7H_3Cl_3O_2$ [50-31-7] XZIDTOHMBOSOX-UHFFFAOYSA-N	4.7×10^2 6.5×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
1,2,3-trichloro-4,5-dimethoxybenzene $C_8H_7Cl_3O_2$ (3,4,5-trichloroveratrole) [16766-29-3] VKNITLPENCJQOP-UHFFFAOYSA-N	2.7×10^{-1}		Lei et al. (1999)	V	
1,2,3,4-tetrachloro-5,6-dimethoxybenzene $C_8H_6Cl_4O_2$ (tetrachloroveratrole) [944-61-6] NCYHCGGUGQDEQW-UHFFFAOYSA-N	9.1×10^{-2} 1.7 2.0 2.6 7.5×10^{-1}		Lei et al. (1999) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3-chloro-2,6-dimethoxyphenol $C_8H_9ClO_3$ (3-chlorosyringol) [18113-22-9] WYEMCZCZKXKDN-C-UHFFFAOYSA-N	4.2×10^1		Lei et al. (1999)	V	
3,5-dichloro-2,6-dimethoxyphenol $C_8H_8Cl_2O_3$ (3,5-dichlorosyringol) [78782-46-4] IDKMFABKPPHDBI-UHFFFAOYSA-N	1.4×10^1		Lei et al. (1999)	V	
3,5-dichloro-2-hydroxybenzoic acid $C_7H_4Cl_2O_3$ [320-72-9] CNJGWCQEGROXEE-UHFFFAOYSA-N	1.3×10^3 4.3×10^2 7.5×10^4 2.2×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,6-dichloro-2-hydroxybenzoic acid $C_7H_4Cl_2O_3$ [3401-80-7] FKIKPQHMMWFZEB-UHFFFAOYSA-N	1.3×10^3 3.4×10^3 1.1×10^1 2.2×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
5-chloro-2-methoxybenzoic acid $C_8H_7ClO_3$ [3438-16-2] HULDRQRKXRXBI-UHFFFAOYSA-N	2.1×10^3 3.8×10^1 9.5×10^3 6.0×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-chloroacetophenone C_8H_7ClO [532-27-4] IMACFCSSMIZSPP-UHFFFAOYSA-N	2.8		HSDB (2015)	Q	99
2,2,2',4',5'-pentachloroacetophenone $C_8H_3Cl_5O$ [1203-86-7] WKJXVVFAALGBOH-UHFFFAOYSA-N	2.0×10^1 5.7 1.0 6.0		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
tetrachloroterephthaloyl chloride $C_8Cl_6O_2$ [719-32-4] YJIRZJAZKDWEL-UHFFFAOYSA-N	1.0×10^1 1.9×10^1 3.4×10^{-2} 1.3×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
chloroxylenol C_8H_9ClO [88-04-0] OSDLLIBGSJNGJE-UHFFFAOYSA-N	1.9×10^1 1.9×10^1 1.5×10^1 2.0×10^1 5.1×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
4,5,6,7-tetrachloro-1,3-isobenzofurandione $C_8Cl_4O_3$ [117-08-8] AUHHYELHRWCWEZ-UHFFFAOYSA-N	5.2 1.8×10^4 1.9×10^2 4.3×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,4,5-trichloro-2,6-dimethoxyphenol (trichlorosyringol) $C_8H_7Cl_3O_3$ [2539-26-6] ZZCSBXFJFLSDRR-UHFFFAOYSA-N	4.5×10^1		Lei et al. (1999)	V	
4,5,6,7-tetrachlorophthalide $C_8H_2Cl_4O_2$ [27355-22-2] NMWKWBPNKPGATC-UHFFFAOYSA-N	1.8×10^1 3.1×10^3 8.6		Kawamoto and Urano (1989) Duchowicz et al. (2020) Duchowicz et al. (2020)	M V Q	 186



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dicamba $\text{C}_8\text{H}_6\text{Cl}_2\text{O}_3$ (banvel) [1918-00-9] IWEDIXLBFLXBO-UHFFFAOYSA-N	4.5×10^3 2.3×10^4 4.5×10^3 8.3×10^3 8.2×10^1 2.2×10^4 5.9×10^3 1.2 1.0×10^4		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Armbrust (2000) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V V V V X C Q Q ?	186 12 567 568, 569 165
(2,4-dichlorophenoxy)-ethanoic acid $\text{C}_8\text{H}_6\text{Cl}_2\text{O}_3$ (2,4-dichlorophenoxy)-acetic acid; 2,4-D) [94-75-7] OVSKIKFHRZPJSS-UHFFFAOYSA-N	1.4×10^{-1} 1.2 2.8×10^2 5.0×10^4 2.3×10^4 4.0×10^3 2.9×10^2 1.8 1.8 7.2×10^4 9.7×10^2 5.5×10^6 8.7×10^2 2.5×10^5		Rice et al. (1997b) Rice et al. (1997b) Duchowicz et al. (2020) Mackay et al. (2006c) Mackay et al. (2006d) Mackay et al. (2006d) Mackay et al. (1995) Riederer (1990) Suntio et al. (1988) Howard (1991) Howard (1991) Armbrust (2000) Duchowicz et al. (2020) Maniere et al. (2011)	M M V V V V V V X X C Q ?	732, 12 732, 12 186 12 412 412 C 12, 165
2,4,5-trichlorophenoxyethanoic acid $\text{C}_8\text{H}_5\text{Cl}_3\text{O}_3$ (2,4,5-T) [93-76-5] SMYJMHWQXWPDB-UHFFFAOYSA-N	1.7×10^2 1.7×10^2 1.7×10^2 8.4×10^5		Mackay et al. (2006d) Riederer (1990) Suntio et al. (1988) MacBean (2012a)	V V V ?	 12
1,4-dichloro-2,5-dimethoxybenzene $\text{C}_8\text{H}_8\text{Cl}_2\text{O}_2$ [2675-77-6] PFIADAMVJXPXS-UHFFFAOYSA-N	9.7×10^{-2} 9.9×10^{-2} 9.4×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186 558
2,3,6-trichlorophenylacetic acid $\text{C}_8\text{H}_5\text{Cl}_3\text{O}_2$ [85-34-7] QZXCCPZJCKEPSA-UHFFFAOYSA-N	8.3×10^{-1} 5.5×10^2		Mackay et al. (2006d) HSDB (2015)	V Q	99



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methoxy-benzoyl chloride $\text{C}_8\text{H}_7\text{ClO}_2$ (<i>p</i> -anisoyl chloride) [100-07-2] MXMOTZIXVICDSD-UHFFFAOYSA-N	1.3		HSDB (2015)	Q	99
(4-chlorophenoxy)acetic acid $\text{C}_8\text{H}_7\text{ClO}_3$ [122-88-3] SODPIMGUZLOIPE-UHFFFAOYSA-N	1.0×10^5		Ebert et al. (2023)	?	316
isobenzan $\text{C}_9\text{H}_4\text{Cl}_8\text{O}$ [297-78-9] LRWHHSXTGZSMSN-UHFFFAOYSA-N	1.7×10^2		HSDB (2015)	Q	99
2-chloro-4-hydroxy-3,5-dimethoxybenzaldehyde $\text{C}_9\text{H}_9\text{ClO}_4$ (2-chlorosyringaldehyde) [76341-69-0] GRIHRCLOUQZXPDUHFFFAOYSA-N	9.1×10^1		Lei et al. (1999)	V	
2,6-dichloro-4-hydroxy-3,5-dimethoxybenzaldehyde $\text{C}_9\text{H}_8\text{Cl}_2\text{O}_4$ (2,6-dichlorosyringaldehyde) [76330-06-8] CTFRWEPMHUGVMM-UHFFFAOYSA-N	2.7×10^2		Lei et al. (1999)	V	
methyl 2,4-dichlorophenoxyethanoate $\text{C}_9\text{H}_8\text{Cl}_2\text{O}_3$ [1928-38-7] HWIGZMADSFQMOI-UHFFFAOYSA-N	3.6 1.0×10^1 1.8 1.3		Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q	186 67
(2-methyl-4-chlorophenoxy)acetic acid $\text{C}_9\text{H}_9\text{ClO}_3$ (MCPA) [94-74-6] WHKUVVPPKQRRBV-UHFFFAOYSA-N	$>9.9 \times 10^1$ 7.4×10^3 4.0×10^4 9.9×10^3 5.7×10^2 1.8×10^4		Mabury and Crosby (1996) Duchowicz et al. (2020) Mackay et al. (2006d) Woodrow et al. (1990) Duchowicz et al. (2020) Maniere et al. (2011)	M V V V Q ?	 186 165
α -(2,4-dichlorophenoxy)propionic acid $\text{C}_9\text{H}_8\text{Cl}_2\text{O}_3$ (dichloroprop) [120-36-5] MZHCEGPTKEIGP-UHFFFAOYSA-N	3.7×10^3		Mackay et al. (2006d)	V	



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>R</i>)-2-(2,4-dichlorophenoxy)propanoic acid $C_9H_8Cl_2O_3$ (dichlorprop-p) [15165-67-0] MZHCEGPTKEIGP-RXMQYKEDSA-N	4.0×10^4		Mackay et al. (2006d)	V	
2-(2,4,5-trichlorophenoxy)propanoic acid $C_9H_7Cl_3O_3$ [93-72-1] ZLSWBLPERHFHIS-UHFFFAOYSA-N	3.9×10^4		Mackay et al. (2006d)	V	
cloxyfonac $C_9H_9O_4Cl$ [6386-63-6] ZJRUTGDCLVIVRD-UHFFFAOYSA-N	1.0×10^5 1.9×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
tridiphane $C_{10}H_7Cl_5O$ [58138-08-2] IBZHOAONZVJLOB-UHFFFAOYSA-N	1.9×10^{-1}		MacBean (2012a)	?	
plifenat $C_{10}H_7O_2Cl_5$ [21757-82-4] FSGNOVKGEXRRHD-UHFFFAOYSA-N	1.1×10^4		MacBean (2012a)	?	
chlorfenprop-methyl $C_{10}H_{10}Cl_2O_2$ [14437-17-3] YKIALIXRCSISK-UHFFFAOYSA-N	4.4		Ebert et al. (2023)	?	365
ethyl 2,4-dichlorophenoxyethanoate $C_{10}H_{10}Cl_2O_3$ [533-23-3] JSLBZIVMVVHMDJ-UHFFFAOYSA-N	3.0 4.3 1.2 1.1		Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q	186 67
mecoprop $C_{10}H_{11}ClO_3$ [93-65-2] WNTGYJSOUMFZEP-UHFFFAOYSA-N	1.1×10^4 9.0×10^1 9.0×10^3 2.6×10^2 1.4×10^2		Duchowicz et al. (2020) Mackay et al. (2006d) Barcelo and Hennion (1997) Armbrust (2000) Duchowicz et al. (2020) Goodarzi et al. (2010)	V V X C Q Q	186 558 567 568



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(<i>R</i>)-2-(4-chloro-2-methylphenoxy)propanoic acid $C_{10}H_{11}ClO_3$ (mecoprop-p) [16484-77-8] WNTGYJSOUMFZEP-SSDOTTWSA-N	1.0×10^4		Mackay et al. (2006d)	V	
dacthal $C_{10}H_6Cl_4O_4$ (DCPA) [1861-32-1] NPOJQCWVMSKXDN-UHFFFAOYSA-N	4.4 4.5 4.5 1.4×10^2		Muir et al. (2004) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	L V V Q	367 186
4-(2,4-dichlorophenoxy)-butanoic acid $C_{10}H_{10}Cl_2O_3$ (2,4-DB) [94-82-6] YIVXMZJTEQBPO-UHFFFAOYSA-N	4.3×10^3 2.2×10^5		HSDB (2015) Maniere et al. (2011)	Q ?	99 241, 165
dichlone $C_{10}H_4Cl_2O_2$ [117-80-6] SVPKNMBRVBMTLB-UHFFFAOYSA-N	9.7×10^3		HSDB (2015)	Q	99
1-[(2,3,6-trichlorophenyl)methoxy]propan-2-ol $C_{10}H_{11}Cl_3O_2$ (tritac) [1861-44-5] LJWIIRATRWPHBA-UHFFFAOYSA-N	2.0×10^1 1.7×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
(2,4-dichlorophenoxy)-acetic acid 1-methylethyl ester $C_{11}H_{12}Cl_2O_3$ [94-11-1] WHOKDONDRZNCBC-UHFFFAOYSA-N	4.6 4.5 2.0		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
4-(4-chloro-2-methylphenoxy)butanoic acid $C_{11}H_{13}ClO_3$ (MCPB) [94-81-5] LLWADFLAOKUBDR-UHFFFAOYSA-N	3.6×10^3 3.1×10^3 1.7×10^3 3.3×10^4		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 241, 165



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
triclosan $C_{12}H_7Cl_3O_2$ [3380-34-5] XEFQLINVKFYRCS-UHFFFAOYSA-N	4.7×10^2 2.0×10^3 5.7×10^1 1.4×10^3 8.2×10^2		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
monobutyl tetrachlorophthalate $C_{12}H_{10}Cl_4O_4$ [24261-19-6] WKYMTJULVAGWJM-UHFFFAOYSA-N	2.0×10^4 7.5×10^2 5.1×10^4 5.1×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
(2,4-dichlorophenoxy)-acetic acid butyl ester $C_{12}H_{14}Cl_2O_3$ [94-80-4] UQMRAFJOBWOFNS-UHFFFAOYSA-N	2.0×10^1 2.0×10^1 5.7		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
sucralose $C_{12}H_{19}Cl_3O_8$ [56038-13-2] BAQAVOSOZGMPRM-QBMZZYIRSA-N	2.5×10^{13}		HSDB (2015)	Q	99
endrin aldehyde $C_{12}H_8Cl_6O$ [7421-93-4] HCTWZIFNBBCVGM-UHFFFAOYSA-N	2.4 2.3 4.8		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
clorophene $C_{13}H_{11}ClO$ (4-chloro-2-benzylphenol) [120-32-1] NCKMMSIFQPKCK-UHFFFAOYSA-N	3.7×10^3 3.7×10^3 6.5×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
(4-chlorophenyl)phenylmethanone $C_{13}H_9ClO$ (4-chlorobenzophenone) [134-85-0] UGVRJVHOJNYEHR-UHFFFAOYSA-N	7.0		HSDB (2015)	Q	99
1-(4-chlorophenyl)-4,4-dimethyl- 3-pentanone $C_{13}H_{17}ClO$ [66346-01-8] ILQGIJDYSLHIOX-UHFFFAOYSA-N	1.1 7.2×10^{-1} 4.2 3.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
hexachlorophene $C_{13}H_6Cl_6O_2$ [70-30-4] ACGUYXCXAPNIKK-UHFFFAOYSA-N	1.8×10^7 1.1×10^7 2.5×10^5 1.2×10^4 6.5×10^5		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4'-dichlorobenzophenone $C_{13}H_8Cl_2O$ [85-29-0] YXMYPHLWXBXNFF-UHFFFAOYSA-N	9.2 6.9 4.3×10^1 6.1×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1-(4-chlorophenyl)-4,4-dimethylpent-1-en-3-one $C_{13}H_{15}ClO$ [1577-03-3] LXJZYHPGRKBVGF-UHFFFAOYSA-N	4.8 2.2 8.2 1.5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
dichlorophen $C_{13}H_{10}Cl_2O_2$ [97-23-4] MDNWOSOZYLHTCG-UHFFFAOYSA-N	8.2×10^6 8.5×10^6		HSDB (2015) Mackay et al. (2006d)	V V	
MCPB ethyl ester $C_{13}H_{17}ClO_3$ [10443-70-6] XNKARWLGLZGMGX-UHFFFAOYSA-N	2.0×10^2 2.9		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
2-chloro-9,10-anthracenedione $C_{14}H_7ClO_2$ [131-09-9] FPKCTSIDAWGFA-UHFFFAOYSA-N	4.2×10^3 6.7×10^2 1.4×10^2 3.3×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
dicofol $C_{14}H_9Cl_5O$ [115-32-2] UOAMTSKGCBMZTC-UHFFFAOYSA-N	4.1×10^1 4.1×10^1 9.6×10^2 1.8×10^4 3.1×10^2 9.2×10^1 3.2×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V V Q Q Q Q Q	186 287, 288 287, 289 287, 290 287, 291
bis(2,4-dichlorobenzoyl)peroxide $C_{14}H_6Cl_4O_4$ [133-14-2] WRXCBRHBHGNNQA-UHFFFAOYSA-N	9.2 1.4×10^2 1.6×10^3 3.5×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
dipropyl tetrachlorophthalate $C_{14}H_{14}Cl_4O_4$ [6928-67-2] QJRSPJSHRYBYJL-UHFFFAOYSA-N	4.7×10^1 3.0×10^1 1.0×10^1 2.8×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-(4-chlorobenzoyl)benzoic acid $C_{14}H_9ClO_3$ [85-56-3] YWECCEXWKFHHQJ-UHFFFAOYSA-N	3.4×10^5 3.6×10^4 7.9×10^7 2.1×10^6		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(2,4,5-trichlorophenoxy)acetic acid butoxyethanol ester $C_{14}H_{17}Cl_3O_4$ [2545-59-7] GLDWASBMYWLQGG-UHFFFAOYSA-N	1.2×10^2		HSDB (2015)	Q	99
(2,4-dichlorophenoxy)-acetic acid, 2-butoxyethyl ester $C_{14}H_{18}Cl_2O_4$ [1929-73-3] ZMWGIGHRZQTQRE-UHFFFAOYSA-N	6.2×10^1		Duchowicz et al. (2020)	V	186
	6.2×10^1		HSDB (2015)	V	
	6.0×10^1		Duchowicz et al. (2020)	Q	
1-chloro-9,10-anthracenedione $C_{14}H_7ClO_2$ (1-chloroanthraquinone) [82-44-0] BOCJQSFSGAZAPQ-UHFFFAOYSA-N	4.3×10^2 4.2×10^3		Abraham et al. (2019) HSDB (2015)	Q Q	99
chlorflurenol methyl $C_{15}H_{11}ClO_3$ [2536-31-4] LINPVIEWJTTEEJ-UHFFFAOYSA-N	1.3×10^3		Ebert et al. (2023)	?	365
4,4'-(1-methylethylidene)bis(2,6- dichlorophenol) $C_{15}H_{12}Cl_4O_2$ (2,2',6,6'-tetrachlorobisphenol A) [79-95-8] KYPYTERUKNKOLP-UHFFFAOYSA-N	3.5×10^6		HSDB (2015)	Q	447
diclofop $C_{15}H_{12}Cl_2O_4$ [40843-25-2] OOLBCHYZDXLDS-UHFFFAOYSA-N	9.2×10^5		Ebert et al. (2023)	?	316
methoxychlor $C_{16}H_{15}Cl_3O_2$ [72-43-5] IAKOZHOLGAGEJT-UHFFFAOYSA-N	4.9×10^1 1.0 4.0 5.5 2.8 6.4 4.9×10^1		Altschuh et al. (1999) Mackay et al. (2006d) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M V Q Q Q Q ?	67 185, 21
diclofop-methyl $C_{16}H_{14}Cl_2O_4$ [51338-27-3] BACHBFVBHLGWSL-UHFFFAOYSA-N	5.0 5.0 1.3×10^2 2.6×10^2 9.5×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) HSDB (2015) Maniere et al. (2011)	V V Q Q ?	186 99 12, 165



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chlorobenzilate $C_{16}H_{14}Cl_2O_3$ [510-15-6] RAPBNVSDCTNRC-UHFFFAOYSA-N	1.4×10^2 2.6×10^2		HSDB (2015) MacBean (2012a)	V ?	
(2,4-dichlorophenoxy)-acetic acid 2-ethylhexyl ester $C_{16}H_{22}Cl_2O_3$ [1928-43-4] QZSFJRIWRPJUOH-UHFFFAOYSA-N	5.5×10^{-1} 5.5×10^{-1}		MacBean (2012b) Maniere et al. (2011)	X ?	350 241, 165
(2,4-dichlorophenoxy)-acetic acid, isooctyl ester $C_{16}H_{22}Cl_2O_3$ [25168-26-7] BBPLSOGERZQYQC-UHFFFAOYSA-N	1.0×10^{-1} 3.3×10^{-1} 1.7×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	186 99
mecoprop-2-butoxyethyl ester $C_{16}H_{23}ClO_4$ [23359-62-8] GWFGUAFFJVHZKY-UHFFFAOYSA-N	5.0		Ebert et al. (2023)	?	318
chloropropylate $C_{17}H_{16}Cl_2O_3$ [5836-10-2] AXGUBXVWZBFQGA-UHFFFAOYSA-N	1.2×10^3 1.0×10^2		HSDB (2015) MacBean (2012a)	V ?	
MCPA-2-ethylhexyl ester $C_{17}H_{25}ClO_3$ [29450-45-1] IDGRPSMONFWWEK-UHFFFAOYSA-N	2.3×10^{-1}		Ebert et al. (2023)	?	318
1-(2-(2-chloroethoxy)ethoxy)-4- (1,1,3,3-tetramethylbutyl)benzene $C_{18}H_{29}ClO_2$ [65925-28-2] FITQCDWGUKECBJ-UHFFFAOYSA-N	5.3×10^{-1} 1.6 3.8×10^{-1} 8.4×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
fenofibrate $C_{20}H_{21}ClO_4$ [49562-28-9] YMTINGFKWWXKFG-UHFFFAOYSA-N	2.2×10^3		HSDB (2015)	Q	99
indanofan $C_{20}H_{17}O_3Cl$ [133220-30-1] PMAAYICDXGUAP-UHFFFAOYSA-N	1.5×10^4 5.4×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
spirodiclofen $C_{21}H_{24}Cl_2O_4$ [148477-71-8] DTDSAWVUFPGDMX-UHFFFAOYSA-N	1.7×10^2 $> 5.0 \times 10^2$		HSDB (2015) Maniere et al. (2011)	V ?	12, 165
permethrin $C_{21}H_{20}Cl_2O_3$ [52645-53-1] RLLPVAHGXCWKJ-UHFFFAOYSA-N	5.3 4.1 9.0 1.2×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186
chlorophacinone $C_{23}H_{15}ClO_3$ [3691-35-8] UDHXJZHVNHGCEC-UHFFFAOYSA-N	2.7×10^6 4.1×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
chlormadinone acetate $C_{23}H_{29}ClO_4$ [302-22-7] QMBJSIBWORFWQT-UHFFFAOYSA-N	1.8×10^4		HSDB (2015)	Q	99
3,4,5,6-tetrachlorophthalic acid bis(2-ethylhexyl) ester $C_{24}H_{34}Cl_4O_4$ [34832-88-7] BELGUQVGZMFEAQ-UHFFFAOYSA-N	2.8 2.3×10^1 1.0×10^4 3.5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
endosulfan alcohol $C_9H_8Cl_6O_2$ [2157-19-9] GTSJHTSVFKEASK-UHFFFAOYSA-N	7.7×10^3 3.0×10^6 1.3×10^5 1.8×10^5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
chlorendic anhydride $C_9H_2Cl_6O_3$ [115-27-5] FLBJFXNAEMSXGL-UHFFFAOYSA-N	1.1×10^2 3.1×10^4 1.5×10^4 3.9×10^7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,4,5,6,7,7-hexachloro- bicyclo[2.2.1]hept-5-ene-2,3- dicarboxylic acid $C_9H_4Cl_6O_4$ [115-28-6] DJKGDNKYTKCJKD-UHFFFAOYSA-N	3.3×10^8 3.3×10^8 3.1×10^9 3.9×10^9 7.3×10^7		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291



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Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
heptachlorepoxyde $C_{10}H_5Cl_7O$ [1024-57-3] ZXFBSWRVVIQKOD-UHFFFAOYSA-N	4.8×10^{-1} 5.9×10^{-1} 9.6×10^{-1} 5.0×10^{-1} 4.7×10^{-1} 3.1×10^{-1} 5.4×10^{-1} 1.3×10^1 3.1×10^{-1} 6.6×10^{-1} 7.7×10^{-1} 7.3 5.4 4.7×10^{-1}	5200	Shen and Wania (2005) Shen and Wania (2005) Chao et al. (2017) Cetin et al. (2006) Altschuh et al. (1999) Warner et al. (1980) Hilal et al. (2008) Ryan et al. (1988) Shen (1982) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	L L M M M M C C C Q Q Q Q ?	366 367 67 185, 21
dieldrin $C_{12}H_8OCl_6$ [60-57-1] DFBKLUNHFCTMDC-NLUYNBKHSA-N	1.0 9.1×10^{-1} 9.1×10^{-1} 6.5×10^{-1} 9.2×10^{-1} 9.8×10^{-1} 3.4×10^{-1} 1.7×10^{-1} 8.9×10^{-1} 8.9×10^{-1} 4.9×10^1 8.8×10^{-3} 1.7×10^{-1} 5.0×10^1 2.2×10^1 9.8×10^{-1} 1.7×10^{-1} 4.7×10^{-2} 1.3 1.7×10^{-1} 2.4×10^{-1} 7.2×10^{-1} 7.4×10^{-4} 1.1 2.7 9.9×10^{-1} 1.2 5.7×10^1	5800	Shen and Wania (2005) Shen and Wania (2005) Mackay and Shiu (1981) Chao et al. (2017) Cetin et al. (2006) Altschuh et al. (1999) Slater and Spedding (1981) Warner et al. (1980) Mackay et al. (2006d) Suntio et al. (1988) Mackay and Leinonen (1975) Barcelo and Hennion (1997) Hilal et al. (2008) Suntio et al. (1988) Suntio et al. (1988) Suntio et al. (1988) Suntio et al. (1988) Suntio et al. (1988) Ryan et al. (1988) Shen (1982) Keshavarz et al. (2022) Duchowicz et al. (2020) Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020) MacBean (2012a) Brimblecombe (1986)	L L L M M M M M V V V X C C C C C C C C Q Q Q Q Q Q Q ?	366 367 12 12 567 12 681 681 568, 571 67 185, 21 80



Table A6.4: Oxygenated chlorocarbons (C, H, O, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
endrin	1.6		Shen and Wania (2005)	L	366
$C_{12}H_8Cl_6O$	9.1×10^{-1}		Shen and Wania (2005)	L	367
[72-20-8]	1.5		Chao et al. (2017)	M	
DFBKLUNHFCTMDC-GKRDHXSOSA-N	1.8	4600	Cetin et al. (2006)	M	
	1.6		Altschuh et al. (1999)	M	
	3.0×10^1		Mackay et al. (2006d)	V	
	3.0×10^1		Suntio et al. (1988)	V	12
	5.6×10^3		Suntio et al. (1988)	C	
	2.4×10^1		Ryan et al. (1988)	C	
	1.2		Keshavarz et al. (2022)	Q	
	7.2×10^{-1}		Duchowicz et al. (2020)	Q	184
	1.1		Hilal et al. (2008)	Q	
	2.7		Modarresi et al. (2007)	Q	67
	1.6		Duchowicz et al. (2020)	?	185, 21
1,4,5,6,7,7- hexachlorobicyclo[2.2.1]hept-5- ene-2,3-dicarboxylic acid, dibutyl ester	5.8×10^2		Zhang et al. (2010)	Q	287, 288
$C_{17}H_{20}Cl_6O_4$	1.4×10^2		Zhang et al. (2010)	Q	287, 289
[1770-80-5]	4.6×10^3		Zhang et al. (2010)	Q	287, 290
UJAHBPDUQZFDLA-UHFFFAOYSA-N	8.0×10^2		Zhang et al. (2010)	Q	287, 291
di-2-ethylhexyl chlorendate	6.0×10^1		Zhang et al. (2010)	Q	287, 288
$C_{25}H_{36}Cl_6O_4$	2.1×10^2		Zhang et al. (2010)	Q	287, 289
[4827-55-8]	5.2×10^3		Zhang et al. (2010)	Q	287, 290
ONIHOIFWLALAQH-UHFFFAOYSA-N	1.6×10^2		Zhang et al. (2010)	Q	287, 291



A6.5 Polychlorinated diphenyl ethers (PCDEs)

Table A6.5: Polychlorinated diphenyl ethers (PCDEs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-chlorodiphenyl ether $C_{12}H_9ClO$ (PCDE-1) [2689-07-8] IPBRZLMGGXHHMS-UHFFFAOYSA-N	3.1×10^{-2}		Kurz and Ballschmiter (1999)	V	
3-chlorodiphenyl ether $C_{12}H_9ClO$ (PCDE-2) [6452-49-9] BMURONZFJJPAOK-UHFFFAOYSA-N	1.2×10^{-1} 2.7×10^{-2} 3.0×10^{-1}		Kurz and Ballschmiter (1999) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q	67
4-chlorodiphenyl ether $C_{12}H_9ClO$ (PCDE-3) [7005-72-3] PGPNJCAMHOJTEF-UHFFFAOYSA-N	1.1×10^{-1} 4.5×10^{-2} 9.0×10^{-2} 4.0×10^{-2} 3.1×10^{-2}		Kurz and Ballschmiter (1999) Mackay et al. (1993) Howard and Meylan (1997) Ryan et al. (1988) Hilal et al. (2008)	V V X C Q	446
2,3-dichlorodiphenyl ether $C_{12}H_8Cl_2O$ (PCDE-5) [68486-28-2] VSKSUBSGORDMQX-UHFFFAOYSA-N	2.4×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,4-dichlorodiphenyl ether $C_{12}H_8Cl_2O$ (PCDE-7) [51892-26-3] KXIPYLZZJMMPD-UHFFFAOYSA-N	1.9×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,4'-dichlorodiphenyl ether $C_{12}H_8Cl_2O$ (PCDE-8) [6903-65-7] MWKULKMSBBSGTP-UHFFFAOYSA-N	3.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,5-dichlorodiphenyl ether $C_{12}H_8Cl_2O$ (PCDE-9) [24910-69-8] VITXVDNQHXYSK-UHFFFAOYSA-N	7.9×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,6-dichlorodiphenyl ether $C_{12}H_8Cl_2O$ (PCDE-10) [28419-69-4] IRLZOQDGEAEIPX-UHFFFAOYSA-N	5.0×10^{-2}		Kurz and Ballschmiter (1999)	V	



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Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4-dichlorodiphenyl ether $C_{12}H_8Cl_2O$ (PCDE-12) [55538-69-7] QFQLZVAAQOJUFS-UHFFFAOYSA-N	1.1×10^{-1}		Kurz and Ballschmiter (1999)	V	
3,4'-dichlorodiphenyl ether $C_{12}H_8Cl_2O$ (PCDE-13) [6842-62-2] HPRGYUWRGCTBAV-UHFFFAOYSA-N	1.3×10^{-1}		Kurz and Ballschmiter (1999)	V	
3,5-dichlorodiphenyl ether $C_{12}H_8Cl_2O$ (PCDE-14) [24910-68-7] LEKOWSSKXYFERR-UHFFFAOYSA-N	6.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
4,4'-dichlorodiphenyl ether $C_{12}H_8Cl_2O$ (PCDE-15) [2444-89-5] URUJZHLCIILC-UHFFFAOYSA-N	2.1×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,2',4-trichlorodiphenyl ether $C_{12}H_7Cl_3O$ (PCDE-17) [68914-97-6] YXMNUPKWUMIZAV-UHFFFAOYSA-N	4.5×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,3,4-trichlorodiphenyl ether $C_{12}H_7Cl_3O$ (PCDE-21) [85918-32-7] ANKBTLMYMVMWBS-UHFFFAOYSA-N	2.8×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,3,4'-trichlorodiphenyl ether $C_{12}H_7Cl_3O$ (PCDE-22) [157683-71-1] KOTNFWJIMRGVBR-UHFFFAOYSA-N	3.2×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,3,5-trichlorodiphenyl ether $C_{12}H_7Cl_3O$ (PCDE-23) [162853-24-9] MDSPKCWGOVVFJD-UHFFFAOYSA-N	2.2×10^{-1}		Kurz and Ballschmiter (1999)	V	



Rolf Sander: Compilation of Henry's law constants

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Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,6-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-24) [162853-25-0] RQSRPDGSUDRYLH-UHFFFAOYSA-N	3.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-25) [155999-93-2] BJFOCMRBCBZFT-UHFFFAOYSA-N	1.5×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,4,4'-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-28) [59039-21-3] PIORTDHJOLELKR-UHFFFAOYSA-N	3.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,4,5-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-29) [52322-80-2] UWKZWXCTDPYXHU-UHFFFAOYSA-N	8.9×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,4,6-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-30) [63646-52-6] WXLQUFLKMICSSY-UHFFFAOYSA-N	1.4×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,4',5-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-31) [65075-00-5] FZBSTAVCYOMFMD-UHFFFAOYSA-N	1.6×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,4',6-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-32) [157683-72-2] ZMRFCSWFCKICQE-UHFFFAOYSA-N	4.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4'-trichlorodiphenyl ether $\text{C}_{12}\text{H}_7\text{Cl}_3\text{O}$ (PCDE-33) [61328-44-7] VBNJGYOQZAENPO-UHFFFAOYSA-N	3.4×10^{-1}		Kurz and Ballschmiter (1999)	V	



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Rolf Sander: Compilation of Henry's law constants

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3',4-trichlorodiphenyl ether $C_{12}H_7Cl_3O$ (PCDE-35) [66794-60-3] BUKLLCIUMZELOH-UHFFFAOYSA-N	2.2×10^{-1}		Kurz and Ballschmiter (1999)	V	
3,4,4'-trichlorodiphenyl ether $C_{12}H_7Cl_3O$ (PCDE-37) [63646-51-5] FTZDEZOARSJHGU-UHFFFAOYSA-N	1.6×10^{-1}		Kurz and Ballschmiter (1999)	V	
3,4,5-trichlorodiphenyl ether $C_{12}H_7Cl_3O$ (PCDE-38) [63646-53-7] ZQCCHNBMSHOJAT-UHFFFAOYSA-N	9.1×10^{-3}		Kurz and Ballschmiter (1999)	V	
3,4',5-trichlorodiphenyl ether $C_{12}H_7Cl_3O$ (PCDE-39) [24910-73-4] CCEZFZGXWFJQEF-UHFFFAOYSA-N	1.6×10^{-1}		Kurz and Ballschmiter (1999)	V	
2,2',3,4-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-41) [220002-37-9] VTTDWGUAWMLHPR-UHFFFAOYSA-N	5.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4'-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-42) [147102-63-4] UYVBJPPIRAJEKW-UHFFFAOYSA-N	5.8×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,4'-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-47) [28076-73-5] ZRWRPGGXCSSBAO-UHFFFAOYSA-N	2.9×10^{-2} 2.8×10^{-1}		Kurz and Ballschmiter (1999) HSDB (2015)	V Q	99
2,2',4,5-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-48) [162853-26-1] DRVAMLZVBNYSQE-UHFFFAOYSA-N	1.6×10^{-2}		Kurz and Ballschmiter (1999)	V	



Rolf Sander: Compilation of Henry's law constants

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Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,5'-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-49) [155999-92-1] XIXPEFLHQAIQY-UHFFFAOYSA-N	2.6×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-55) [220002-39-1] IZISEKJPNSBPRX-UHFFFAOYSA-N	2.3×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4'-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-56) [162853-27-2] JVFGXWCLGNACOG-UHFFFAOYSA-N	4.4×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4,4'-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-60) [65075-01-6] ZPOBHURVVTGKB-UHFFFAOYSA-N	3.6×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4,5-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-61) [220002-40-4] QAPPZLVGIXQUJW-UHFFFAOYSA-N	6.6×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3,4,6-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-62) [85918-33-8] WJZPRRFZWWZJL-UHFFFAOYSA-N	9.1×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3,4',5-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-63) [220002-41-5] YHQRYZGDQCSHFO-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4',6-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-64) [220002-42-6] HJCNTJIMUWQMSA-UHFFFAOYSA-N	3.8×10^{-2}		Kurz and Ballschmiter (1999)	V	



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Rolf Sander: Compilation of Henry's law constants

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,5,6-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-65) [63646-54-8] UFGXCDQXRUFDMA-UHFFFAOYSA-N	9.3×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3',4,4'-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-66) [61328-46-9] CAWSVYYOUZEMHA-UHFFFAOYSA-N	2.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4,5-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-67) [152833-52-8] QDQGEFCQVPRMEO-UHFFFAOYSA-N	8.9×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3',4,5'-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-68) [147102-64-5] XORVNHCKWFPDLN-UHFFFAOYSA-N	1.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4',5-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-70) [159553-67-0] MFTPXFIGIJCNJM-UHFFFAOYSA-N	1.8×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4',6-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-71) [130892-66-9] IZZULMOBRTYHMH-UHFFFAOYSA-N	4.6×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,4,4',5-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-74) [61328-45-8] KXOJXWNARBQHNX-UHFFFAOYSA-N	1.9×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,4,4',6-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-75) [63553-30-0] YCWRSOTXXJYCKF-UHFFFAOYSA-N	1.7×10^{-2}		Kurz and Ballschmiter (1999)	V	



Rolf Sander: Compilation of Henry's law constants

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Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3',4,4'-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-77) [56348-72-2] DHLVZXZRIZBPKG-UHFFFAOYSA-N	4.1×10^{-2}		Kurz and Ballschmiter (1999)	V	
3,3',4,5'-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-79) [552884-22-7] BUPRSRBWDJVKGG-UHFFFAOYSA-N	1.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
3,4,4',5-tetrachlorodiphenyl ether $C_{12}H_6Cl_4O$ (PCDE-81) [62615-07-0] CAUBBRCOHHHCNG-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-82) [160282-10-0] ABRDPORILGADAP-UHFFFAOYSA-N	8.3×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4'-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-85) [71585-37-0] RSBUDFTVQYJNHK-UHFFFAOYSA-N	5.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,5'-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-87) [160282-09-7] SCLCXTQIVCULDR-UHFFFAOYSA-N	2.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,6'-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-89) [85918-35-0] JGXAONSRHOSPTJ-UHFFFAOYSA-N	6.5×10^{-2}		Kurz and Ballschmiter (1999)	V	



Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4',5-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-90) [157683-73-3] QPEBRZQSEUOWPA-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4',6-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-91) [116995-20-1] BRNKJDZYZVNM-UHFFFAOYSA-N	3.9×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4',5'-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-97) [160282-08-6] ABYZYVAIOYICJQ-UHFFFAOYSA-N	3.3×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,4',5-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-99) [60123-64-0] AVURWLKSFZBANQ-UHFFFAOYSA-N	1.8×10^{-2} 3.8×10^{-2}	6100	Kurz and Ballschmiter (1999) Paasivirta et al. (1999)	V T	
2,2',4,4',6-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-100) [104294-16-8] FONWDRSQXQZNBK-UHFFFAOYSA-N	2.1×10^{-2} 1.3×10^{-2}	5800	Kurz and Ballschmiter (1999) Paasivirta et al. (1999)	V T	
2,2',4,5,5'-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-101) [131138-21-1] MKIAKZAWONVRFU-UHFFFAOYSA-N	1.6×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,5,6'-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-102) [130892-67-0] BOJBTUWEQMUWHT-UHFFFAOYSA-N	3.7×10^{-2}		Kurz and Ballschmiter (1999)	V	



Rolf Sander: Compilation of Henry's law constants

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Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4,4'-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-105) [85918-31-6] PKEGIXYNAGGYPN-UHFFFAOYSA-N	4.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4,5'-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-108) [160282-07-5] HCTKORQPUZCIAO-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4,6-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-109) [727738-64-9] SEIXDCGLHKOBEO-UHFFFAOYSA-N	1.4×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4',6-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-110) [159553-69-2] KASGFDPQAMDPAZ-UHFFFAOYSA-N	3.6×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4,4',5-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-114) [113464-17-8] WSTVMACYLXUQIM-UHFFFAOYSA-N	1.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4,4',6-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-115) [160282-05-3] LUNNFBBTEHRMWM-UHFFFAOYSA-N	1.1×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,4,5,6-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-116) [22274-42-6] JDWOFUWJURZFFF-UHFFFAOYSA-N	6.6×10^{-3}		Kurz and Ballschmiter (1999)	V	



Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4',5,6-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-117) [63646-55-9] UETIKWAWMZLQOZ-UHFFFAOYSA-N	1.1×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4,4',5-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-118) [60123-65-1] NRAVUGAGYOBXIG-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4,4',6-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-119) [157683-74-4] POOXVKSDWCXIBU-UHFFFAOYSA-N	1.3×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3',4,5,5'-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-120) [160282-04-2] XIFRTJZLSYOLIU-UHFFFAOYSA-N	4.8×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3',4,4',5'-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-123) [160282-06-4] BUAXMSGDEZZOJD-UHFFFAOYSA-N	1.3×10^{-2}		Kurz and Ballschmiter (1999)	V	
3,3',4,4',5-pentachlorodiphenyl ether $C_{12}H_5Cl_5O$ (PCDE-126) [94339-59-0] WDBLKMRZRLISL-UHFFFAOYSA-N	1.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,4'-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-128) [71585-39-2] GSWMXIUDJJOXNF-UHFFFAOYSA-N	8.3×10^{-2}		Kurz and Ballschmiter (1999)	V	



Rolf Sander: Compilation of Henry's law constants

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Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,5'-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-130) [76621-14-2] JTEWACHFMNTRBB-UHFFFAOYSA-N	1.5×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,6'-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-132) [124076-66-0] YDVYLSIVXYLBXB-UHFFFAOYSA-N	6.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4',5-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-137) [71585-38-1] LDPJEMNPDFBCQ-UHFFFAOYSA-N	1.8×10^{-2} 1.9×10^{-2}	6400	Kurz and Ballschmiter (1999) Paasivirta et al. (1999)	V T	
2,2',3,4,4',5'-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-138) [71585-36-9] PHSJYZIFPWCLZ-UHFFFAOYSA-N	2.9×10^{-2} 2.8×10^{-2}	6500	Kurz and Ballschmiter (1999) Paasivirta et al. (1999)	V T	
2,2',3,4,4',6-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-139) [106220-83-1] BIWCXHDIQZFHI-UHFFFAOYSA-N	9.8×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4',6'-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-140) [106220-82-0] XDAOZRZWYVKIAK-UHFFFAOYSA-N	3.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4',5,5'-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-146) [162853-28-3] SFTBUGPDOJDENF-UHFFFAOYSA-N	1.0×10^{-2}		Kurz and Ballschmiter (1999)	V	



Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4',5,6-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-147) [116995-18-7] DIBYIHMYPMGKC-UHFFFAOYSA-N	1.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4',5',6-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-149) [85918-37-2] RDKSFIZNZGWNLA-UHFFFAOYSA-N	3.1×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',4,4',5,5'-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-153) [71859-30-8] PECXRRMHOQBOIE-UHFFFAOYSA-N	1.3×10^{-2}	1.1×10^{-2}	6300 Paasivirta et al. (1999)	T	
2,2',4,4',5,6'-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-154) [106220-81-9] XKQUAQGLZDBV-UHFFFAOYSA-N	1.4×10^{-2}	4.4×10^{-3}	5900 Paasivirta et al. (1999)	T	
2,3,3',4,4',5-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-156) [109828-22-0] GHTWMHLFFDEYRE-UHFFFAOYSA-N	1.2×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4,4',5'-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-157) [94339-60-3] FEIDIWDEJQVIPO-UHFFFAOYSA-N	2.8×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,3,3',4',5,6-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-163) [155999-97-6] YLAYOOJLJKJGCF-UHFFFAOYSA-N	1.6×10^{-2}		Kurz and Ballschmiter (1999)	V	



Rolf Sander: Compilation of Henry's law constants

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Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4,4',5,6-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-166) [63646-56-0] MXDRLBNLTLOWGV-UHFFFAOYSA-N	5.0×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3',4,4',5,5'-hexachlorodiphenyl ether $C_{12}H_4Cl_6O$ (PCDE-167) [131138-20-0] DYSUSQZPGJXVAL-UHFFFAOYSA-N	8.3×10^{-3} 9.0×10^{-3}	6200	Kurz and Ballschmiter (1999) Paasivirta et al. (1999)	V T	
2,2',3,3',4,4',5-heptachlorodiphenyl ether $C_{12}H_3Cl_7O$ (PCDE-170) [71585-40-5] BLBURLWSCHSPIS-UHFFFAOYSA-N	2.0×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,5,6'-heptachlorodiphenyl ether $C_{12}H_3Cl_7O$ (PCDE-174) [159553-73-8] DQYYZAABYZAOOC-UHFFFAOYSA-N	1.8×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,5',6'-heptachlorodiphenyl ether $C_{12}H_3Cl_7O$ (PCDE-177) [83992-71-6] RXPQVFMDOJTCKE-UHFFFAOYSA-N	1.4×10^{-2}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4',5,5'-heptachlorodiphenyl ether $C_{12}H_3Cl_7O$ (PCDE-180) [83992-69-2] YBYCWPMPXZRBNI-UHFFFAOYSA-N	5.0×10^{-3} 1.9×10^{-2}	6800	Kurz and Ballschmiter (1999) Paasivirta et al. (1999)	V T	



Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',5,6-heptachlorodiphenyl ether $C_{12}H_3Cl_7O$ (PCDE-181) [157683-75-5] RPNFRXWGMTYOPA-UHFFFAOYSA-N	3.4×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4',5,6'-heptachlorodiphenyl ether $C_{12}H_3Cl_7O$ (PCDE-182) [88467-63-4] XWRZWPPSQDHTFU-UHFFFAOYSA-N	3.3×10^{-3}	6400	Paasivirta et al. (1999)	T	
2,2',3,4,4',6,6'-heptachlorodiphenyl ether $C_{12}H_3Cl_7O$ (PCDE-184) [106220-84-2] WTYSJAGEYAAIFW-UHFFFAOYSA-N	2.0×10^{-1}	7800	Paasivirta et al. (1999)	T	
2,2',3,4',5,5',6-heptachlorodiphenyl ether $C_{12}H_3Cl_7O$ (PCDE-187) [109828-23-1] BHJCMGUFRLKK-UHFFFAOYSA-N	7.4×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3,3',4,4',5,5'-heptachlorodiphenyl ether $C_{12}H_3Cl_7O$ (PCDE-189) [83992-72-7] JUHPMUOWCYBMEY-UHFFFAOYSA-N	6.2×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,3,3',4,4',5,6-heptachlorodiphenyl ether $C_{12}H_3Cl_7O$ (PCDE-190) [83992-70-5] QLSBRXLSQINWHM-UHFFFAOYSA-N	5.8×10^{-3}		Kurz and Ballschmiter (1999)	V	



Rolf Sander: Compilation of Henry's law constants

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Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4',5,5'- octachlorodiphenyl ether $C_{12}H_2Cl_8O$ (PCDE-194) [57379-40-5] IXZVOZCULZBCDY-UHFFFAOYSA-N	4.3×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,4',5,6- octachlorodiphenyl ether $C_{12}H_2Cl_8O$ (PCDE-195) [65075-02-7] YHUPMPHVHYBYJE-UHFFFAOYSA-N	1.8×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,2',3,3',4,4',5,6'- octachlorodiphenyl ether $C_{12}H_2Cl_8O$ (PCDE-196) [85918-38-3] HYNVIQBCBHJTOZ-UHFFFAOYSA-N	8.7×10^{-3}	7100	Paasivirta et al. (1999)	T	
2,2',3,3',4,4',6,6'- octachlorodiphenyl ether $C_{12}H_2Cl_8O$ (PCDE-197) [117948-62-6] GRWRDFGBFYSSOKR-UHFFFAOYSA-N	7.7×10^{-3}	7000	Paasivirta et al. (1999)	T	
2,2',3,3',4,5,5',6'- octachlorodiphenyl ether $C_{12}H_2Cl_8O$ (PCDE-199) [83992-76-1] MRHQOXCYYPFGEU-UHFFFAOYSA-N	2.6×10^{-3}		Kurz and Ballschmiter (1999)	V	
2,2',3,4,4',5,5',6- octachlorodiphenyl ether $C_{12}H_2Cl_8O$ (PCDE-203) [83992-75-0] PKOSPVZTRLMBBSK-UHFFFAOYSA-N	2.3×10^{-3}		Kurz and Ballschmiter (1999)	V	



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Rolf Sander: Compilation of Henry's law constants

Table A6.5: Polychlorinated diphenyl ethers (PCDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,4',5,5',6- nonachlorodiphenyl ether $C_{12}HCl_9O$ (PCDE-206) [83992-73-8] FPEYJPVHPGDXXDD-UHFFFAOYSA-N	5.1×10^{-4}		Kurz and Ballschmiter (1999)	V	
decachlorodiphenyl ether $C_{12}Cl_{10}O$ (PCDE-209) [31710-30-2] CIPFDHFTBYJKQB-UHFFFAOYSA-N	7.1×10^{-5}		Kurz and Ballschmiter (1999)	V	



A6.6 Polychlorinated dibenzofuranes (PCDFs)

Table A6.6: Polychlorinated dibenzofuranes (PCDFs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chlorodibenzofuran $C_{12}H_7ClO$ (PCDF-1) [84761-86-4] WRSMJZYBNIAAEE-UHFFFAOYSA-N	8.3×10^{-2}		Govers and Krop (1998)	Q	
2-chlorodibenzofuran $C_{12}H_7ClO$ (PCDF-2) [51230-49-0] PRKTYWJFCODJOA-UHFFFAOYSA-N	1.1×10^{-1}		Govers and Krop (1998)	Q	
3-chlorodibenzofuran $C_{12}H_7ClO$ (PCDF-3) [25074-67-3] BBOZMMAURMEVAR-UHFFFAOYSA-N	1.3×10^{-1}		Govers and Krop (1998)	Q	
4-chlorodibenzofuran $C_{12}H_7ClO$ (PCDF-4) [74992-96-4] RHRYBWFAXCUCR-UHFFFAOYSA-N	8.9×10^{-2}		Govers and Krop (1998)	Q	
1,2-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-12) [64126-85-8] QVAPRJWSOUIITIF-UHFFFAOYSA-N	1.5×10^{-1}		Govers and Krop (1998)	Q	
1,3-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-13) [94538-00-8] VKIBKEFGJSRJC-UHFFFAOYSA-N	2.0×10^{-1}		Govers and Krop (1998)	Q	
1,4-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-14) [94538-01-9] VHQMZLPHWGUDB-UHFFFAOYSA-N	1.5×10^{-1}		Govers and Krop (1998)	Q	
1,6-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-16) [74992-97-5] JRSRWACZUFLWKF-UHFFFAOYSA-N	1.4×10^{-1}		Govers and Krop (1998)	Q	



Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,7-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-17) [94538-02-0] XRQNHGZRFKBJW-UHFFFAOYSA-N	1.9×10^{-1}		Govers and Krop (1998)	Q	
1,8-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-18) [81638-37-1] UAFNQBPWFPGC-UHFFFAOYSA-N	2.5×10^{-1}		Govers and Krop (1998)	Q	
1,9-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-19) [70648-14-5] AEKSGHBVWJHELW-UHFFFAOYSA-N	2.0×10^{-1}		Govers and Krop (1998)	Q	
2,3-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-23) [64126-86-9] GETJJZZRPQFSFM-UHFFFAOYSA-N	2.3×10^{-1}		Govers and Krop (1998)	Q	
2,4-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-24) [24478-74-8] LHTCKMYRNOGUOA-UHFFFAOYSA-N	1.9×10^{-1}		Govers and Krop (1998)	Q	
2,6-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-26) [60390-27-4] XVLCNKFGFHUQNL-UHFFFAOYSA-N	1.8×10^{-1}		Govers and Krop (1998)	Q	
2,7-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-27) [74992-98-6] DOZUTNBQVUMPY-UHFFFAOYSA-N	2.0×10^{-1}		Govers and Krop (1998)	Q	
2,8-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-28) [5409-83-6] IVVRJIDVYSPKFZ-UHFFFAOYSA-N	1.6×10^{-1} 1.6×10^{-1} 1.6×10^{-1} 4.2×10^{-1} 2.6×10^{-1} 2.2×10^{-1}		Duchowicz et al. (2020) Mackay et al. (2006b) Govers and Krop (1998) Duchowicz et al. (2020) Saçan et al. (2005) Govers and Krop (1998)	V V V Q Q Q	186



Rolf Sander: Compilation of Henry's law constants

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Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-34) [94570-83-9] HYQGGNWDQPZLGX-UHFFFAOYSA-N	1.9×10^{-1}		Govers and Krop (1998)	Q	
3,6-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-36) [74918-40-4] DMOBGFAKTSXOHG-UHFFFAOYSA-N	2.2×10^{-1}		Govers and Krop (1998)	Q	
3,7-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-37) [58802-21-4] OLTYAGNRSNFHLK-UHFFFAOYSA-N	3.0×10^{-1}		Govers and Krop (1998)	Q	
4,6-dichlorodibenzofuran $C_{12}H_6Cl_2O$ (PCDF-46) [64560-13-0] BZFIJNKNJCJEAD-UHFFFAOYSA-N	2.2×10^{-1}		Govers and Krop (1998)	Q	
1,2,3-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-123) [83636-47-9] LADSWAAWPMGHBE-UHFFFAOYSA-N	2.9×10^{-1}		Govers and Krop (1998)	Q	
1,2,4-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-124) [24478-73-7] RQIWKWHVZLDXEJ-UHFFFAOYSA-N	2.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,6-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-126) [64560-15-2] CYRZCBUWRUACKJ-UHFFFAOYSA-N	2.3×10^{-1}		Govers and Krop (1998)	Q	
1,2,7-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-127) [83704-37-4] AFOVQGPNOZDUEP-UHFFFAOYSA-N	2.3×10^{-1}		Govers and Krop (1998)	Q	



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Rolf Sander: Compilation of Henry's law constants

Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,8-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-128) [83704-34-1] UYIGPSPCOXGBCS-UHFFFAOYSA-N	3.9×10^{-1}		Govers and Krop (1998)	Q	
1,2,9-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-129) [83704-38-5] ICTXINQOXPMQPM-UHFFFAOYSA-N	4.8×10^{-1}		Govers and Krop (1998)	Q	
1,3,4-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-134) [82911-61-3] FIPOITUDJFQRRN-UHFFFAOYSA-N	2.8×10^{-1}		Govers and Krop (1998)	Q	
1,3,6-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-136) [83704-39-6] AGPTXRLVBIRYL-UHFFFAOYSA-N	3.3×10^{-1}		Govers and Krop (1998)	Q	
1,3,7-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-137) [64560-16-3] INRBXOGZPDFCLQ-UHFFFAOYSA-N	4.1×10^{-1}		Govers and Krop (1998)	Q	
1,3,8-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-138) [76621-12-0] PHFSTDOPTZHECA-UHFFFAOYSA-N	4.2×10^{-1}		Govers and Krop (1998)	Q	
1,3,9-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-139) [83704-40-9] SPPGDLROKBFNNO-UHFFFAOYSA-N	4.4×10^{-1}		Govers and Krop (1998)	Q	
1,4,6-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-146) [82911-60-2] XDQRWSUJOURTHK-UHFFFAOYSA-N	3.5×10^{-1}		Govers and Krop (1998)	Q	



Rolf Sander: Compilation of Henry's law constants

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Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4,7-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-147) [83704-41-0] XTLMVJUSIANHND-UHFFFAOYSA-N	3.2×10^{-1}		Govers and Krop (1998)	Q	
1,4,8-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-148) [64560-14-1] PCQCYNFBUADOK-UHFFFAOYSA-N	3.9×10^{-1}		Govers and Krop (1998)	Q	
1,4,9-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-149) [70648-13-4] NVYUPBVXKLTYYHV-UHFFFAOYSA-N	3.5×10^{-1}		Govers and Krop (1998)	Q	
1,6,7-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-167) [83704-46-5] HEWLCNCSWBMZHG-UHFFFAOYSA-N	2.7×10^{-1}		Govers and Krop (1998)	Q	
1,6,8-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-168) [82911-59-9] ZOBVYDQWZXUJNO-UHFFFAOYSA-N	4.1×10^{-1}		Govers and Krop (1998)	Q	
1,7,8-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-178) [58802-18-9] YNMCXGLWHTVMQO-UHFFFAOYSA-N	4.6×10^{-1}		Govers and Krop (1998)	Q	
2,3,4-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-234) [57117-34-7] YDLADWPBKZODCJ-UHFFFAOYSA-N	3.1×10^{-1}		Govers and Krop (1998)	Q	
2,3,6-trichlorodibenzofuran $C_{12}H_5Cl_3O$ (PCDF-236) [57117-33-6] CPMGJTLNRBIKQM-UHFFFAOYSA-N	3.4×10^{-1}		Govers and Krop (1998)	Q	



Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,7-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-237) [58802-17-8] CKXMNTLGGAOERF-UHFFFAOYSA-N	3.5×10^{-1}		Govers and Krop (1998)	Q	
2,3,8-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-238) [57117-32-5] NUNSNNOYACKRIK-UHFFFAOYSA-N	3.1×10^{-1}		Govers and Krop (1998)	Q	
2,4,6-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-246) [58802-14-5] GTKURBTWZFOHHY-UHFFFAOYSA-N	4.2×10^{-1}		Govers and Krop (1998)	Q	
2,4,7-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-247) [83704-42-1] SZBZRVJHPZIGAY-UHFFFAOYSA-N	3.1×10^{-1}		Govers and Krop (1998)	Q	
2,4,8-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-248) [54589-71-8] WJURXKWTOMRCE-UHFFFAOYSA-N	3.2×10^{-1}		Govers and Krop (1998)	Q	
3,4,6-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-346) [83704-43-2] XEUHBCMRIXEBTD-UHFFFAOYSA-N	4.3×10^{-1}		Govers and Krop (1998)	Q	
3,4,7-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-347) [83704-44-3] RPJJBTSXPNFUTA-UHFFFAOYSA-N	3.9×10^{-1}		Govers and Krop (1998)	Q	
3,4,8-trichlorodibenzofuran $\text{C}_{12}\text{H}_5\text{Cl}_3\text{O}$ (PCDF-348) [83704-45-4] YTZWNIQGGIJHJX-UHFFFAOYSA-N	2.5×10^{-1}		Govers and Krop (1998)	Q	



Rolf Sander: Compilation of Henry's law constants

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Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1234) [24478-72-6] AETAPIFVELRIDN-UHFFFAOYSA-N	3.6×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,6-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1236) [83704-21-6] BBAXFLIBRPXRPB-UHFFFAOYSA-N	4.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,7-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1237) [83704-22-7] MDNZFYGATDCKRB-UHFFFAOYSA-N	3.9×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1238) [62615-08-1] KFQRHGKKSJHJMCU-UHFFFAOYSA-N	5.0×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,9-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1239) [83704-23-8] GNQHLJHTOATTOJ-UHFFFAOYSA-N	7.9×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,6-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1246) [71998-73-7] NLVWEKJFJUPVMZ-UHFFFAOYSA-N	5.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,7-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1247) [83719-40-8] MFURKMJLDQBHRA-UHFFFAOYSA-N	3.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1248) [64126-87-0] BFTASCFRRBHFFK-UHFFFAOYSA-N	5.5×10^{-1}		Govers and Krop (1998)	Q	



Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1249) [83704-24-9] ZUYYTCCHKQGGOV-UHFFFAOYSA-N	7.4×10^{-1}		Govers and Krop (1998)	Q	
1,2,6,7-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1267) [83704-25-0] AUEWYHHKDYUYMI-UHFFFAOYSA-N	2.8×10^{-1}		Govers and Krop (1998)	Q	
1,2,6,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1268) [83710-07-0] KCVGVSIBBGJINZ-UHFFFAOYSA-N	5.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,6,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1269) [70648-18-9] IEPGLLVEBKXASE-UHFFFAOYSA-N	7.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,7,8-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1278) [58802-20-3] JODWPAQNABOH DG-UHFFFAOYSA-N	1.1 4.8×10^{-1}		Saçan et al. (2005) Govers and Krop (1998)	Q Q	
1,2,7,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1279) [83704-26-1] PDMFRPIFZAKMLH-UHFFFAOYSA-N	6.9×10^{-1}		Govers and Krop (1998)	Q	
1,2,8,9-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1289) [70648-22-5] OHYCQUKMNPHFPT-UHFFFAOYSA-N	9.5×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,6-tetrachlorodibenzofuran $\text{C}_{12}\text{H}_4\text{Cl}_4\text{O}$ (PCDF-1346) [83704-27-2] CBBDONKZEJKFJP-UHFFFAOYSA-N	6.3×10^{-1}		Govers and Krop (1998)	Q	



Rolf Sander: Compilation of Henry's law constants

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Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3,4,7-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1347) [70648-16-7] UMKCVDTZTSZNRH-UHFFFAOYSA-N	5.1×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1348) [92341-04-3] XWKRJSMNDOXIHS-UHFFFAOYSA-N	5.0×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,9-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1349) [83704-28-3] PNCYJHOTZSKZPA-UHFFFAOYSA-N	5.8×10^{-1}		Govers and Krop (1998)	Q	
1,3,6,7-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1367) [57117-36-9] PITDPGCTIMCIEZ-UHFFFAOYSA-N	5.1×10^{-1}		Govers and Krop (1998)	Q	
1,3,6,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1368) [71998-72-6] BDXKVABZWRZKOS-UHFFFAOYSA-N	6.2×10^{-1}		Govers and Krop (1998)	Q	
1,3,6,9-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1369) [83690-98-6] NJQQZRLWVLLWNGD-UHFFFAOYSA-N	6.8×10^{-1}		Govers and Krop (1998)	Q	
1,3,7,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1378) [57117-35-8] CSXDVUGDFSXYTD-UHFFFAOYSA-N	6.5×10^{-1}		Govers and Krop (1998)	Q	
1,3,7,9-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1379) [64560-17-4] IEMJMCVYAORWJV-UHFFFAOYSA-N	7.9×10^{-1}		Govers and Krop (1998)	Q	



Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4,6,7-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1467) [66794-59-0] RBFNYMHNIOKXLA-UHFFFAOYSA-N	5.9×10^{-1}		Govers and Krop (1998)	Q	
1,4,6,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1468) [82911-58-8] VHOBVPNETFRJED-UHFFFAOYSA-N	8.5×10^{-1}		Govers and Krop (1998)	Q	
1,4,6,9-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1469) [70648-19-0] JAYSBJFHJDJOMGZ-UHFFFAOYSA-N	7.9×10^{-1}		Govers and Krop (1998)	Q	
1,4,7,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1478) [83704-29-4] IVRDRRWQABCXLY-UHFFFAOYSA-N	6.5×10^{-1}		Govers and Krop (1998)	Q	
1,6,7,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-1678) [83704-33-0] KOJMOXYETDLOPN-UHFFFAOYSA-N	5.8×10^{-1}		Govers and Krop (1998)	Q	
2,3,4,6-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-2346) [83704-30-7] JNVHSHPAAMRSKK-UHFFFAOYSA-N	6.2×10^{-1}		Govers and Krop (1998)	Q	
2,3,4,7-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-2347) [83704-31-8] BROFYOSLFHTGCQ-UHFFFAOYSA-N	4.4×10^{-1}		Govers and Krop (1998)	Q	
2,3,4,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-2348) [83704-32-9] IIKXRERKNIJJQY-UHFFFAOYSA-N	3.5×10^{-1}		Govers and Krop (1998)	Q	



Rolf Sander: Compilation of Henry's law constants

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Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,6,7-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-2367) [57117-39-2] MJCNKMDTLRSHNK-UHFFFAOYSA-N	4.1×10^{-1}		Govers and Krop (1998)	Q	
2,3,6,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-2368) [57117-37-0] SPMZHWRMWWTSY-UHFFFAOYSA-N	4.2×10^{-1}		Govers and Krop (1998)	Q	
2,3,7,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-2378) [51207-31-9] KSMVNVHUTQZITP-UHFFFAOYSA-N	5.9×10^{-1} 6.8×10^{-1} 8.5×10^{-1} 2.2×10^{-3} 2.4×10^{-1} 1.2 6.4×10^{-1} 7.2×10^{-1} 3.7×10^{-1} 5.9×10^{-1}	3700	Friesen et al. (1993) Mackay et al. (2006b) Govers and Krop (1998) Paasivirta et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Saçan et al. (2005) Govers and Krop (1998) Duchowicz et al. (2020)	M V V T Q Q Q Q Q ?	99 185, 21
2,4,6,7-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-2467) [57117-38-1] NSDXKMRVQOSASS-UHFFFAOYSA-N	5.4×10^{-1}		Govers and Krop (1998)	Q	
2,4,6,8-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-2468) [58802-19-0] ZSPJEACWUWSAGS-UHFFFAOYSA-N	6.6×10^{-1}		Govers and Krop (1998)	Q	
3,4,6,7-tetrachlorodibenzofuran $C_{12}H_4Cl_4O$ (PCDF-3467) [57117-40-5] LMJLCLBSUNZLNW-UHFFFAOYSA-N	7.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,4,6-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-12346) [83704-47-6] LIQJBAPSLUZUTB-UHFFFAOYSA-N	7.1×10^{-1}		Govers and Krop (1998)	Q	



Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4,7-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12347) [83704-48-7] DOJZTBGOWIYFAC-UHFFFAOYSA-N	4.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,4,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12348) [67517-48-0] ZCTNDJSCLPJCRU-UHFFFAOYSA-N	5.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,4,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12349) [83704-49-8] IQSNZVZXOFRJS-UHFFFAOYSA-N	9.8×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,6,7-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12367) [57117-42-7] NZUPQBVDIWCPCBX-UHFFFAOYSA-N	4.2×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,6,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12368) [83704-51-2] VHQJZOFUPXEZQZ-UHFFFAOYSA-N	6.5×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,6,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12369) [83704-52-3] IPSFQAKXDJVQOX-UHFFFAOYSA-N	1.1		Govers and Krop (1998)	Q	
1,2,3,7,8-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12378) [57117-41-6] SBMIVUVRFPQOEB-UHFFFAOYSA-N	8.7×10^{-4} 5.2×10^{-1}	3000	Paasivirta et al. (1999) Govers and Krop (1998)	T Q	
1,2,3,7,9-pentachlorodibenzofuran $\text{C}_{12}\text{H}_3\text{Cl}_5\text{O}$ (PCDF-12379) [83704-53-4] JVUSEQPOWCBYNG-UHFFFAOYSA-N	1.0		Govers and Krop (1998)	Q	



Rolf Sander: Compilation of Henry's law constants

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Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,8,9-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-12389) [83704-54-5] NKGLWUJPCUDEH-UHFFFAOYSA-N	2.0 1.1		Saçan et al. (2005) Govers and Krop (1998)	Q Q	
1,2,4,6,7-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-12467) [83704-50-1] BQTCODOVGXJHRB-UHFFFAOYSA-N	5.8×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,6,8-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-12468) [69698-57-3] JDTUAYPJSSXDNO-UHFFFAOYSA-N	1.0		Govers and Krop (1998)	Q	
1,2,4,6,9-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-12469) [70648-24-7] QDQFGVXGSPYEJU-UHFFFAOYSA-N	1.5		Govers and Krop (1998)	Q	
1,2,4,7,8-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-12478) [58802-15-6] GCFDWHIKRXCUPJ-UHFFFAOYSA-N	6.2×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,7,9-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-12479) [71998-74-8] IYGVHNHWORPMFU-UHFFFAOYSA-N	9.8×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,8,9-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-12489) [70648-23-6] ZSPAPWGNAGTCCA-UHFFFAOYSA-N	1.3		Govers and Krop (1998)	Q	
1,2,6,7,8-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-12678) [69433-00-7] ZAAVDGLJEOXCMV-UHFFFAOYSA-N	5.2×10^{-1}		Govers and Krop (1998)	Q	



Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,6,7,9-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-12679) [70872-82-1] QQRQEVOSMEVQB-UHFFFAOYSA-N	7.9×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,6,7-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-13467) [83704-36-3] JVYYDUWJIJMOGW-UHFFFAOYSA-N	8.9×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,6,8-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-13468) [83704-55-6] COKIAYPRHYHYCH-UHFFFAOYSA-N	1.0		Govers and Krop (1998)	Q	
1,3,4,6,9-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-13469) [70648-15-6] MYSAFUYQSBEEEDR-UHFFFAOYSA-N	1.2		Govers and Krop (1998)	Q	
1,3,4,7,8-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-13478) [58802-16-7] ORSUQGVCWLXLZ-UHFFFAOYSA-N	7.1×10^{-1}		Govers and Krop (1998)	Q	
1,3,4,7,9-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-13479) [70648-20-3] GFXPLABVZOBCCW-UHFFFAOYSA-N	9.5×10^{-1}		Govers and Krop (1998)	Q	
1,3,6,7,8-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-13678) [70648-21-4] FRLMQDUYUJIHCZ-UHFFFAOYSA-N	7.6×10^{-1}		Govers and Krop (1998)	Q	
1,4,6,7,8-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-14678) [83704-35-2] VANGHZRYKXDPRR-UHFFFAOYSA-N	1.1		Govers and Krop (1998)	Q	



Rolf Sander: Compilation of Henry's law constants

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Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4,6,7-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-23467) [57117-43-8] SJFBZRQKGGHEV-UHFFFAOYSA-N	6.9×10^{-1}		Govers and Krop (1998)	Q	
2,3,4,6,8-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-23468) [67481-22-5] MKRFORPSRBMAIP-UHFFFAOYSA-N	6.6×10^{-1}		Govers and Krop (1998)	Q	
2,3,4,7,8-pentachlorodibenzofuran $C_{12}H_3Cl_5O$ (PCDF-23478) [57117-31-4] OGBQILNBLMPPDP-UHFFFAOYSA-N	2.0 2.0 2.0 1.7 2.3×10^{-3} 1.6 1.6 3.9×10^{-1}	2900	Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006b) Govers and Krop (1998) Paasivirta et al. (1999) Duchowicz et al. (2020) Saçan et al. (2005) Govers and Krop (1998)	V V V V T Q Q Q	186
1,2,3,4,6,7-hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-123467) [79060-60-9] SNWFMKXFMVHBKD-UHFFFAOYSA-N	6.8×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,4,6,8-hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-123468) [69698-60-8] UCFGNWHERVQWMZ-UHFFFAOYSA-N	2.4×10^{-4} 9.8×10^{-1}	2300	Paasivirta et al. (1999) Govers and Krop (1998)	T Q	
1,2,3,4,6,9-hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-123469) [91538-83-9] KFFUZIROJGXTQH-UHFFFAOYSA-N	1.8		Govers and Krop (1998)	Q	
1,2,3,4,7,8-hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-123478) [70648-26-9] LVYBAQIVPKOEE-UHFFFAOYSA-N	6.9×10^{-1} 3.8×10^{-1} 4.1×10^{-4} 2.0 5.2×10^{-1}	2400	Mackay et al. (2006b) Govers and Krop (1998) Paasivirta et al. (1999) Saçan et al. (2005) Govers and Krop (1998)	V V T Q Q	



Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4,7,9- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-123479) [91538-84-0] BKIXWRBZCQEZAQ-UHFFFAOYSA-N	1.1		Govers and Krop (1998)	Q	
1,2,3,4,8,9- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-123489) [92341-07-6] VSDUQUBUJRNREH-UHFFFAOYSA-N	2.7		Saçan et al. (2005)	Q	
1,2,3,6,7,8- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-123678) [57117-44-9] JEYJJXOFWNEHN-UHFFFAOYSA-N	1.1		Govers and Krop (1998)	Q	
1,2,3,6,7,8- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-123678) [57117-44-9] JEYJJXOFWNEHN-UHFFFAOYSA-N	9.1×10^{-1}		Govers and Krop (1998)	V	
	1.1×10^{-3}	3300	Paasivirta et al. (1999)	T	
	2.2		Saçan et al. (2005)	Q	
	5.2×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,6,7,9- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-123679) [92341-06-5] JZVOLXQREJNTTL-UHFFFAOYSA-N	1.0		Govers and Krop (1998)	Q	
1,2,3,6,8,9- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-123689) [75198-38-8] WLGQZUOHEXTWFH-UHFFFAOYSA-N	1.3		Govers and Krop (1998)	Q	
1,2,3,7,8,9- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-123789) [72918-21-9] PYUSJFJVDVXSXIU-UHFFFAOYSA-N	6.3×10^{-4}	2600	Paasivirta et al. (1999)	T	
	2.6		Saçan et al. (2005)	Q	
	1.0		Govers and Krop (1998)	Q	
1,2,4,6,7,8- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-124678) [67562-40-7] CKDDYGBBKXIHRY-UHFFFAOYSA-N	3.2×10^{-4}	2300	Paasivirta et al. (1999)	T	
	9.3×10^{-1}		Govers and Krop (1998)	Q	



Rolf Sander: Compilation of Henry's law constants

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Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,6,7,9- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-124679) [75627-02-0] FAHIPPHRJQQOG-UHFFFAOYSA-N	1.5		Govers and Krop (1998)	Q	
1,2,4,6,8,9- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-124689) [69698-59-5] FGZCXIPKUCJGHW-UHFFFAOYSA-N	2.2×10^{-4} 2.4	2600	Paasivirta et al. (1999) Govers and Krop (1998)	T Q	
1,3,4,6,7,8- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-134678) [71998-75-9] OGTZINGGZYXZCR-UHFFFAOYSA-N	1.1		Govers and Krop (1998)	Q	
1,3,4,6,7,9- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-134679) [92341-05-4] TURXXOIFVABBPW-UHFFFAOYSA-N	1.6		Govers and Krop (1998)	Q	
2,3,4,6,7,8- hexachlorodibenzofuran $C_{12}H_2Cl_6O$ (PCDF-234678) [60851-34-5] XTAHLACQOVXINQ-UHFFFAOYSA-N	3.6×10^{-4} 3.1 5.6×10^{-1}	2600	Paasivirta et al. (1999) Saçan et al. (2005) Govers and Krop (1998)	T Q Q	
1,2,3,4,6,7,8- heptachlorodibenzofuran $C_{12}HCl_7O$ (PCDF-1234678) [67562-39-4] WDMKCPVJOGHBF-UHFFFAOYSA-N	7.0×10^{-1} 7.0×10^{-1} 2.9×10^{-1} 5.4×10^{-5} 2.1 3.9 7.1×10^{-1}	1600	Duchowicz et al. (2020) Mackay et al. (2006b) Govers and Krop (1998) Paasivirta et al. (1999) Duchowicz et al. (2020) Saçan et al. (2005) Govers and Krop (1998)	V V V T Q Q Q	186
1,2,3,4,6,7,9- heptachlorodibenzofuran $C_{12}HCl_7O$ (PCDF-1234679) [70648-25-8] JWXWEOUKHXOUSK-UHFFFAOYSA-N	1.5		Govers and Krop (1998)	Q	



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Table A6.6: Polychlorinated dibenzofuranes (PCDFs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4,6,8,9- heptachlorodibenzofuran $C_{12}HCl_7O$ (PCDF-1234689) [69698-58-4] BADFHCOLISGRRW-UHFFFAOYSA-N	3.4×10^{-4} 1.9	1800	Paasivirta et al. (1999) Govers and Krop (1998)	T Q	
1,2,3,4,7,8,9- heptachlorodibenzofuran $C_{12}HCl_7O$ (PCDF-1234789) [55673-89-7] VEZCTZWLJYWARH-UHFFFAOYSA-N	5.5×10^{-4} 3.2 1.0	2100	Paasivirta et al. (1999) Saçan et al. (2005) Govers and Krop (1998)	T Q Q	
octachlorodibenzofuran $C_{12}Cl_8O$ (PCDF-12346789) [39001-02-0] RHIOFAGUQOFLU-UHFFFAOYSA-N	5.2 7.6×10^{-1} 2.3×10^{-4} 1.7 4.9 1.3	2400	Duchowicz et al. (2020) Mackay et al. (2006b) Govers and Krop (1998) Paasivirta et al. (1999) Duchowicz et al. (2020) Saçan et al. (2005) Govers and Krop (1998)	V V V T Q Q Q	186 683



Rolf Sander: Compilation of Henry's law constants

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A6.7 Polychlorinated dibenzo-*p*-dioxins (PCDDs)

Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
1-chlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_7\text{ClO}_2$ (PCDD-1) [39227-53-7] VGGGRWRBGXENKI-UHFFFAOYSA-N	1.6×10^{-1}	7100	Duchowicz et al. (2020)	V	186	
	1.6×10^{-1}		Mackay et al. (2006b)	V		
	2.5×10^{-2}		Saçan et al. (2005)	V		
	1.6×10^{-1}		Govers and Krop (1998)	V		
	1.2×10^{-1}		Shiu et al. (1988)	V		
	2.1		Duchowicz et al. (2020)	Q		
	6.8×10^{-2}		Kühne et al. (2005)	Q		
	1.3×10^{-1}		Saçan et al. (2005)	Q		
2-chlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_7\text{ClO}_2$ (PCDD-2) [39227-54-8] GIUGGRUEPVPVNR-UHFFFAOYSA-N	1.3×10^{-1}	6500	Wang and Wong (2002)	Q	535	
	1.7×10^{-1}		Govers and Krop (1998)	Q		
	8.6×10^{-1}		Duchowicz et al. (2020)	V		186
	7.9×10^{-2}		Mackay et al. (2006b)	V		
	7.9×10^{-2}		Govers and Krop (1998)	V		
	6.7×10^{-2}		Shiu et al. (1988)	V		
	1.1		Duchowicz et al. (2020)	Q		
	9.8×10^{-2}		Saçan et al. (2005)	Q		
1.3×10^{-1}	Wang and Wong (2002)	Q				
2.2×10^{-1}	Govers and Krop (1998)	Q				
1,2-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-12) [54536-18-4] DFGDMWHUCCHXIF-UHFFFAOYSA-N	2.8×10^{-1}	7100	Wang and Wong (2002)	Q	535	
	3.2×10^{-1}		Govers and Krop (1998)	Q		
1,3-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-13) [50585-39-2] AZYJYMAKTBXNSX-UHFFFAOYSA-N	2.2×10^{-1}	7100	Wang and Wong (2002)	Q	535	
	3.8×10^{-1}		Govers and Krop (1998)	Q		
1,4-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-14) [54536-19-5] MBMUPQZSDWVPQU-UHFFFAOYSA-N	2.4×10^{-1}	7100	Wang and Wong (2002)	Q	535	
	3.2×10^{-1}		Govers and Krop (1998)	Q		
1,6-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-16) [38178-38-0] MAWMBEVNJGEDAD-UHFFFAOYSA-N	2.5×10^{-1}	7100	Wang and Wong (2002)	Q	535	
	3.2×10^{-1}		Govers and Krop (1998)	Q		



Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,7-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-17) [82291-26-7] IJUWLAFFPPVRYGY-UHFFFAOYSA-N	2.6×10^{-1} 3.6×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,8-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-18) [82291-27-8] PLZYIHQBHROTFD-UHFFFAOYSA-N	2.6×10^{-1} 3.8×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,9-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-19) [82291-28-9] JZDVJXBKJDADAY-UHFFFAOYSA-N	2.6×10^{-1} 5.4×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
2,3-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-23) [29446-15-9] YCIYTXRZSDMRZ-UHFFFAOYSA-N	1.5×10^{-1} 1.5×10^{-1} 1.5×10^{-1} 1.5×10^{-1} 1.5×10^{-1} 8.5×10^{-1} 2.5×10^{-1} 2.6×10^{-1} 4.0×10^{-1}		Duchowicz et al. (2020) Mackay et al. (2006b) Saçan et al. (2005) Govers and Krop (1998) Shiu et al. (1988) Duchowicz et al. (2020) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	V V V V V Q Q Q Q	186 535
2,7-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-27) [33857-26-0] NBFMTHWVRBOVPE-UHFFFAOYSA-N	1.7×10^{-1} 1.2×10^{-1} 1.2×10^{-1} 2.4×10^{-1} 6.6×10^{-1} 7.3×10^{-1} 5.0 1.0×10^{-1} 2.6×10^{-1} 3.5×10^{-1} 1.7×10^{-1}		Santl et al. (1994) Mackay et al. (2006b) Govers and Krop (1998) Shiu et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998) Duchowicz et al. (2020)	M V V V Q Q Q Q Q Q Q ?	733 683 299 67 535 185, 21
2,8-dichlorodibenzo- <i>p</i> -dioxin $\text{C}_{12}\text{H}_6\text{Cl}_2\text{O}_2$ (PCDD-28) [38964-22-6] WMMWJCKBJUQDYLM-UHFFFAOYSA-N	4.7×10^{-1} 4.7×10^{-1} 4.7×10^{-1} 4.7×10^{-1} 1.2 1.7×10^{-1} 2.6×10^{-1} 4.4×10^{-1}		Duchowicz et al. (2020) Mackay et al. (2006b) Govers and Krop (1998) Shiu et al. (1988) Duchowicz et al. (2020) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	V V V V Q Q Q Q	186 535



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Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-123) [54536-17-3] SKMFBGZVNDVFR-UHFFFAOYSA-N	5.0×10^{-1} 5.6×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,4-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-124) [39227-58-2] HRVUKLBF RPWPXJ-UHFFFAOYSA-N	2.7×10^{-1} 2.9×10^{-1} 2.6×10^{-1} 2.6×10^{-1} 2.4×10^{-1} 9.1×10^{-1} 1.3 1.1×10^1 3.0×10^{-1} 4.4×10^{-1} 5.5×10^{-1} 2.7×10^{-1}		Santl et al. (1994) Mackay et al. (2006b) Govers and Krop (1998) Shiu et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998) Duchowicz et al. (2020) Fogg and Sangster (2003)	M V V V Q Q Q Q Q Q Q ? W	733 67 535 185, 21 734
1,2,6-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-126) [69760-96-9] XQBPVWBIUBCJO-UHFFFAOYSA-N	5.0×10^{-1} 5.1×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,7-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-127) [82291-30-3] TXJMXDWFPQSYEQ-UHFFFAOYSA-N	5.1×10^{-1} 4.6×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,8-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-128) [82291-31-4] QBEOCKSANJLBAE-UHFFFAOYSA-N	5.1×10^{-1} 6.0×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,9-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-129) [82291-32-5] DQLRDBDQLSIOIX-UHFFFAOYSA-N	5.2×10^{-1} 9.1×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,3,6-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-136) [82291-33-6] LNPVMVSAUXUGHH-UHFFFAOYSA-N	4.2×10^{-1} 6.3×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535



Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3,7-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-137) [67028-17-5] RPKWIXFZKMDPMH-UHFFFAOYSA-N	4.3×10^{-1} 6.8×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,3,8-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-138) [82306-61-4] FJAKCOBYQSEWMT-UHFFFAOYSA-N	4.3×10^{-1} 5.6×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,3,9-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-139) [82306-62-5] DGDADRUTFAIQQ-UHFFFAOYSA-N	4.4×10^{-1} 1.0		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,4,6-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-146) [82306-63-6] UTTYFTWIJLRXKB-UHFFFAOYSA-N	4.4×10^{-1} 9.3×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,4,7-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-147) [82306-64-7] NBWAQBGJBSYXHV-UHFFFAOYSA-N	4.5×10^{-1} 6.0×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,7,8-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-178) [82306-65-8] CAPCTZJHYADFNX-UHFFFAOYSA-N	4.9×10^{-1} 6.2×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
2,3,7-trichlorodibenzo- <i>p</i> -dioxin $C_{12}H_5Cl_3O_2$ (PCDD-237) [33857-28-2] ZSIZNEHVVRPFF-UHFFFAOYSA-N	4.9×10^{-1} 5.6×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,3,4-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1234) [30746-58-8] DJHHDMLTUOLVHY-UHFFFAOYSA-N	5.0×10^{-1} 2.7×10^{-1} 1.4 3.3×10^{-1} 2.7×10^{-1} 2.4×10^{-1} 7.0×10^{-1} 1.4		Santl et al. (1994) Mackay et al. (2006b) Mackay et al. (2006b) Govers and Krop (1998) Shiu et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008)	M V V V V Q Q Q	733 184



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Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^1		Modarresi et al. (2007)	Q	67
	6.3×10^{-1}		Saçan et al. (2005)	Q	
	8.7×10^{-1}		Wang and Wong (2002)	Q	535
	7.4×10^{-1}		Govers and Krop (1998)	Q	
	4.9×10^{-1}		Duchowicz et al. (2020)	?	185, 21
1,2,3,6-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1236) [71669-25-5] XEZBZSVTUSXISZ-UHFFFAOYSA-N	8.7×10^{-1}		Wang and Wong (2002)	Q	535
	8.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,7-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1237) [67028-18-6] SKGXVYFVQZVPEFP-UHFFFAOYSA-N	1.3		Mackay et al. (2006b)	V	
	1.7		Govers and Krop (1998)	V	
	1.3		Shiu et al. (1988)	V	
	2.4×10^{-1}		Keshavarz et al. (2022)	Q	
	5.7×10^{-1}		Duchowicz et al. (2020)	Q	184
	1.7		Hilal et al. (2008)	Q	
	2.1×10^1		Modarresi et al. (2007)	Q	67
	4.3×10^{-1}		Saçan et al. (2005)	Q	
	8.7×10^{-1}		Wang and Wong (2002)	Q	535
	6.8×10^{-1}		Govers and Krop (1998)	Q	
	1.3		Duchowicz et al. (2020)	?	185, 21
1,2,3,8-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1238) [53555-02-5] BXKLTNKYLCZOHF-UHFFFAOYSA-N	8.7×10^{-1}		Wang and Wong (2002)	Q	535
	7.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,9-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1239) [71669-26-6] CMVHZKSHSHQJHS-UHFFFAOYSA-N	9.1×10^{-1}		Wang and Wong (2002)	Q	535
	1.4		Govers and Krop (1998)	Q	
1,2,4,6-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1246) [71669-27-7] KQNBZUDHTCXCN-UHFFFAOYSA-N	8.1×10^{-1}		Wang and Wong (2002)	Q	535
	1.4		Govers and Krop (1998)	Q	



Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,7-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1247) [71669-28-8] SMPHQCMJQUBTFZ-UHFFFAOYSA-N	7.8×10^{-1} 7.1×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,4,8-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1248) [71669-29-9] XGIKODBWQSAEFQ-UHFFFAOYSA-N	7.8×10^{-1} 8.9×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,4,9-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1249) [71665-99-1] WDAHVJCSSYOALR-UHFFFAOYSA-N	8.1×10^{-1} 1.5		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,6,7-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1267) [40581-90-6] SAMLAWFHxzIRMP-UHFFFAOYSA-N	9.5×10^{-1} 5.8×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,6,8-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1268) [67323-56-2] YYUFYZDSYHKVDP-UHFFFAOYSA-N	8.1×10^{-1} 8.9×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,6,9-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1269) [40581-91-7] ZKMXKYXNLFLUCD-UHFFFAOYSA-N	8.7×10^{-1} 1.4		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,7,8-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1278) [34816-53-0] YDZCLBKUTXYYS-UHFFFAOYSA-N	7.8×10^{-1} 6.8×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535



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Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,7,9-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1279) [71669-23-3] QIKHBBZEUNSCAF-UHFFFAOYSA-N	8.3×10^{-1} 1.2		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,8,9-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1289) [62470-54-6] WELWFAGPAZKSBG-UHFFFAOYSA-N	9.8×10^{-1} 1.3		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,3,6,8-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1368) [33423-92-6] OTQFXRBLGNEOGH-UHFFFAOYSA-N	1.4×10^{-1} 1.4 1.4 1.2 2.9×10^{-1} 6.8×10^{-1} 8.7×10^{-1}		Webster et al. (1985) Govers and Krop (1998) Shiu et al. (1988) Hilal et al. (2008) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	M V V Q Q Q Q	535
1,3,6,9-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1369) [71669-24-4] QAUIRDJIUMMEP-UHFFFAOYSA-N	7.4×10^{-1} 1.7		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,3,7,8-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1378) [50585-46-1] VPTDIAYLYJBYPQG-UHFFFAOYSA-N	7.8×10^{-1} 7.9×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,3,7,9-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1379) [62470-53-5] JMGYHLJVDHUACM-UHFFFAOYSA-N	7.1×10^{-1} 1.7		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,4,6,9-tetrachlorodibenzo- <i>p</i> - dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1469) [40581-93-9] QTIIAIRUSSOHT-UHFFFAOYSA-N	7.9×10^{-1} 2.6		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535



Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4,7,8-tetrachlorodibenzo- <i>p</i> -dioxin $C_{12}H_4Cl_4O_2$ (PCDD-1478) [40581-94-0] FCRXUTCUWCJZJI-UHFFFAOYSA-N	8.1×10^{-1}		Wang and Wong (2002)	Q	535
	9.1×10^{-1}		Govers and Krop (1998)	Q	
2,3,7,8-tetrachlorodibenzo- <i>p</i> -dioxin $C_{12}H_4Cl_4O_2$ (PCDD-2378; TCDD) [1746-01-6] HGUFODBRKLSHSI-UHFFFAOYSA-N	2.0×10^{-1}		Duchowicz et al. (2020)	V	186
	2.0×10^{-1}		HSDB (2015)	V	
	3.0×10^{-1}		Mackay et al. (2006b)	V	
	3.0×10^{-1}		Govers and Krop (1998)	V	
	5.8×10^{-1}		McLachlan et al. (1990)	V	373
	6.1×10^{-1}		Shiu et al. (1988)	V	
	3.0×10^{-1}		Shiu et al. (1988)	V	
	9.7×10^{-2}		Shiu et al. (1988)	V	
	6.3×10^{-1}		Podoll et al. (1986)	V	
	4.7		Schroy et al. (1985)	V	
	2.6×10^{-4}	3600	Paasivirta et al. (1999)	T	
	4.1×10^{-1}		Duchowicz et al. (2020)	Q	
	3.3×10^{-1}		Saçan et al. (2005)	Q	
	8.9×10^{-1}		Wang and Wong (2002)	Q	535
	6.2×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,4,6-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12346) [67028-19-7] LNWDBNKKBLRAMH-UHFFFAOYSA-N	1.5		Wang and Wong (2002)	Q	535
	1.8		Govers and Krop (1998)	Q	
1,2,3,4,7-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12347) [39227-61-7] WRNGAZFESPEMCN-UHFFFAOYSA-N	3.8		Duchowicz et al. (2020)	V	186
	3.8		Mackay et al. (2006b)	V	
	4.5		Govers and Krop (1998)	V	
	3.8		Shiu et al. (1988)	V	
	4.5×10^{-1}		Duchowicz et al. (2020)	Q	
	7.0×10^{-1}		Saçan et al. (2005)	Q	
	1.4		Wang and Wong (2002)	Q	535
	8.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,3,6,7-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12367) [71925-15-0] RLGWUDUHOIWPNG-UHFFFAOYSA-N	1.5		Wang and Wong (2002)	Q	535
	7.8×10^{-1}		Govers and Krop (1998)	Q	



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Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,6,8-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12368) [71925-16-1] VKDGHBBUEIIEHL-UHFFFAOYSA-N	1.3 9.5×10^{-1}		Wang and Wong (2002) Govers and Krop (1998)	Q	535
1,2,3,6,9-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12369) [82291-34-7] NWKWRHRSKKNELND-UHFFFAOYSA-N	1.4 1.9		Wang and Wong (2002) Govers and Krop (1998)	Q	535
1,2,3,7,8-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12378) [40321-76-4] FSPZPQQWDODWAU-UHFFFAOYSA-N	5.2×10^{-5} 6.4×10^{-1} 1.5 6.8×10^{-1}	2500	Paasivirta et al. (1999) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	T Q Q Q	535
1,2,3,7,9-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12379) [71925-17-2] UAOYHTXYVWEPIB-UHFFFAOYSA-N	1.3 1.5		Wang and Wong (2002) Govers and Krop (1998)	Q	535
1,2,3,8,9-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12389) [71925-18-3] VUMZAVNIADYKFC-UHFFFAOYSA-N	1.5 1.4		Wang and Wong (2002) Govers and Krop (1998)	Q	535
1,2,4,6,7-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12467) [82291-35-8] SEKDDGLKEYEVQK-UHFFFAOYSA-N	1.4 1.4		Wang and Wong (2002) Govers and Krop (1998)	Q	535
1,2,4,6,8-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12468) [71998-76-0] SJJWALZHAWITMS-UHFFFAOYSA-N	1.2 2.1		Wang and Wong (2002) Govers and Krop (1998)	Q	535



Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,6,9-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12469) [82291-36-9] GNQVSAMSAKZLKE-UHFFFAOYSA-N	1.3		Wang and Wong (2002)	Q	535
	3.6		Govers and Krop (1998)	Q	
1,2,4,7,8-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12478) [58802-08-7] QUPLGUUISJOUJP-UHFFFAOYSA-N	1.3		Wang and Wong (2002)	Q	535
	9.1×10^{-1}		Govers and Krop (1998)	Q	
1,2,4,7,9-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12479) [82291-37-0] QLBBXWPVEFJZEC-UHFFFAOYSA-N	1.2		Wang and Wong (2002)	Q	535
	1.8		Govers and Krop (1998)	Q	
1,2,4,8,9-pentachlorodibenzo- <i>p</i> -dioxin $C_{12}H_3Cl_5O_2$ (PCDD-12489) [82291-38-1] KLLFLRKEOJCTGC-UHFFFAOYSA-N	1.4		Wang and Wong (2002)	Q	535
	1.9		Govers and Krop (1998)	Q	
1,2,3,4,6,7-hexachlorodibenzo- <i>p</i> -dioxin $C_{12}H_2Cl_6O_2$ (PCDD-123467) [58200-66-1] NLBQVWJHLWAFGJ-UHFFFAOYSA-N	2.5		Wang and Wong (2002)	Q	535
	1.5		Govers and Krop (1998)	Q	
1,2,3,4,6,8-hexachlorodibenzo- <i>p</i> -dioxin $C_{12}H_2Cl_6O_2$ (PCDD-123468) [58200-67-2] IMALTUQZEIFHJW-UHFFFAOYSA-N	2.2		Wang and Wong (2002)	Q	535
	1.8		Govers and Krop (1998)	Q	
1,2,3,4,6,9-hexachlorodibenzo- <i>p</i> -dioxin $C_{12}H_2Cl_6O_2$ (PCDD-123469) [58200-68-3] UDYXCMRDCOVQLG-UHFFFAOYSA-N	2.3		Wang and Wong (2002)	Q	535
	4.0		Govers and Krop (1998)	Q	



Rolf Sander: Compilation of Henry's law constants

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Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,3,4,7,8-hexachlorodibenzo- <i>p</i> -dioxin $C_{12}H_2Cl_6O_2$ (PCDD-123478) [39227-28-6] WCYYQNSQJHPVMG-UHFFFAOYSA-N	2.5 3.0 1.6 2.2×10^{-1} 1.2×10^{-4} 3.7×10^{-1}	2900 8800	Duchowicz et al. (2020) Mackay et al. (2006b) Govers and Krop (1998) Shiu et al. (1988) Paasivirta et al. (1999) Duchowicz et al. (2020) Kühne et al. (2005) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998) Kühne et al. (2005)	V V V V T Q Q Q Q Q ?	186 535
1,2,3,6,7,8-hexachlorodibenzo- <i>p</i> -dioxin $C_{12}H_2Cl_6O_2$ (PCDD-123678) [57653-85-7] YCLUIPQDHHPDJJ-UHFFFAOYSA-N	6.2×10^{-5} 5.2 7.4×10^{-1} 2.4 6.9×10^{-1}	2800	Paasivirta et al. (1999) HSDB (2015) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	T Q Q Q Q	 99 535
1,2,3,6,7,9-hexachlorodibenzo- <i>p</i> -dioxin $C_{12}H_2Cl_6O_2$ (PCDD-123679) [64461-98-9] BQOHWGKNRKCEFT-UHFFFAOYSA-N	2.2 1.7		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,3,6,8,9-hexachlorodibenzo- <i>p</i> -dioxin $C_{12}H_2Cl_6O_2$ (PCDD-123689) [58200-69-4] GZRQZUFVFRKBI-UHFFFAOYSA-N	2.2 1.8		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535
1,2,3,7,8,9-hexachlorodibenzo- <i>p</i> -dioxin $C_{12}H_2Cl_6O_2$ (PCDD-123789) [19408-74-3] LGIRBUBHIWTVCK-UHFFFAOYSA-N	2.5×10^{-4} 5.2 1.1 2.4 1.2	2700	Paasivirta et al. (1999) HSDB (2015) Saçan et al. (2005) Wang and Wong (2002) Govers and Krop (1998)	T Q Q Q Q	 99 535
1,2,4,6,7,9-hexachlorodibenzo- <i>p</i> -dioxin $C_{12}H_2Cl_6O_2$ (PCDD-124679) [39227-62-8] BSJDQMWAFFTDGD-UHFFFAOYSA-N	2.1 3.5		Wang and Wong (2002) Govers and Krop (1998)	Q Q	535



Table A6.7: Polychlorinated dibenzo-*p*-dioxins (PCDDs) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,6,8,9-hexachlorodibenzo- <i>p</i> -dioxin $C_{12}H_2Cl_6O_2$ (PCDD-124689) [58802-09-8] URELDHWUZUWPIU-UHFFFAOYSA-N	2.0		Wang and Wong (2002)	Q	535
	4.4		Govers and Krop (1998)	Q	
1,2,3,4,6,7,8-heptachlorodibenzo- <i>p</i> -dioxin $C_{12}HCl_7O_2$ (PCDD-1234678) [35822-46-9] WCLNVRQZUKYVAI-UHFFFAOYSA-N	5.6×10^{-2}		Duchowicz et al. (2020)	V	186
	7.5		Mackay et al. (2006b)	V	
	2.3		Govers and Krop (1998)	V	
	7.5		Shiu et al. (1988)	V	
	7.5×10^{-5}	2400	Paasivirta et al. (1999)	T	
	4.5×10^{-1}		Duchowicz et al. (2020)	Q	
	4.5×10^{-1}		HSDB (2015)	Q	545
	1.4		Saçan et al. (2005)	Q	
	3.6		Wang and Wong (2002)	Q	535
	1.2		Govers and Krop (1998)	Q	
1,2,3,4,6,7,9-heptachlorodibenzo- <i>p</i> -dioxin $C_{12}HCl_7O_2$ (PCDD-1234679) [58200-70-7] KTJJIBIRZGQFQZ-UHFFFAOYSA-N	3.4		Wang and Wong (2002)	Q	535
	3.2		Govers and Krop (1998)	Q	
octachlorodibenzo- <i>p</i> -dioxin $C_{12}Cl_8O_2$ (PCDD-12346789) [3268-87-9] FOIBFBMSLDGNHL-UHFFFAOYSA-N	1.5		Duchowicz et al. (2020)	V	186
	1.5		HSDB (2015)	V	
	1.5		Mackay et al. (2006b)	V	
	7.6×10^{-1}		Govers and Krop (1998)	V	
	1.5		Shiu et al. (1988)	V	
	1.1×10^{-5}	2300	Paasivirta et al. (1999)	T	
	3.8×10^{-1}		Duchowicz et al. (2020)	Q	
		9600	Kühne et al. (2005)	Q	
	1.7		Saçan et al. (2005)	Q	
	5.2		Wang and Wong (2002)	Q	535
	1.9		Govers and Krop (1998)	Q	
		9500	Kühne et al. (2005)	?	



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A6.8 Chlorocarbons with nitrogen (C, H, O, N, Cl)

Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyanogen chloride NCCl [506-77-4] QPJDMGCKMHUXFD-UHFFFAOYSA-N	1.2×10^{-2} 5.1×10^{-3}		Hilal et al. (2008) Yaws (1999)	Q ?	21
N,N-dichloromethylamine CH ₃ NCl ₂ [7651-91-4] DWEYPOWXNBAIDU-UHFFFAOYSA-N	3.3×10^{-3} 3.3×10^{-3} 3.3×10^{-3}	4300 4300 4300	Burkholder et al. (2019) Burkholder et al. (2015) Cimetiere and de Laat (2009)	L L M	
chloroacetonitrile C ₂ H ₂ ClN [107-14-2] RENMDAKOXSCIGH-UHFFFAOYSA-N	9.1×10^{-1}	4600 5400	HSDB (2015) Kühne et al. (2005) Kühne et al. (2005)	Q Q ?	447
dichloroacetonitrile C ₂ HCl ₂ N [3018-12-0] STZZWJCGRKRXEFF-UHFFFAOYSA-N	2.6		HSDB (2015)	Q	99
trichloroacetonitrile C ₂ Cl ₃ N [545-06-2] DRUIESSIVYOMK-UHFFFAOYSA-N	7.6 7.3 1.9×10^{-2} 3.9×10^{-3} 1.0×10^{-2}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
tetramethylammonium chloride C ₄ H ₁₂ ClN [75-57-0] OKIZCWYLBKLSU-UHFFFAOYSA-M	2.3×10^6		HSDB (2015)	Q	99
metformin hydrochloride C ₄ H ₁₂ ClN ₅ [1115-70-4] OETHQSJEHLVLGH-UHFFFAOYSA-N	1.3×10^{10}		HSDB (2015)	Q	99
bis(2-chloroethyl)methylamine C ₅ H ₁₁ Cl ₂ N [51-75-2] HAWPXGHAZFHAD-UHFFFAOYSA-N	3.4 8.5×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
chlormequat chloride C ₅ H ₁₃ Cl ₂ N [999-81-5] OLQFELZRGYJRAZ-UHFFFAOYSA-N	$>3.2 \times 10^9$		Maniere et al. (2011)	?	241, 165



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tris(2-chloroethyl)amine $C_6H_{12}Cl_3N$ [555-77-1] FDAYLTPAFBGXAB-UHFFFAOYSA-N	5.3×10^{-1} 5.3×10^{-1} 7.3×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
bis(2-chloroethyl)ethylamine $C_6H_{13}Cl_2N$ (ethylbis(2-chloroethyl)amine) [538-07-8] UQZPGHOJMQTOHB-UHFFFAOYSA-N	2.8×10^{-2} 2.9×10^{-2} 3.0×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
cetrimonium chloride $C_{19}H_{42}ClN$ (trimethylhexadecylammonium chloride) [112-02-7] WOWHHFRSBJGXCM-UHFFFAOYSA-M	3.4×10^4		HSDB (2015)	Q	99
dimethyldioctadecylammonium chloride $C_{38}H_{80}ClN$ [107-64-2] REZZEXDLIUJMMS-UHFFFAOYSA-M	1.5×10^2		HSDB (2015)	Q	99
1-amino-2-chlorobenzene C_6H_6ClN (<i>o</i> -chloroaniline) [95-51-2] AKCRQHGOIJBRMN-UHFFFAOYSA-N	1.9 7.8×10^{-1} 1.8 7.6×10^{-1}	7900	Brockbank (2013) Chao et al. (2017) Duchowicz et al. (2020) Chao et al. (2017) HSDB (2015) Mackay et al. (2006d) Lide and Frederikse (1995) Mackay et al. (1995) Meylan and Howard (1991) Abraham et al. (1994a) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Meylan and Howard (1991) Yaws (1999)	L M V V V V V V R Q Q Q Q Q Q Q Q ?	1, 735 186 67 230, 231 21, 12
1-amino-3-chlorobenzene C_6H_6ClN (<i>m</i> -chloroaniline) [108-42-9] PNPCRKVUWYDDST-UHFFFAOYSA-N	4.7 9.8 2.7 4.5 4.5 7.5 7.5		Chao et al. (2017) Altschuh et al. (1999) Chao et al. (2017) Mackay et al. (2006d) Mackay et al. (1995) Abraham et al. (1994a) Yaws (2003)	M M V V V R X	237, 12



Rolf Sander: Compilation of Henry's law constants

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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	9.1		Keshavarz et al. (2022)	Q	
	8.8		Duchowicz et al. (2020)	Q	
	4.9		Gharagheizi et al. (2010)	Q	246
	7.7		Hilal et al. (2008)	Q	
	3.1×10^1		Modarresi et al. (2007)	Q	67
	4.6		Yao et al. (2002)	Q	229
	4.1		English and Carroll (2001)	Q	230, 274
	1.5×10^1		Katritzky et al. (1998)	Q	
	5.3		Nirmalakhandan et al. (1997)	Q	
	9.9		Duchowicz et al. (2020)	?	185, 21
	4.9		Yaws (1999)	?	21, 12
1-amino-4-chlorobenzene C_6H_6ClN (<i>p</i> -chloroaniline) [106-47-8] QSNCSYFYFVORTR-UHFFFAOYSA-N	8.5		Duchowicz et al. (2020)	V	186
	3.2		HSDB (2015)	V	
	1.0×10^1		Mackay et al. (2006d)	V	
	9.1×10^{-1}		Lide and Frederikse (1995)	V	
	1.0×10^1		Mackay et al. (1995)	V	
	2.5×10^1		Meylan and Howard (1991)	V	
	8.6		Abraham et al. (1994a)	R	
	3.4		Yaws (2003)	X	237, 12
	9.2×10^{-1}		Howard (1989)	X	412
	8.3		Duchowicz et al. (2020)	Q	
	4.9		Gharagheizi et al. (2010)	Q	246
	8.6		Hilal et al. (2008)	Q	
	1.6×10^1		Modarresi et al. (2007)	Q	67
	8.8		Yaffe et al. (2003)	Q	248, 249
	5.4		English and Carroll (2001)	Q	230, 260
	1.5×10^1		Katritzky et al. (1998)	Q	
	5.3		Nirmalakhandan et al. (1997)	Q	
	7.0		Meylan and Howard (1991)	Q	
2,3-dichlorobenzeneamine $C_6H_5Cl_2N$ (2,3-dichloroaniline) [608-27-5] BRPSAOUFIJSKOT-UHFFFAOYSA-N	6.2		HSDB (2015)	Q	99
2,4-dichlorobenzeneamine $C_6H_5Cl_2N$ (2,4-dichloroaniline) [554-00-7] KQCMTOWTPBNWDB-UHFFFAOYSA-N	6.2		HSDB (2015)	Q	99
3,4-dichlorobenzeneamine $C_6H_5Cl_2N$ (3,4-dichloroaniline) [95-76-1] SDYWXFYBZPNOFX-UHFFFAOYSA-N	6.8×10^{-1}		Duchowicz et al. (2020)	V	186
	6.8×10^{-1}		HSDB (2015)	V	
	4.4×10^{-1}		Mackay et al. (2006d)	V	
	4.4×10^{-1}		Mackay et al. (1995)	V	
	1.8×10^1		Duchowicz et al. (2020)	Q	
	2.0×10^1		Katritzky et al. (1998)	Q	



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,5-dichlorobenzeneamine $C_6H_5Cl_2N$ (3,5-dichloroaniline) [626-43-7] UQRLKWGPVNVHT-UHFFFAOYSA-N	6.2		HSDB (2015)	Q	99
2,5-dichlorobenzeneamine $C_6H_5Cl_2N$ (2,5-dichloroaniline) [95-82-9] AVYGCQXNNJPXSS-UHFFFAOYSA-N	6.2 9.5 2.6 2.7 1.9×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
2,4,5-trichlorobenzeneamine $C_6H_4Cl_3N$ [636-30-6] GUMCAKKNKYFEB-UHFFFAOYSA-N	1.3×10^1 2.4 9.5 1.8×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2,4,6-trichlorobenzeneamine $C_6H_4Cl_3N$ [634-93-5] NATVSFWWYVJTAZ-UHFFFAOYSA-N	7.4 1.3×10^1 6.2×10^{-1} 4.1×10^{-1} 1.5×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	 287, 288 287, 289 287, 290 287, 291
2,3,4,5,6-pentachloroaniline $C_6H_2Cl_5N$ [527-20-8] KHCZSJXTDDHLGJ-UHFFFAOYSA-N	2.3×10^1		HSDB (2015)	Q	99
2,6-dichlorobenzene nitrile $C_6H_3Cl_2CN$ (dichlobenil) [1194-65-6] YOYAIZYFCNQIRF-UHFFFAOYSA-N	4.8×10^{-1} 9.8×10^{-1} 9.9×10^{-1} 1.5 1.4 1.5 1.4 1.5×10^{-2} 3.5×10^{-1} 1.5×10^{-2} 3.6×10^{-1}	5400 6000 5500	Schoene and Steinhanses (1985) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Schüürmann (2000) Suntio et al. (1988) Burkhard and Guth (1981) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	M V V V V V V X Q Q Q Q Q Q ?	 186 12 567 568, 569 67
(2,4,6-trichlorophenyl)hydrazine $C_6H_5Cl_3N_2$ [5329-12-4] MULHANRBCQBHII-UHFFFAOYSA-N	3.1×10^3 3.7×10^1 1.1×10^1 5.4×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-chlorobenzonitrile C_7H_4ClN [623-03-0] GJNGXPDXRVXSEH-UHFFFAOYSA-N	2.5×10^{-1} 3.8×10^{-1} 1.6 4.5×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3-chloro-2-methylbenzenamine C_7H_8ClN [87-60-5] ZUVPLKVDZNDZCM-UHFFFAOYSA-N	6.3		HSDB (2015)	Q	99
3-chloro-4-methylbenzenamine C_7H_8ClN [95-74-9] RQKFYFNZSHWXAW-UHFFFAOYSA-N	4.9		HSDB (2015)	Q	99
4-chloro-2-methylbenzenamine C_7H_8ClN [95-69-2] CXNVOWPRHWWCQR-UHFFFAOYSA-N	4.9		HSDB (2015)	Q	99
5-chloro-2-methylbenzenamine C_7H_8ClN [95-79-4] WRZOMWDJOLIVQP-UHFFFAOYSA-N	6.3		HSDB (2015)	Q	545
2,4,5,6-tetrachloro-1,3-dicyanobenzene $C_8Cl_4N_2$ (chlorothalonil) [1897-45-6] CRQQGFGUEAVUIL-UHFFFAOYSA-N	5.0×10^1 1.7×10^{-2} 3.9×10^1 4.5×10^1 4.1×10^{-1} 1.8×10^1 6.5×10^1 1.5 6.9×10^1 2.7×10^1 5.8 2.4×10^1 6.5×10^1 4.9		Kawamoto and Urano (1989) Mackay et al. (2006d) MacBean (2012b) Armbrust (2000) Keshavarz et al. (2022) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Meylan and Howard (1991) Duchowicz et al. (2020)	M V X C Q Q Q Q Q Q Q Q Q Q ?	350 287, 288 287, 289 287, 290 287, 291 67 185, 21
2-chlorobenzalmalononitrile $C_{10}H_5ClN_2$ [2698-41-1] JUNZLAFIPKXIG-UHFFFAOYSA-N	9.9×10^2		HSDB (2015)	Q	99



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzyltrimethylammonium chloride $C_{10}H_{16}ClN$ [56-93-9] KXHPPCXNWTUNSB-UHFFFAOYSA-M	2.9×10^8		HSDB (2015)	Q	99
chlordimeform $C_{10}H_{13}ClN_2$ [6164-98-3] STUSTWKEFDQFFZ-UHFFFAOYSA-N	2.9×10^1 2.6×10^1		HSDB (2015) MacBean (2012a)	V ?	12
4,4'-dichloroazobenzene $C_{12}H_8Cl_2N_2$ [1602-00-2] XHQXCFUPJSGOE-UHFFFAOYSA-N	1.2		HSDB (2015)	Q	99
bis(3,4-dichlorophenyl)diazene $C_{12}H_6Cl_4N_2$ (3,4,3',4'-tetrachloroazobenzene) [14047-09-7] SOBGIMQKWUEPY-UHFFFAOYSA-N	2.2		HSDB (2015)	Q	447
2-(p-chlorophenyl)-3- methylbutyronitrile $C_{11}H_{12}ClN$ [2012-81-9] RBGSZIRWNWQDOK-UHFFFAOYSA-N	2.3 4.4 3.9 2.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,3'-dichloro-(1,1'-biphenyl)-4,4'- diamine $C_{12}H_{10}Cl_2N_2$ (3,3'-dichlorobenzidine) [91-94-1] HUWXDEQWWKGRV-UHFFFAOYSA-N	2.0×10^2 2.0×10^2 1.2×10^1 3.5×10^5		Mackay et al. (2006d) Mackay et al. (1995) Mackay et al. (1995) HSDB (2015)	V V C Q	99
4-chloroazobenzene $C_{12}H_9ClN_2$ [4340-77-6] NJFDMENHTAYHMA-UHFFFAOYSA-N	7.4 2.2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
4,4'-methylenebis(2- chlorobenzeneamine) $C_{13}H_{12}Cl_2N_2$ [101-14-4] IBOFVQJTBBUKMU-UHFFFAOYSA-N	9.0×10^5 3.0×10^5 3.4×10^4 2.9×10^4 9.7×10^5		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
clofentazine $C_{14}H_8N_4Cl_2$ [74115-24-5] UXADOQPNKNTIHB-UHFFFAOYSA-N	2.5×10^4 1.7×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
aniline, 4,4'-(imidocarbonyl)bis- (N,N-dimethyl)-, hydrochloride $C_{17}H_{22}ClN_3$ (auramine hydrochloride) [2465-27-2] KSCQDDRPFHTRL-UHFFFAOYSA-N	3.5×10^{10}		HSDB (2015)	Q	99
amitriptyline hydrochloride $C_{20}H_{24}ClN$ [549-18-8] KFYRPLNVJVHGT-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	99
chlorhexidine $C_{22}H_{30}Cl_2N_{10}$ [55-56-1] GHXZTYHSJHQHIJ-UHFFFAOYSA-N	9.0×10^{24}		HSDB (2015)	Q	99
malachite green $C_{23}H_{25}ClN_2$ [569-64-2] FDZZRQASAIRJF-UHFFFAOYSA-M	5.2×10^8		HSDB (2015)	Q	99
tetradecylbenzylidimethyl ammonium chloride $C_{23}H_{42}ClN$ [139-08-2] OCBHHZMJRVXXQK-UHFFFAOYSA-M	7.6×10^5		HSDB (2015)	Q	99
stearyldimethylbenzylammonium chloride $C_{27}H_{50}ClN$ (benzylidimethylstearylammonium chloride) [122-19-0] SFVFIFLLYFPGHH-UHFFFAOYSA-M	2.3×10^5		HSDB (2015)	Q	99
2,4,6-trichloro-1,3,5-triazine $C_3Cl_3N_3$ [108-77-0] MGNCLNQXLYJVJD-UHFFFAOYSA-N	2.0×10^1 2.0×10^1 2.4×10^1 3.1×10^{-1} 7.9		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
2-chloropyridine C_5H_4ClN [109-09-1] OKDGRDCXVWSXDC-UHFFFAOYSA-N	7.4×10^{-1} 6.1×10^{-1} 1.9×10^{-1} 5.8×10^{-1} 1.1 6.7×10^{-1}	5900 6100	Arnett and Chawla (1979) Duchowicz et al. (2020) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Yaffe et al. (2003)	M V Q Q Q Q	559 186 67 248, 249



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.9×10^{-1}		English and Carroll (2001)	Q	230, 274
	8.0×10^{-2}		Katritzky et al. (1998)	Q	
	1.5×10^1		Nirmalakhandan et al. (1997)	Q	
		6600	Kühne et al. (2005)	?	
3-chloropyridine C_5H_4ClN [626-60-8] PWRBGCZZORRPXAB-UHFFFAOYSA-N	3.5×10^{-1}	5600	Arnett and Chawla (1979)	M	559
	4.1×10^{-1}		Hilal et al. (2008)	Q	
	8.3×10^{-1}		Modarresi et al. (2007)	Q	67
	3.7×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	2.9×10^{-1}		English and Carroll (2001)	Q	230, 231
	1.5×10^1		Nirmalakhandan et al. (1997)	Q	
2,3,4,6-tetrachloropyridine C_5HCl_4N [14121-36-9] FZFNDUTVMQOPCT-UHFFFAOYSA-N	1.2×10^{-3}		Zhang et al. (2010)	Q	287, 288
	1.1×10^{-1}		Zhang et al. (2010)	Q	287, 289
	7.9×10^{-2}		Zhang et al. (2010)	Q	287, 290
	2.9×10^{-1}		Zhang et al. (2010)	Q	287, 291
2,3,5,6-tetrachloropyridine C_5HCl_4N [2402-79-1] FATBKZJZAHWCSL-UHFFFAOYSA-N	1.2×10^{-3}		HSDB (2015)	Q	99
	1.2×10^{-3}		Zhang et al. (2010)	Q	287, 288
	3.4×10^{-2}		Zhang et al. (2010)	Q	287, 289
	8.4×10^{-2}		Zhang et al. (2010)	Q	287, 290
	1.9×10^{-1}		Zhang et al. (2010)	Q	287, 291
pentachloropyridine C_5Cl_5N [2176-62-7] DNDPLEAVNVOOQZ-UHFFFAOYSA-N	1.6×10^{-3}		HSDB (2015)	Q	99
	1.6×10^{-3}		Zhang et al. (2010)	Q	287, 288
	1.3×10^{-2}		Zhang et al. (2010)	Q	287, 289
	2.5×10^{-2}		Zhang et al. (2010)	Q	287, 290
	1.8×10^{-1}		Zhang et al. (2010)	Q	287, 291
desethylatrazine $C_6H_{10}ClN_5$ [6190-65-4] DFWFIQKMSFGDCQ-UHFFFAOYSA-N	6.6×10^3		HSDB (2015)	Q	99
2-chloro-6-(trichloromethyl)- pyridine $C_6H_3Cl_4N$ [1929-82-4] DCUJWWUNKIUPH-UHFFFAOYSA-N	6.2×10^{-1}		Zhang et al. (2010)	Q	287, 288
	1.8		Zhang et al. (2010)	Q	287, 289
	2.7		Zhang et al. (2010)	Q	287, 290
	4.2×10^{-1}		Zhang et al. (2010)	Q	287, 291
	1.8		Hilal et al. (2008)	Q	
	5.9×10^{-1}		Modarresi et al. (2007)	Q	67
2,3,4,5-tetrachloro-6- methylpyridine $C_6H_3Cl_4N$ [10469-02-0] OZLPEWBQZDDFCQ-UHFFFAOYSA-N	6.7×10^{-2}		Zhang et al. (2010)	Q	287, 288
	3.6×10^{-2}		Zhang et al. (2010)	Q	287, 289
	3.6×10^{-2}		Zhang et al. (2010)	Q	287, 290
	1.1×10^{-1}		Zhang et al. (2010)	Q	287, 291



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-chloro-5-(trichloromethyl)pyridine $C_6H_3Cl_4N$ [69045-78-9] VLJIVLGVKMTBOD-UHFFFAOYSA-N	6.2×10^{-1} 2.2 7.7×10^{-1} 4.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2,3-dichloro-5-(trichloromethyl)pyridine $C_6H_2Cl_5N$ [69045-83-6] XVBWQGSXLITICX-UHFFFAOYSA-N	8.4×10^{-1} 4.1×10^{-1} 1.8×10^{-1} 6.1×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2,5-dichloro-6-(trichloromethyl)pyridine $C_6H_2Cl_5N$ [1817-13-6] MWFQRQNUHFSUNY-UHFFFAOYSA-N	8.4×10^{-1} 1.2 9.9×10^{-1} 5.7×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,4,5-trichloro-2-(trichloromethyl)pyridine C_6HCl_6N [1201-30-5] YWSFDYUMBEQNZ-UHFFFAOYSA-N	7.2×10^1 9.0×10^{-2} 1.0×10^{-1} 4.1×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2,3,4,5-tetrachloro-6-(trichloromethyl)pyridine C_6Cl_7N [1134-04-9] YMBFWRZKTZICHS-UHFFFAOYSA-N	1.5 6.7×10^{-2} 7.0×10^{-2} 2.3×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,4,5,6-tetrachloropyridine-2-carbonitrile $C_6Cl_4N_2$ [17824-83-8] KFPBGJYBKSIQAI-UHFFFAOYSA-N	7.5 1.7 8.0×10^{-1} 1.5×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4-amino-3,5,6-trichloropyridine-2-carbonitrile $C_6H_2Cl_3N_3$ [14143-60-3] AZYQQVGBVUCIEO-UHFFFAOYSA-N	1.6×10^4 1.1×10^3 9.0×10^3 1.0×10^5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
crimidine $C_7H_{10}ClN_3$ [535-89-7] HJIUPFPIEBPYIE-UHFFFAOYSA-N	2.6×10^2		HSDB (2015)	Q	99



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
simazine $C_7H_{12}ClN_5$ [122-34-9] ODCWYMRDDJXKW-UHFFFAOYSA-N	1.0×10^4 2.9×10^3 2.9×10^3 1.6×10^4 2.9×10^1 6.2×10^7 1.1×10^4 9.1×10^1 1.7×10^3 7.2×10^3 5.5×10^5 4.0×10^6		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Glotfelty et al. (1987) Barcelo and Hennion (1997) Delgado and Alderete (2003) Delgado and Alderete (2003) Goodarzi et al. (2010) Hilal et al. (2008) Abraham et al. (2007) Delgado and Alderete (2003) Delgado and Alderete (2003)	V V V V X C C Q Q Q Q Q	12 567 568
desethylterbutylazine $C_7H_{12}ClN_5$ [30125-63-4] LMKQNTMFZLJJDV-UHFFFAOYSA-N	2.2×10^3		Otto et al. (1997)	V	
mepiquat chloride $C_7H_{16}NCl$ [24307-26-4] VHOVSQVSAQAQANU-UHFFFAOYSA-M	3.3×10^{11}		Maniere et al. (2011)	?	241, 165
atrazine $C_8H_{14}ClN_5$ [1912-24-9] MXWJVTOOROXGIU-UHFFFAOYSA-N	1.9×10^3 3.5×10^3 1.0×10^3 3.3×10^3 3.4×10^3 2.0×10^3 3.4×10^1 8.3×10^6 4.3×10^3 7.2×10^1 7.2×10^2 5.1×10^3 2.8×10^4 4.0×10^5		Muir et al. (2004) Mackay et al. (2006d) Siebers et al. (1994) Riederer (1990) Suntio et al. (1988) Glotfelty et al. (1987) Barcelo and Hennion (1997) Delgado and Alderete (2003) Delgado and Alderete (2003) Goodarzi et al. (2010) Hilal et al. (2008) Abraham et al. (2007) Delgado and Alderete (2003) Delgado and Alderete (2003)	L V V V V V X C C Q Q Q Q Q	367 12 567 568
clonidine $C_9H_9Cl_2N_3$ [4205-90-7] GJSURZIOUXGAL-UHFFFAOYSA-N	6.6×10^5		HSDB (2015)	Q	99
cyprazine $C_9H_{12}ClN_5$ [22936-86-3] OOHIAOSLOGDBCE-UHFFFAOYSA-N	7.6×10^3 7.7×10^4 3.8×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	186 99



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propazine $\text{C}_9\text{H}_{16}\text{ClN}_5$ [139-40-2] WJNRPIHGGKWK-UHFFFAOYSA-N	2.1×10^3		HSDB (2015)	V	
			Mackay et al. (2006d)	V	558
	1.0×10^4		Suntio et al. (1988)	V	12
	9.9×10^1		Barcelo and Hennion (1997)	X	567
	1.7×10^2		Goodarzi et al. (2010)	Q	568, 571
	3.6×10^2		Hilal et al. (2008)	Q	
	4.0×10^3		Abraham et al. (2007)	Q	
sebuthylazine $\text{C}_9\text{H}_{16}\text{ClN}_5$ [7286-69-3] BZRUVKZGXNSXMB-UHFFFAOYSA-N	8.4×10^2		Ebert et al. (2023)	?	318
terbuthylazine $\text{C}_9\text{H}_{16}\text{ClN}_5$ [5915-41-3] FZXISNSWEXTPMF-UHFFFAOYSA-N	4.3×10^2		HSDB (2015)	V	
	2.5×10^2		Mackay et al. (2006d)	V	
	2.5×10^2		Otto et al. (1997)	V	
	2.4×10^2		Siebers et al. (1994)	V	
	2.9×10^2		Hilal et al. (2008)	Q	
	9.0×10^2		Abraham et al. (2007)	Q	
	4.3×10^2		Maniere et al. (2011)	?	241, 165
cyanazine $\text{C}_9\text{H}_{13}\text{ClN}_6$ [21725-46-2] MZZBPDKVEVLF-UHFFFAOYSA-N	3.3×10^6		Mackay et al. (2006d)	V	
	3.3×10^4		Barcelo and Hennion (1997)	X	567
	8.3×10^9		Delgado and Alderete (2003)	C	
	3.9×10^6		Delgado and Alderete (2003)	C	
	9.6×10^1		Goodarzi et al. (2010)	Q	568
	6.4×10^5		Hilal et al. (2008)	Q	
	2.0×10^6		Abraham et al. (2007)	Q	
	4.5×10^6		Delgado and Alderete (2003)	Q	
	1.0×10^9		Delgado and Alderete (2003)	Q	
anilazine $\text{C}_9\text{H}_5\text{Cl}_3\text{N}_4$ [101-05-3] IMHBYKMAHXWHRP-UHFFFAOYSA-N	3.5×10^4		HSDB (2015)	V	
	3.5×10^4		Mackay et al. (2006d)	V	
	2.9×10^1		Zhang et al. (2010)	Q	287, 288
	1.2×10^3		Zhang et al. (2010)	Q	287, 289
	9.5		Zhang et al. (2010)	Q	287, 290
	5.4×10^3		Zhang et al. (2010)	Q	287, 291
	3.5×10^4		MacBean (2012a)	?	
4,7-dichloroquinoline $\text{C}_9\text{H}_5\text{Cl}_2\text{N}$ [86-98-6] HXEWMTXDBOQQKO-UHFFFAOYSA-N	2.6×10^1		Zhang et al. (2010)	Q	287, 288
	6.9		Zhang et al. (2010)	Q	287, 289
	1.5		Zhang et al. (2010)	Q	287, 290
	7.0		Zhang et al. (2010)	Q	287, 291
fencloirim $\text{C}_{10}\text{H}_6\text{Cl}_2\text{N}_2$ [3740-92-9] NRFQZTCQAYEXEE-UHFFFAOYSA-N	5.6×10^{-1}		Ebert et al. (2023)	?	318



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
acetamidrid $C_{10}H_{11}ClN_4$ [135410-20-7] WCXDHFDTOYPNIE-UHFFFAOYSA-N	1.4×10^2 $> 1.9 \times 10^7$		HSDB (2015) Maniere et al. (2011)	Q ?	99 165
pyrimethamine $C_{12}H_{13}ClN_4$ [58-14-0] WKSQUYGYAYLPV-UHFFFAOYSA-N	9.1×10^4		HSDB (2015)	Q	447
penconazole $C_{13}H_{15}Cl_2N_3$ [66246-88-6] WKBZPYKAUNRMKP-UHFFFAOYSA-N	6.9×10^2 1.2×10^3 2.1 1.5×10^3		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 12, 165
myclobutanil $C_{15}H_{17}ClN_4$ [88671-89-0] HZJKXKUJVSEEFU-UHFFFAOYSA-N	2.3×10^3 2.3×10^3 2.2×10^2 2.3×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 12, 165
2-chloro-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine $C_{19}H_{18}N_3Cl$ [1237-53-2] LVWOBZPDFCTAOU-UHFFFAOYSA-N	1.2×10^3 1.3×10^3 7.0 1.2×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
fenbuconazole $C_{19}H_{17}ClN_4$ [114369-43-6] RQDJADAKIFFEKQ-UHFFFAOYSA-N	3.3×10^4		Maniere et al. (2011)	?	241, 165
trichloronitromethane CCl_3NO_2 (chloropicrin) [76-06-2] LFHISGNCFUNFFM-UHFFFAOYSA-N	4.7×10^{-3} 4.7×10^{-3} 4.7×10^{-3} 4.7×10^{-3} 4.0×10^{-3} 4.8×10^{-3}		Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Worthington and Wade (2007) Welke et al. (1998) Kawamoto and Urano (1989) Mackay et al. (2006d) Suntio et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998) Duchowicz et al. (2020)	L L L M M M V V Q Q Q Q Q Q Q ?	 558 12 184 67 248, 249 185, 21



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phosgene oxime CHCl ₂ NO [1794-86-1] JIRJHEXNDQBKRZ-UHFFFAOYSA-N	1.8×10^1		HSDB (2015)	Q	99
1,1-dichloro-1-nitroethane C ₂ H ₃ Cl ₂ NO ₂ [594-72-9] OQOGEOLRYAOSKO-UHFFFAOYSA-N	7.7×10^{-3} 1.3×10^{-1} 7.7×10^{-3} 2.0×10^{-2} 1.1×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q	186 99 67
2-chloroacetamide C ₂ H ₄ ClNO [79-07-2] VXIVSQZSERGHQP-UHFFFAOYSA-N	2.5×10^3		HSDB (2015)	Q	99
MCM:CCL3PAN C ₂ NO ₅ Cl ₃ LLOMRHYBAIQGH-UHFFFAOYSA-N	1.0×10^1 7.3×10^{-1} 3.6×10^{-5}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CCLNO3COOH C ₂ H ₄ NO ₅ Cl GVGGZHVOOFUNFY-UHFFFAOYSA-N	2.1×10^3 2.6×10^3 4.2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CHCL2PAN C ₂ HNO ₅ Cl ₂ BORKLXDOXKHVRO-UHFFFAOYSA-N	2.2×10^1 1.6×10^1 4.9×10^{-4}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CLETPAN C ₂ H ₂ NO ₅ Cl IEQWXJNETVFAEB-UHFFFAOYSA-N	9.8 3.3×10^1 4.2×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CNO3CLOOH C ₂ H ₄ NO ₅ Cl FBIXZLOOAAICML-UHFFFAOYSA-N	2.1×10^3 3.0×10^3 8.3		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CCLNO3COH C ₂ H ₄ NO ₄ Cl PMLDKFZZOPGPNK-UHFFFAOYSA-N	1.8×10^2 7.1×10^2 7.8×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CL2OHPAN C ₂ HNO ₆ Cl ₂ YJZUCQDIDXVNP-UHFFFAOYSA-N	3.8×10^3 1.5×10^2 1.4×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CLOHPAN C ₂ H ₂ NO ₆ Cl ZNYKQWDXYHNGTP-UHFFFAOYSA-N	4.2×10^3 1.0×10^4 8.9×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1-chloro-1-nitroethane C ₂ H ₄ ClNO ₂ [598-92-5] LPIWIOBGUAPNQW-UHFFFAOYSA-N	2.0×10^{-2}		Ebert et al. (2023)	?	316



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
MCM:CNO3CLOH $\text{C}_2\text{H}_4\text{NO}_4\text{Cl}$ OUFVLIWCNZOATK-UHFFFAOYSA-N	2.8×10^2 1.4×10^3 1.4×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CCLCONO3 $\text{C}_2\text{H}_2\text{NO}_4\text{Cl}$ XDEFPIDZLAIVCM-UHFFFAOYSA-N	2.6×10^1 1.6×10^2 2.5×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CNO3OCL $\text{C}_2\text{H}_2\text{NO}_4\text{Cl}$ ODQFUUDIIEKDDJ-UHFFFAOYSA-N	1.7×10^1 1.1×10^1 4.4×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
symclosene $\text{C}_3\text{Cl}_3\text{N}_3\text{O}_3$ (trichloroisocyanuric acid) [87-90-1] YRIZYWQGELRKNT-UHFFFAOYSA-N	1.6×10^5		HSDB (2015)	Q	99
MCM:CL12PAN $\text{C}_3\text{H}_3\text{NO}_5\text{Cl}_2$ MSMFQRZPTBDNBF-UHFFFAOYSA-N	6.2×10^1 4.9×10^1 2.5×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
1-chloro-1-nitropropane $\text{C}_3\text{H}_6\text{ClNO}_2$ [600-25-9] XEKUXTMJEFPWCG-UHFFFAOYSA-N	4.6×10^{-2}		Ebert et al. (2023)	?	316
1,3-dichloro-5,5-dimethylhydantoin $\text{C}_5\text{H}_6\text{Cl}_2\text{N}_2\text{O}_2$ [118-52-5] KEQGZUUPPQEDPF-UHFFFAOYSA-N	9.9		HSDB (2015)	Q	99
carmustine $\text{C}_5\text{H}_9\text{Cl}_2\text{N}_3\text{O}_2$ [154-93-8] DLGOEMSEDOSKAD-UHFFFAOYSA-N	2.1×10^5		HSDB (2015)	Q	99
2-chloro-N,N-di-2-propenylacetamide $\text{C}_8\text{H}_{12}\text{ClNO}$ [93-71-0] MDBGGTQNNUOQRC-UHFFFAOYSA-N	9.2×10^1 9.2×10^1 9.5 9.7×10^1 1.9×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	186 67
2,2-dichloro-N,N-di-2-propenylacetamide $\text{C}_8\text{H}_{11}\text{Cl}_2\text{NO}$ (dichlormid) [37764-25-3] YRMLFORXOOJDR-UHFFFAOYSA-N	3.1×10^1 2.7×10^1		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	 67



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.7×10^{-1}		Modarresi et al. (2007)	Q	67
	7.3×10^{-1}		Duchowicz et al. (2020)	?	185, 21
	3.4×10^{-1}		Yaws (1999)	?	21, 12
4-chloronitrobenzene $\text{C}_6\text{H}_4\text{ClNO}_2$ (<i>p</i> -chloronitrobenzene) [100-00-5] CZGCEKJOLUNIFY-UHFFFAOYSA-N	6.4×10^{-1}	5900	Brockbank (2013)	L	1
	1.4		Chao et al. (2017)	M	
	2.0		Altschuh et al. (1999)	M	
	1.8×10^{-1}		Hellmann (1987)	M	87
	2.8×10^{-1}		Lide and Frederikse (1995)	V	
	1.1		Keshavarz et al. (2022)	Q	
	1.7		Duchowicz et al. (2020)	Q	184
	6.2×10^{-1}		Zhang et al. (2010)	Q	287, 288
	3.0×10^{-1}		Zhang et al. (2010)	Q	287, 289
	6.1×10^{-1}		Zhang et al. (2010)	Q	287, 290
	4.6×10^{-1}		Zhang et al. (2010)	Q	287, 291
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	2.3×10^{-1}		Hilal et al. (2008)	Q	
	1.4×10^{-1}		Modarresi et al. (2007)	Q	67
		4700	Kühne et al. (2005)	Q	
	1.9×10^{-1}		Yaffe et al. (2003)	Q	248, 249
	1.6		Katritzky et al. (1998)	Q	
	2.0		Duchowicz et al. (2020)	?	185, 21
		4000	Kühne et al. (2005)	?	
1,2-dichloro-4-nitrobenzene $\text{C}_6\text{H}_3\text{Cl}_2\text{NO}_2$ [99-54-7] NTBYINQTYWZXLH-UHFFFAOYSA-N	1.2		Altschuh et al. (1999)	M	
	1.1		Keshavarz et al. (2022)	Q	
	1.8		Duchowicz et al. (2020)	Q	
	2.1×10^{-1}		Abraham et al. (2019)	Q	
	8.4×10^{-1}		Zhang et al. (2010)	Q	287, 288
	3.1×10^{-1}		Zhang et al. (2010)	Q	287, 289
	4.6×10^{-1}		Zhang et al. (2010)	Q	287, 290
	6.7×10^{-1}		Zhang et al. (2010)	Q	287, 291
	2.7×10^{-1}		Hilal et al. (2008)	Q	
	2.3×10^{-1}		Modarresi et al. (2007)	Q	67
	1.2		Duchowicz et al. (2020)	?	185, 21
1,4-dichloro-2-nitrobenzene $\text{C}_6\text{H}_3\text{Cl}_2\text{NO}_2$ [89-61-2] RZKKOBGFCAHLGZ-UHFFFAOYSA-N	8.2×10^{-1}		Altschuh et al. (1999)	M	
	1.1		Keshavarz et al. (2022)	Q	
	1.8		Duchowicz et al. (2020)	Q	184
	3.2×10^{-1}		Abraham et al. (2019)	Q	
	8.4×10^{-1}		Zhang et al. (2010)	Q	287, 288
	1.5×10^{-1}		Zhang et al. (2010)	Q	287, 289
	7.3×10^{-1}		Zhang et al. (2010)	Q	287, 290
	6.1×10^{-1}		Zhang et al. (2010)	Q	287, 291
	3.1×10^{-1}		Hilal et al. (2008)	Q	
	2.2×10^{-1}		Modarresi et al. (2007)	Q	67
	8.2×10^{-1}		Duchowicz et al. (2020)	?	185, 21



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3-dichloronitrobenzene $C_6H_3Cl_2NO_2$ [3209-22-1] CMVQZRLQEOAYSW-UHFFFAOYSA-N	5.0×10^{-1} 8.2×10^{-1} 8.4×10^{-1} 1.4×10^{-1} 9.7×10^{-1} 6.7×10^{-1}		Abraham et al. (2019) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
2,4-dichloronitrobenzene $C_6H_3Cl_2NO_2$ [611-06-3] QUIMTLZDMCNYGY-UHFFFAOYSA-N	3.1×10^{-1} 8.4×10^{-1} 1.6×10^{-1} 8.4×10^{-1} 2.9×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
3,5-dichloronitrobenzene $C_6H_3Cl_2NO_2$ [618-62-2] RNABGKOKSBUFW-UHFFFAOYSA-N	8.4×10^{-1} 2.0×10^{-1} 1.1×10^{-1} 2.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
pentachloronitrobenzene $C_6Cl_5NO_2$ (quintozene) [82-68-8] LKPLKUMXSAEKID-UHFFFAOYSA-N	2.7 2.2×10^{-1} 2.2×10^{-1} 2.3×10^{-1} 2.1×10^{-1} 1.1 2.1 2.3×10^{-2} 2.2×10^{-2} 2.2×10^{-1} 6.9×10^{-2} 2.1		Kawamoto and Urano (1989) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Howard and Meylan (1997) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Meylan and Howard (1991)	M V V V X Q Q Q Q Q Q Q	186 446 287, 288 287, 289 287, 290 287, 291
4-chloro-2-nitrophenol $C_6H_4ClNO_2$ [89-64-5] NWSIFTLPLKCTXS-UHFFFAOYSA-N	7.8×10^{-1} 7.8×10^{-1} 1.6×10^1 7.9×10^{-1} 3.6×10^1		Duchowicz et al. (2020) Schwarzenbach et al. (1988) Duchowicz et al. (2020) Yaffe et al. (2003) Katritzky et al. (1998)	V V Q Q Q	186 12 248, 249
2-chloro-4-nitrobenzenamine $C_6H_5ClN_2O_2$ [121-87-9] LOCWBQIWHWIRGN-UHFFFAOYSA-N	1.0×10^3 4.2×10^3 1.3×10^3 1.8×10^3 1.3×10^3 6.7×10^4 2.1×10^3 4.6×10^2 6.4×10^2 1.0×10^3		Altschuh et al. (1999) Keshavarz et al. (2022) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	M Q Q Q Q Q Q Q Q ?	184 287, 288 287, 289 287, 290 287, 291 67 185, 21



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-chloro-5-nitrobenzenamine $\text{C}_6\text{H}_5\text{ClN}_2\text{O}_2$ [6283-25-6] KWIXNFOTNVKIGM-UHFFFAOYSA-N	1.8×10^3		HSDB (2015)	Q	99
4-chloro-2,6-dinitrobenzenamine $\text{C}_6\text{H}_4\text{ClN}_3\text{O}_4$ [5388-62-5] CLMQEQFVUMDPC-UHFFFAOYSA-N	7.6×10^1		HSDB (2015)	Q	99
1-chloro-2,4-dinitrobenzene $\text{C}_6\text{H}_3\text{ClN}_2\text{O}_4$ [97-00-7] VYZAHLBVBHPDDF-UHFFFAOYSA-N	3.5		Duchowicz et al. (2020)	V	186
	4.0		HSDB (2015)	V	
	1.1×10^1		Yaws (2003)	X	237, 80
	1.8×10^2		Duchowicz et al. (2020)	Q	
	1.6×10^2		Zhang et al. (2010)	Q	287, 288
	6.0		Zhang et al. (2010)	Q	287, 289
	5.3		Zhang et al. (2010)	Q	287, 290
1-chloro-2,6-dinitrobenzene $\text{C}_6\text{H}_3\text{ClN}_2\text{O}_4$ [606-21-3] BPPMIQPXQVIZNJ-UHFFFAOYSA-N	3.9×10^1		Zhang et al. (2010)	Q	287, 291
	1.0×10^1		Gharagheizi et al. (2010)	Q	246
	1.6×10^2		Zhang et al. (2010)	Q	287, 288
	4.3		Zhang et al. (2010)	Q	287, 289
	7.2		Zhang et al. (2010)	Q	287, 290
2-chloro-1,3,5-trinitrobenzene $\text{C}_6\text{H}_2\text{ClN}_3\text{O}_6$ [88-88-0] HJRJRUMKQCMYDL-UHFFFAOYSA-N	3.9×10^4		HSDB (2015)	Q	99
	1.1		Zhang et al. (2010)	Q	287, 288
	1.3×10^{-1}		Zhang et al. (2010)	Q	287, 289
	2.0×10^{-1}		Zhang et al. (2010)	Q	287, 290
2,3,4,5-tetrachloronitrobenzene $\text{C}_6\text{HCl}_4\text{NO}_2$ [879-39-0] MTBYTWZDRVOMBR-UHFFFAOYSA-N	4.0×10^{-1}		Zhang et al. (2010)	Q	287, 291
	4.3×10^{-1}		HSDB (2015)	Q	99
1,2,4,5-tetrachloronitrobenzene $\text{C}_6\text{HCl}_4\text{NO}_2$ (tecnazene) [117-18-0] XQTLDFVHHJORV-UHFFFAOYSA-N	4.3×10^{-1}		HSDB (2015)	Q	99
4-chloro-2-nitrobenzenamine $\text{C}_6\text{H}_5\text{ClN}_2\text{O}_2$ [89-63-4] PBGKNXWGYQPUIJK-UHFFFAOYSA-N	8.2×10^1		HSDB (2015)	Q	99
	8.0×10^1		Zhang et al. (2010)	Q	287, 288
	1.7×10^2		Zhang et al. (2010)	Q	287, 289
	2.2×10^3		Zhang et al. (2010)	Q	287, 290
	2.9×10^2		Zhang et al. (2010)	Q	287, 291



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-chloro-3-nitrobenzenamine $C_6H_5ClN_2O_2$ [635-22-3] FOHHWGAOVDPVLP-UHFFFAOYSA-N	1.8×10^3 1.8×10^3 1.1×10^3 2.4×10^3 3.5×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
botran $C_6H_4Cl_2N_2O_2$ [99-30-9] BIXZHMJUSMUDOQ-UHFFFAOYSA-N	1.2×10^2 2.4×10^3 6.9×10^1 1.7×10^3 1.4×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,5-dichlorophenyl isocyanate $C_7H_3Cl_2NO$ [34893-92-0] XEFUJGURFLOFAN-UHFFFAOYSA-N	7.7×10^{-2} 2.8 8.2×10^{-3} 7.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-chloro-5-nitrobenzoic acid $C_7H_4ClNO_4$ [2516-96-3] QUEKGYQTRJVEQC-UHFFFAOYSA-N	6.5×10^3		Abraham et al. (2019)	Q	
4-chloro-3-nitrobenzoic acid $C_7H_4ClNO_4$ [96-99-1] DFXQXFGFOLXAPO-UHFFFAOYSA-N	3.6×10^3 3.1×10^4 2.1×10^3 1.6×10^3 9.2×10^4		Abraham et al. (2019) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1-chloro-4-isocyanatobenzene C_7H_4ClNO [104-12-1] ADAKRBAJFHTIEW-UHFFFAOYSA-N	5.7×10^{-2} 4.1 9.7×10^{-3} 3.4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,2-dichloro-4-isocyanatobenzene $C_7H_3Cl_2NO$ [102-36-3] MFUVCHZWSJKEQ-UHFFFAOYSA-N	7.7×10^{-2} 4.5 1.6×10^{-2} 2.2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-chloro-1-methyl-4-nitrobenzene $C_7H_6ClNO_2$ [121-86-8] LLYXJBROWQDVMU-UHFFFAOYSA-N	2.4×10^{-1} 5.7×10^{-1} 3.4×10^{-1} 3.7×10^{-1} 2.5×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	545 287, 288 287, 289 287, 290 287, 291
2,4-dichloro-3-methyl-6-nitrophenol $C_7H_5Cl_2NO_3$ [39549-27-4] VMBRJHMTAZXHES-UHFFFAOYSA-N	2.3 2.9 9.5×10^1 3.3×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-chloro-5-methyl-2-nitrophenol $C_7H_6ClNO_3$ (4-chloro-6-nitro- <i>m</i> -cresol) [7147-89-9] JBMGJOKJUYGIJH-UHFFFAOYSA-N	3.6×10^{-1}		Schwarzenbach et al. (1988)	V	12
3-amino-2,5-dichlorobenzoic acid $C_7H_5Cl_2NO_2$ [133-90-4] HSSBORCLYSCBJR-UHFFFAOYSA-N	2.6×10^5 3.6 4.5×10^5		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020)	V V Q	186
2,3,5,6-tetrachloro-4-nitroanisole $C_7H_3Cl_4NO_3$ (TCNA) [2438-88-2] BGPPUXMKKQMWLV-UHFFFAOYSA-N	5.2×10^{-1}		HSDB (2015)	Q	99
2,6-dichlorobenzamide $C_7H_5Cl_2NO$ [2008-58-4] JHSPCUHPSIUQRB-UHFFFAOYSA-N	8.2×10^3		HSDB (2015)	Q	99
swep $C_8H_7Cl_2NO$ [1918-18-9] WOZQBERUBLYCEG-UHFFFAOYSA-N	8.2×10^2		HSDB (2015)	Q	99
N-(4-chlorophenyl)acetamide C_8H_8ClNO (<i>p</i> -chloroacetanilide) [539-03-7] GGUOCFNAWIDMF-UHFFFAOYSA-N	2.1		HSDB (2015)	Q	99
methyl 5-chloro-2-nitrobenzoate $C_8H_6ClNO_4$ [51282-49-6] JGBJHRKCUKTQOE-UHFFFAOYSA-N	9.7×10^1 1.2×10^2 3.7×10^3 6.7×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4-chloro-2,5-dimethoxynitrobenzene $C_8H_8ClNO_4$ [6940-53-0] ORLPGMKKCAEWOW-UHFFFAOYSA-N	1.8×10^2 1.6×10^1 2.0×10^2 3.9×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
chloraniformethan $C_9H_7Cl_5N_2O$ [20856-57-9] REEFSLKDEDEWAO-UHFFFAOYSA-N	$>2.3 \times 10^{10}$		MacBean (2012a)	?	



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
monuron $C_9H_{11}ClN_2O$ [150-68-5] BMLIZLVNXIYGCK-UHFFFAOYSA-N	1.7×10^4 1.5×10^4 3.3×10^2 1.7×10^4 1.7×10^4		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Burkhard and Guth (1981) Abraham et al. (2019) MacBean (2012a)	V V V V Q ?	12
monolinuron $C_9H_{11}ClN_2O_2$ [1746-81-2] LKJPSUCKSLORMF-UHFFFAOYSA-N	2.1×10^2 1.7×10^2		HSDB (2015) Mackay et al. (2006d)	V V	
diuron $C_9H_{10}Cl_2N_2O$ [330-54-1] XMTQYYKAHVGBJ-UHFFFAOYSA-N	3.5×10^1 2.0×10^4 8.3×10^2 8.2 4.0×10^4 5.2×10^1		Chao et al. (2017) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Abraham et al. (2019) Goodarzi et al. (2010)	M V V V X Q Q	558 12 567 568
linuron $C_9H_{10}Cl_2N_2O_2$ [330-55-2] XKJMBINCVNINCA-UHFFFAOYSA-N	1.6×10^3 1.9×10^2 5.0×10^3 1.8 6.5 2.2×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Suntio et al. (1988) MacBean (2012b) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010)	V V V X X Q Q	186 558 12 350 567 568, 571
propanil $C_9H_9Cl_2NO$ [709-98-8] LFULEKSKNZEWOE-UHFFFAOYSA-N	1.3×10^1 5.8×10^3 5.8×10^3 1.8×10^2 2.8×10^2 2.7 2.8 2.2×10^3 8.0×10^2 3.8×10^3 8.4×10^3 1.2×10^{-1}		Chao et al. (2017) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Goodarzi et al. (2010)	M V V V V X Q Q Q Q Q Q	186 12 567 287, 288 287, 289 287, 290 287, 291 568, 571
methazole $C_9H_6Cl_2N_2O_3$ [20354-26-1] LRUUNMYPIBZBQH-UHFFFAOYSA-N	4.3×10^1 4.8×10^4 4.3×10^1		HSDB (2015) Hilal et al. (2008) MacBean (2012a)	V Q ?	



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4-naphthalenedione, 2-amino-3-chloro- $C_{10}H_6ClNO_2$ (quinoclamine) [2797-51-5] OBLNWSCLAYSJJR-UHFFFAOYSA-N	3.3×10^4		Maniere et al. (2011)	?	241, 165
chlortoluron $C_{10}H_{13}ClN_2O$ (chlorotoluron) [15545-48-9] JXCGFZXSOMJFOA-UHFFFAOYSA-N	7.0×10^4 1.9×10^4 1.9×10^2 3.4×10^1		HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V X Q	567 568, 571
metoxuron $C_{10}H_{13}ClN_2O_2$ [19937-59-8] DSRNRVQBBJQVCW-UHFFFAOYSA-N	6.9×10^2 6.9×10^2 6.6 2.0×10^2 1.2×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010)	V V X Q Q	186 567 568
chlorpropham $C_{10}H_{12}ClNO_2$ [101-21-3] CWJSHJJYOPWUGX-UHFFFAOYSA-N	2.3×10^1 1.7×10^1 1.7×10^1 4.8×10^2 4.7×10^1 5.4×10^{-2} 2.9		Watanabe (1993) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010)	M V V V X Q Q	186 558 12 567 568, 571
pyrazon $C_{10}H_8ClN_3O$ [1698-60-8] WYKYKTKDBLFHCY-UHFFFAOYSA-N	3.0×10^4 3.0×10^4 2.3×10^{-1} 2.3×10^{-1} 8.3×10^4 1.9×10^9		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Duchowicz et al. (2020) Maniere et al. (2011)	V V V V Q ?	186 12 12, 165
2,4-D dimethylamine $C_{10}H_{13}Cl_2NO_3$ (2,4-dichlorophenoxy)acetic acid dimethylamine) [2008-39-1] IUQJDHJVPLKFL-UHFFFAOYSA-N	2.1×10^{10} 4.9×10^1 7.0×10^{10}		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	186 99
3',4'- dichlorocyclopropanecarboxanilide $C_{10}H_9Cl_2NO$ (cypromid) [2759-71-9] PLQDLOBGKJCDZS-UHFFFAOYSA-N	3.8×10^3		HSDB (2015)	Q	99



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
triazoxide $C_{10}H_6N_5OCl$ [72459-58-6] IQGKIPDJXCAMSM-UHFFFAOYSA-N	4.6×10^5 7.9×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
chlorbufam $C_{11}H_{10}ClNO_2$ [1967-16-4] ULBXWWGWDVPVHAO-UHFFFAOYSA-N	1.1×10^3 1.1×10^3		HSDB (2015) MacBean (2012a)	V ?	
zarilamid $C_{11}H_{11}N_2O_2Cl$ [84527-51-5] VLBZAQJMGULJIU-UHFFFAOYSA-N	1.5×10^5		MacBean (2012a)	?	
chloramphenicol $C_{11}H_{12}Cl_2N_2O_5$ [56-75-7] WIIZWVCIJKGZOK-IUCAKERBSA-N	4.3×10^{12}		HSDB (2015)	Q	99
cloethocarb $C_{11}H_{14}ClNO_4$ [51487-69-5] PITWUHDDNUVBPT-UHFFFAOYSA-N	5.0×10^5		MacBean (2012a)	?	
formetanate hydrochloride $C_{11}H_{16}ClN_3O_2$ [23422-53-9] MYPKGPZHHQEODQ-UHFFFAOYSA-N	4.3×10^{13} 2.0×10^9		HSDB (2015) Maniere et al. (2011)	Q ?	99 241, 165
cyclanilide $C_{11}H_9Cl_2NO_3$ [113136-77-9] GLWWLNJJCTFMZ-UHFFFAOYSA-N	1.4×10^4 1.2×10^4 1.2×10^5 1.4×10^4		MacBean (2012b) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	X Q Q ?	350 185, 21
propachlor $C_{11}H_{14}ClNO$ [1918-16-7] MFOUDYKPLGXPGO-UHFFFAOYSA-N	2.7×10^1 9.1×10^1 9.1×10^1 9.0×10^{-1} 3.7×10^{-1}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	12 567 568
barban $C_{11}H_9Cl_2NO_2$ [101-27-9] MCOQHIWZJUDQIC-UHFFFAOYSA-N	8.4×10^2 8.2×10^2 8.5×10^2 3.3×10^{-1} 8.5×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020) MacBean (2012a)	V V V Q ?	186
aclonifen $C_{12}H_9ClN_2O_3$ [74070-46-5] DDBMQDADIHOWIC-UHFFFAOYSA-N	5.9×10^2 7.1×10^3 3.3×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 12, 165



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propyzamide $C_{12}H_{11}Cl_2NO$ (pronamide) [23950-58-5] PHNUZKMIPIFFYSO-UHFFFAOYSA-N	1.0×10^3 5.2 5.2×10^{-2} 1.5×10^2 6.6×10^{-2} 1.3×10^8		Duchowicz et al. (2020) HSDB (2015) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011) Mackay et al. (2006d)	V V X Q Q ? W	186 567 568 12, 165 736
2,4,6-trichlorophenyl 4-nitrophenyl ether $C_{12}H_6Cl_3NO_3$ (chlornitrofen) [1836-77-7] XQNAUQUKWRBODG-UHFFFAOYSA-N	>8.1		Kawamoto and Urano (1989)	M	
nitrofen $C_{12}H_7Cl_2NO_3$ [1836-75-5] XITQUSLLOSKDTB-UHFFFAOYSA-N	3.3 3.9×10^1 2.8×10^1 1.2×10^2 1.1×10^2		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	 287, 288 287, 289 287, 290 287, 291
buturon $C_{12}H_{13}ClN_2O$ [3766-60-7] BYYMILHAKOURNM-UHFFFAOYSA-N	1.3×10^4		MacBean (2012a)	?	
tricloctan $C_{13}H_9Cl_3N_2O$ [101-20-2] ICUTUKXCWQYESQ-UHFFFAOYSA-N	2.2×10^5 2.2×10^5 5.0×10^3 7.2×10^7 1.8×10^7		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
dimethachlor $C_{13}H_{18}ClNO_2$ [50563-36-5] SCCDDNKJYDZXMM-UHFFFAOYSA-N	5.9×10^3		Maniere et al. (2011)	?	165
3,5-dichloro-N-(3,4-dichlorophenyl)-2-hydroxybenzamide $C_{13}H_7Cl_4NO_2$ [1154-59-2] SJBQHPJLLIJASD-UHFFFAOYSA-N	2.1×10^5 2.1×10^5 2.3×10^5 3.9×10^6 1.6×10^5		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
procymidone $C_{13}H_{11}Cl_2NO_2$ [32809-16-8] QXJKBPVAHBARF-UHFFFAOYSA-N	8.5×10^{-1} 8.5×10^{-1} 9.0×10^{-3} 9.7×10^{-1} 1.4×10^{-2}		Duchowicz et al. (2020) Mackay et al. (2006d) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010)	V V X Q Q	186 567 568



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
melphalan $C_{13}H_{18}Cl_2N_2O_2$ [148-82-3] SGDBTWWWUNDEQ-LBPRGKRZSA-N	2.3×10^7		HSDB (2015)	Q	99
niclosamide $C_{13}H_8Cl_2N_2O_4$ [50-65-7] RJMUSRYZPJFPJ-UHFFFAOYSA-N	1.5×10^4		HSDB (2015)	V	
iprodone $C_{13}H_{13}Cl_2N_3O_3$ [36734-19-7] ONUFEQLQCSAYKA-UHFFFAOYSA-N	7.1×10^2		Barcelo and Hennion (1997)	X	567
	4.0×10^4		Keshavarz et al. (2022)	Q	
	9.5×10^3		Duchowicz et al. (2020)	Q	
	2.0×10^1		Goodarzi et al. (2010)	Q	568, 569
zoxamide $C_{14}H_{16}Cl_3NO_2$ [156052-68-5] SOUGWDPBRBKJEX-UHFFFAOYSA-N	4.9×10^3		HSDB (2015)	Q	99
	$>1.5 \times 10^2$		Maniere et al. (2011)	?	241, 165
fenhexamid $C_{14}H_{17}Cl_2NO_2$ [126833-17-8] VDLGAVALJYLFDH-UHFFFAOYSA-N	2.0×10^5		MacBean (2012b)	X	350
	2.0×10^5		Maniere et al. (2011)	?	12, 493, 165
	3.3×10^6		Maniere et al. (2011)	?	12, 573, 165
	1.1×10^5		Maniere et al. (2011)	?	12, 570, 165
chlorambucil $C_{14}H_{19}Cl_2NO_2$ [305-03-3] JCKYGMPEJWAADB-UHFFFAOYSA-N	3.7×10^4		HSDB (2015)	Q	99
2-chloro-N-(ethoxymethyl)-N-(2-ethyl-6-methylphenyl)acetamide $C_{14}H_{20}ClNO_2$ (acetochlor) [34256-82-1] VTNQPKFIQCLBDU-UHFFFAOYSA-N	3.7×10^4		HSDB (2015)	V	
alachlor $C_{14}H_{20}ClNO_2$ [15972-60-8] XCSPAVHZFQHGGE-UHFFFAOYSA-N	6.7×10^2		Muir et al. (2004)	L	367
	9.9×10^2		Muir et al. (2004)	L	366
	7.4		Chao et al. (2017)	M	
	1.4×10^2	9200	Gautier et al. (2003)	M	
	9.0×10^2		Fendinger et al. (1989)	M	72
	1.2×10^3		Fendinger and Glotfelty (1988)	M	72
	4.5×10^2		Mackay et al. (2006d)	V	
	1.6×10^2		Suntio et al. (1988)	V	12
3.1×10^2		Glotfelty et al. (1987)	V		
1.6		Barcelo and Hennion (1997)	X	567	



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.6×10^{-2}		Goodarzi et al. (2010)	Q	568, 569
	3.1×10^3		Hilal et al. (2008)	Q	
	4.5×10^1		Modarresi et al. (2007)	Q	67
		11000	Kühne et al. (2005)	Q	
	8.2×10^4		Meylan and Howard (1991)	Q	
		9300	Kühne et al. (2005)	?	
	3.1×10^2		Chesters et al. (1989)	?	
bifenox $C_{14}H_9Cl_2NO_3$ [42576-02-3] SUSRRORUBZHMPFO-UHFFFAOYSA-N	9.1×10^1		Duchowicz et al. (2020)	V	186
	3.7		HSDB (2015)	V	
	3.2		Mackay et al. (2006d)	V	
	3.3×10^{-2}		Barcelo and Hennion (1997)	X	567
	6.2×10^3		Duchowicz et al. (2020)	Q	
	3.5×10^{-2}		Goodarzi et al. (2010)	Q	568, 571
	$<6.2 \times 10^3$		Maniere et al. (2011)	?	12, 165
S-metolachlor $C_{15}H_{22}ClNO_2$ [87392-12-9] WVQBLGZPHOPFFO-LBPRGKRZSA-N	4.5×10^2		Maniere et al. (2011)	?	165
metolachlor $C_{15}H_{22}ClNO_2$ [51218-45-2] WVQBLGZPHOPFFO-UHFFFAOYSA-N	7.5×10^2		Muir et al. (2004)	L	367
	7.2×10^2		Muir et al. (2004)	L	366
	6.2×10^2	15000	Fogg and Sangster (2003)	L	
	2.1×10^2	10000	Feigenbrugel et al. (2004a)	M	
	1.3×10^2		Rice et al. (1997b)	M	12
	5.7×10^2	15000	Lau et al. (1995)	M	737
	4.3×10^2		Mackay et al. (2006d)	V	
	4.1×10^2		Otto et al. (1997)	V	
	1.1×10^3		Glotfelty et al. (1987)	V	
	1.1×10^3		Burkhard and Guth (1981)	V	
	1.1×10^1		Barcelo and Hennion (1997)	X	567
	1.2×10^3		Rice et al. (1997b)	C	
	7.9×10^{-2}		Goodarzi et al. (2010)	Q	568
	6.2×10^3		Hilal et al. (2008)	Q	
	1.7×10^2		Modarresi et al. (2007)	Q	67
		12000	Kühne et al. (2005)	Q	
		10000	Kühne et al. (2005)	?	
	1.1×10^3		Chesters et al. (1989)	?	12
clonitralid $C_{15}H_{15}Cl_2N_3O_5$ [1420-04-8] XYCDHXSQODHSLG-UHFFFAOYSA-N	$>2.6 \times 10^4$		HSDB (2015)	V	
chloroxuron $C_{15}H_{15}ClN_2O_2$ [1982-47-4] IVUXTESCPZUGJC-UHFFFAOYSA-N	2.4×10^4		HSDB (2015)	V	
	5.3×10^4		MacBean (2012a)	?	



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
CGA 80000 $C_{15}H_{18}ClNO_4$ [67932-85-8] FHZMAAGOSXDIBJ-UHFFFAOYSA-N	4.4×10^6		MacBean (2012a)	?	
oxadiargyl $C_{15}H_{14}N_2O_3Cl_2$ [39807-15-3] DVOODWOZJVJKQR-UHFFFAOYSA-N	4.3×10^2 8.2×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
diniconazole $C_{15}H_{17}Cl_2N_3O$ [83657-24-3] FBOUIAKEJMJZPQG-UHFFFAOYSA-N	2.5×10^1 2.8×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
pethoxamid $C_{16}H_{22}ClNO_2$ [106700-29-2] CSWIKHNSBZVWNQ-UHFFFAOYSA-N	8.5×10^2		Maniere et al. (2011)	?	12, 165
pigment red 4 $C_{16}H_{10}ClN_3O_3$ [2814-77-9] XLTMWFMRJZDFFD-VHEBQXMUSA-N	1.1×10^7		HSDB (2015)	Q	99
darendoside b $C_{17}H_{15}Cl_2N_5O_2$ [13301-61-6] KHZRTXVUEZJYNE-UHFFFAOYSA-N	2.7×10^7 5.0×10^6 2.5×10^7 7.3×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
butenachlor $C_{17}H_{24}NO_2Cl$ [87310-56-3] HZDIJTXDRLNTIS-DAXSKMNVSA-N	1.0×10^2		MacBean (2012a)	?	
butachlor $C_{17}H_{26}ClNO_2$ [23184-66-9] HKPHPIREJKHECO-UHFFFAOYSA-N	1.6×10^2 1.2×10^2 6.9×10^2 1.7×10^2		Watanabe (1993) Mackay et al. (2006d) Hilal et al. (2008) Modarresi et al. (2007)	M V Q Q	67
pretilachlor $C_{17}H_{26}ClNO_2$ [51218-49-6] YLPGTOIOYRQOHV-UHFFFAOYSA-N	4.5×10^3 1.8×10^2		Hilal et al. (2008) Modarresi et al. (2007)	Q Q	67
halofenozide $C_{18}H_{19}ClN_2O_2$ [112226-61-6] CNKHSLKYRMDDNQ-UHFFFAOYSA-N	2.7×10^5		HSDB (2015)	Q	99



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzoximate $\text{C}_{18}\text{H}_{18}\text{ClNO}_5$ [29104-30-1] BZMIHNKNQJVVRO-UHFFFAOYSA-N	1.8×10^2 1.5×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
pencycuron $\text{C}_{19}\text{H}_{21}\text{ClN}_2\text{O}$ [66063-05-6] OGYFATSSENRIKG-UHFFFAOYSA-N	2.0×10^6		Maniere et al. (2011)	?	12, 165
valifenalate $\text{C}_{19}\text{H}_{27}\text{ClN}_2\text{O}_5$ [283159-90-0] DBXFMOWZRXXBRN-LWKPJOBUSA-N	6.2×10^5		Maniere et al. (2011)	?	12, 738, 165
pyrazoxyfen $\text{C}_{20}\text{H}_{16}\text{Cl}_2\text{N}_2\text{O}_3$ [71561-11-0] FKERUJTUOYLBKB-UHFFFAOYSA-N	4.7×10^4 1.9×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
α -cypermethrin $\text{C}_{22}\text{H}_{19}\text{Cl}_2\text{NO}_3$ [67375-30-8] KAATUXNTWXVJKI-DXCJPMOASA-N	1.0 1.0×10^2 1.9×10^1		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	12, 165
cypermethrin- β $\text{C}_{22}\text{H}_{19}\text{Cl}_2\text{NO}_3$ [1224510-29-5] KAATUXNTWXVJKI-FLXSOZOKSA-N	5.6×10^1		Ebert et al. (2023)	?	318
β -cypermethrin $\text{C}_{22}\text{H}_{19}\text{Cl}_2\text{NO}_3$ [65731-84-2] KAATUXNTWXVJKI-NSHGMRRFSA-N			Mackay et al. (2006d)	V	558
δ -cypermethrin $\text{C}_{22}\text{H}_{19}\text{Cl}_2\text{NO}_3$ (cypermethrin; alphamethrin) [52315-07-8] KAATUXNTWXVJKI-UHFFFAOYSA-N	4.1×10^1 4.3×10^2 1.2×10^1 2.5×10^1 1.0×10^1		HSDB (2015) Mackay et al. (2006d) Siebers and Mattusch (1996) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	12 567 568, 569
	4.2×10^1 5.0×10^7		Maniere et al. (2011) Maniere et al. (2011)	? ?	12, 165 241, 165
θ -cypermethrin $\text{C}_{22}\text{H}_{19}\text{Cl}_2\text{NO}_3$ [71697-59-1] KAATUXNTWXVJKI-GGPKGHCWSA-N	6.1×10^2		Ebert et al. (2023)	?	318



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ζ -cypermethrin $C_{22}H_{19}Cl_2NO_3$ [1315501-18-8] KAATUXNTWXVJKI-QPIRBTGLSA-N	4.3×10^2		Ebert et al. (2023)	?	365
ochratoxin C $C_{22}H_{22}ClNO_6$ [4865-85-4] BPZZWRPHVVDAPT-PXAZEXFGSA-N	7.6×10^8		HSDB (2015)	Q	99
quizalofop-p-tefuryl $C_{22}H_{21}N_2O_5Cl$ [119738-06-6] BBKDWPJZANJGB-UHFFFAOYSA-N	1.8×10^4 3.4×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
mandipropamid $C_{23}H_{22}ClNO_4$ [374726-62-2] KWLWJWPJKJMCSH-UHFFFAOYSA-N	1.1×10^4 $>1.1 \times 10^4$		HSDB (2015) Maniere et al. (2011)	V ?	165
fenvalerate $C_{25}H_{22}ClNO_3$ [51630-58-1] NYPJDWWKZLNNGM-UHFFFAOYSA-N	2.9×10^2 2.9×10^2 4.7×10^1 7.0×10^1 3.2×10^3		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Cotham and Bidleman (1989) Duchowicz et al. (2020)	V V V V Q	186
esfenvalerate $C_{25}H_{22}ClNO_3$ [66230-04-4] NYPJDWWKZLNNGM-ZEQLZLVSA-N	2.4×10^1 2.4×10^1 3.2×10^3 2.0×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 241, 165
clopyralid $C_6H_3Cl_2NO_2$ [1702-17-6] HUBANNPOLNYSAD-UHFFFAOYSA-N	3.3×10^3 3.2×10^2 1.8×10^3 3.6×10^1 3.0×10^9 4.5×10^{10} 6.2×10^{10} 5.6×10^{10}		Duchowicz et al. (2020) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V X Q Q ? ? ?	186 567 568 12, 165 12, 570, 165 12, 573, 165
picloram $C_6H_3Cl_3N_2O_2$ [1918-02-1] NQQVFXUMIDALNH-UHFFFAOYSA-N	3.0×10^4 2.9×10^4 2.9×10^2 7.7×10^6 2.5 9.0×10^4 1.6×10^8 1.1×10^3		Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Goodarzi et al. (2010)	V V X Q Q Q Q Q	12 567 287, 288 287, 289 287, 290 287, 291 568, 571



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1×10^4		Maniere et al. (2011)	?	241, 165
aminopyralid $C_6H_4Cl_2N_2O_2$	5.8×10^6 1.0×10^{11}		HSDB (2015) Maniere et al. (2011)	Q ?	99 241, 493, 165
[150114-71-9] NIXXQNOQHKNPEJ-UHFFFAOYSA-N					
3,4,5,6-tetrachloropyridine-2- carboxylic acid	3.7×10^3		Zhang et al. (2010)	Q	287, 288
$C_6HCl_4NO_2$	2.4		Zhang et al. (2010)	Q	287, 289
[10469-09-7]	1.2×10^2		Zhang et al. (2010)	Q	287, 290
GXFRQLQUKBSYQL-UHFFFAOYSA-N	4.1×10^4		Zhang et al. (2010)	Q	287, 291
[(3,5,6-trichloro-2-pyridinyl)oxy]- acetic acid	1.0×10^4		Duchowicz et al. (2020)	V	186
$C_7H_4Cl_3NO_3$	1.0×10^4		HSDB (2015)	V	
(triclopyr)	1.2×10^4		Armbrust (2000)	C	
[55335-06-3]	3.2×10^3		Duchowicz et al. (2020)	Q	
REEQLXGGVXDJSQ-UHFFFAOYSA-N	1.1×10^4		Maniere et al. (2011)	?	12, 165
	2.1×10^5		Maniere et al. (2011)	?	12, 570, 165
	2.3×10^5		Maniere et al. (2011)	?	12, 493, 165
clopidol $C_7H_7Cl_2NO$	9.9×10^3		HSDB (2015)	Q	99
[2971-90-6] ZDPIZLCVJAAHHR-UHFFFAOYSA-N					
[(3,5,6-trichloro-2-pyridinyl)oxy]- acetic acid, methyl ester	6.0		Zhang et al. (2010)	Q	287, 288
$C_8H_6Cl_3NO_3$	3.1×10^1		Zhang et al. (2010)	Q	287, 289
[60825-26-5]	4.6×10^3		Zhang et al. (2010)	Q	287, 290
MNYBZEHWPRTNJY-UHFFFAOYSA-N	3.5×10^2		Zhang et al. (2010)	Q	287, 291
aminocyclopyrachlor $C_8H_8ClN_3O_2$	1.3×10^7		Ebert et al. (2023)	?	318
[858956-08-8] KWAIHLIXESXTJL-UHFFFAOYSA-N					
uracil mustard $C_8H_{11}Cl_2N_3O_2$	2.5×10^7		HSDB (2015)	Q	99
[66-75-1] IDPUKCWIGUEADI-UHFFFAOYSA-N					



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
imidacloprid $\text{C}_9\text{H}_{10}\text{ClN}_5\text{O}_2$ [138261-41-3] YWTYJOPNNQFBPC-UHFFFAOYSA-N	4.9×10^9 5.9×10^9		Armbrust (2000) Maniere et al. (2011)	C ?	12, 165
ethyl [(3,5,6-trichloro-2-pyridinyl)oxy]acetate $\text{C}_9\text{H}_8\text{Cl}_3\text{NO}_3$ [60825-27-6] KXAVVWXJUDQGDGDA-UHFFFAOYSA-N	4.5 1.7×10^1 2.3×10^1 3.1×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
N-methyl-3,4,5,6-tetrachlorophthalimide $\text{C}_9\text{H}_3\text{Cl}_4\text{NO}_2$ [14737-80-5] OHCSZUQRNNMRG-UHFFFAOYSA-N	1.5×10^3 1.2×10^3 4.1×10^1 3.1×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
terbacil $\text{C}_9\text{H}_{13}\text{ClN}_2\text{O}_2$ [5902-51-2] NBQCZNYJUMBKY-UHFFFAOYSA-N	5.2×10^4 6.5×10^4 7.9×10^4 5.6×10^4 5.5×10^2 4.4×10^2		HSDB (2015) Mackay et al. (2006d) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V V X Q	12 567 568
eglinazine-ethyl $\text{C}_9\text{H}_{14}\text{ClN}_5\text{O}_2$ [6616-80-4] YESXTECNXIKUMM-UHFFFAOYSA-N	4.1×10^4		Ebert et al. (2023)	?	318
proglinazine ethyl ester $\text{C}_{10}\text{H}_{16}\text{ClN}_5\text{O}_2$ [68228-18-2] QQADVTSTCZBBOE-UHFFFAOYSA-N	1.0×10^4		Ebert et al. (2023)	?	318
triforine $\text{C}_{10}\text{H}_{14}\text{Cl}_6\text{N}_4\text{O}_2$ [26644-46-2] RROQIUMZODEXOR-UHFFFAOYSA-N	2.6×10^3 2.6×10^3		HSDB (2015) Mackay et al. (2006d)	V V	
drazoxolon $\text{C}_{10}\text{H}_8\text{ClN}_3\text{O}_2$ [5707-69-7] OOTHARUZHONSW-UHFFFAOYSA-N	1.4×10^2		Ebert et al. (2023)	?	318
anagrelide $\text{C}_{10}\text{H}_7\text{Cl}_2\text{N}_3\text{O}$ [68475-42-3] OTBXOEAQVRKTNQ-UHFFFAOYSA-N	3.7×10^7		HSDB (2015)	Q	99



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fenpiclonil $C_{11}H_6Cl_2N_2$ [74738-17-3] FKLFBQCQQYDUAM-UHFFFAOYSA-N	1.8×10^3 5.4×10^2 1.9×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	186
benoxacor $C_{11}H_{11}Cl_2NO_2$ [98730-04-2] PFJMJDEVDLPNE-UHFFFAOYSA-N	1.3×10^2 2.9×10^2 1.3×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 12, 165
ethychlozate $C_{11}H_{11}ClN_2O_2$ [27512-72-7] GLPZEHFBLBYFHN-UHFFFAOYSA-N	1.6×10^4		Ebert et al. (2023)	?	318
quinmerac $C_{11}H_8ClNO_2$ [90717-03-6] ALZOLUNSQWINIR-UHFFFAOYSA-N	1.0×10^{10}		Maniere et al. (2011)	?	241, 165
quinonamid $C_{12}H_6Cl_3NO_3$ [27541-88-4] ZIEWAMOXCOLNSJ-UHFFFAOYSA-N	8.0×10^2		Ebert et al. (2023)	?	365
fenchlorazole-ethyl $C_{12}H_8N_3O_2Cl_5$ [103112-35-2] GMBRUAIJEFRHFQ-UHFFFAOYSA-N	2.7×10^3		MacBean (2012a)	?	12
vinclozoline $C_{12}H_9Cl_2NO_3$ (vinclozolin) [50471-44-8] FSCWZHGZWWDELK-UHFFFAOYSA-N	5.8×10^2 2.6×10^5 9.1×10^1 7.6 1.7		HSDB (2015) Mackay et al. (2006d) Siebers et al. (1994) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	567 568
forchlorfenuron $C_{12}H_{10}ClN_3O$ [68157-60-8] GPXLRLUVLMHHIK-UHFFFAOYSA-N	3.4×10^6 3.5×10^6 1.7×10^1 3.4×10^6		Duchowicz et al. (2020) MacBean (2012b) Duchowicz et al. (2020) Maniere et al. (2011)	V X Q ?	186 350 241, 165
azaconazole $C_{12}H_{11}Cl_2N_3O_2$ [60207-31-0] AKNQMEBLVAMSNZ-UHFFFAOYSA-N	5.1×10^4		Ebert et al. (2023)	?	318
myclozolin $C_{12}H_{11}NO_4Cl_2$ [54864-61-8] FTCOKXNKPOUEFH-UHFFFAOYSA-N	3.7×10^2		MacBean (2012a)	?	



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
triclopyr-butotyl $C_{13}H_{16}Cl_3NO_4$ [64700-56-7] IVDRCZNVHVGQBHZ-UHFFFAOYSA-N	3.4×10^2		Maniere et al. (2011)	?	12, 165
clofencet $C_{13}H_{11}ClN_2O_3$ [129025-54-3] PIZCXVUFSNPNON-UHFFFAOYSA-N	$>1.9 \times 10^8$ $>2.3 \times 10^{10}$		HSDB (2015) MacBean (2012a)	V ?	
chlozolate $C_{13}H_{11}NO_5Cl_2$ [84332-86-5] IGUYEXXAGBDLLX-UHFFFAOYSA-N	7.6×10^3 4.7×10^2 2.8×10^1 2.8×10^1 4.4×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V V Q Q ?	186 186
monalide $C_{13}H_{18}ClNO$ [7287-36-7] KXGYBSNVFXBPNO-UHFFFAOYSA-N	4.0×10^2		MacBean (2012a)	?	
chlomethoxyfen $C_{13}H_9Cl_2NO_4$ [32861-85-1] DXXVCXKMSWHGTF-UHFFFAOYSA-N	5.1×10^{-1}		Ebert et al. (2023)	?	318
metazachlor $C_{14}H_{16}ClN_3O$ [67129-08-2] STEPQTYSZVCJPV-UHFFFAOYSA-N	1.3×10^1 3.5×10^2 7.1×10^3 1.7×10^4		Barcelo and Hennion (1997) Goodarzi et al. (2010) Modarresi et al. (2007) Maniere et al. (2011)	X Q Q ?	567 568 67 12, 165
etaconazole $C_{14}H_{15}Cl_2N_3O_2$ [60207-93-4] DWRKFAJEBUWTQM-UHFFFAOYSA-N	7.9×10^3		MacBean (2012a)	?	
triadimenol $C_{14}H_{18}ClN_3O_2$ [55219-65-3] BAZVSMNPJJMILC-UHFFFAOYSA-N	7.6×10^6 3.8×10^6 4.5×10^5		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	241, 165
hexaconazole $C_{14}H_{17}Cl_2N_3O$ [79983-71-4] STMIIPIFODONDC-UHFFFAOYSA-N	2.8×10^1 6.0×10^1		Barcelo and Hennion (1997) Goodarzi et al. (2010)	X Q	567 568
triadimefon $C_{14}H_{16}ClN_3O_2$ [43121-43-3] WURBVZBTWMNKQT-UHFFFAOYSA-N	1.2×10^5 1.2×10^5 1.2×10^5 1.5×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
imazalil $C_{14}H_{14}Cl_2N_2O$ [35554-44-0] PZBPKYOVPKCNPJY-UHFFFAOYSA-N	3.8×10^3 5.1×10^5 9.3×10^3		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	 241, 165
pyrifenoX $C_{14}H_{12}Cl_2N_2O$ [88283-41-4] CKPCAYZTYMHQEX-UHFFFAOYSA-N	2.3×10^2		Ebert et al. (2023)	?	318
chlorphthalim $C_{14}H_{12}ClNO_2$ [39985-63-2] MJQBFSWPMMHVSM-UHFFFAOYSA-N	5.1×10^2		Ebert et al. (2023)	?	318
cyprofuram $C_{14}H_{14}ClNO_3$ [69581-33-5] KRZUZYJEQBXUIN-UHFFFAOYSA-N	3.1×10^5		Ebert et al. (2023)	?	316
ofurace $C_{14}H_{16}ClNO_3$ [58810-48-3] OWDLFBLNMPXSD-UHFFFAOYSA-N	1.1×10^4		Ebert et al. (2023)	?	318
triadimenol B $C_{14}H_{18}ClN_3O_2$ [82200-72-4]	1.1×10^5		Ebert et al. (2023)	?	365
triadimenol A $C_{14}H_{18}ClN_3O_2$ [89482-17-7]	1.3×10^5		Ebert et al. (2023)	?	318
propiconazole $C_{15}H_{17}Cl_2N_3O_2$ [60207-90-1] STJLVHWMYQXCPB-UHFFFAOYSA-N	1.1×10^4 5.7×10^3 2.5×10^3 2.4×10^1 3.1×10^1		HSDB (2015) Mackay et al. (2006d) Siebers et al. (1994) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 567 568, 571
clonazepam $C_{15}H_{10}ClN_3O_3$ [1622-61-3] DGBIGWXXNGSACT-UHFFFAOYSA-N	1.4×10^7		HSDB (2015)	Q	99
oxazepam $C_{15}H_{12}ClN_2O_2$ [604-75-1] ADIMAYPTOBDMTL-UHFFFAOYSA-N	1.8×10^4		HSDB (2015)	Q	99



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
oxadiazon $C_{15}H_{18}Cl_2N_2O_3$ [19666-30-9] CHNUNORXWHYHNE-UHFFFAOYSA-N	1.4×10^2 1.4×10^2		HSDB (2015) Armbrust (2000)	V C	
cyproconazole $C_{15}H_{18}ClN_3O$ [94361-06-5] UFNOUKDBUJZYDE-UHFFFAOYSA-N	1.4×10^4 1.3×10^2 3.4×10^2 2.0×10^4		HSDB (2015) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V X Q ?	567 568 241, 165
diclobutrazol $C_{15}H_{19}Cl_2N_3O$ [75736-33-3] URDNHJVMYZFRT-UHFFFAOYSA-N	8.0×10^3		MacBean (2012a)	?	
paclobutrazol $C_{15}H_{20}ClN_3O$ [76738-62-0] RMOGWMIKYWRWKW-UHFFFAOYSA-N	4.2×10^4		Maniere et al. (2011)	?	241, 165
prochloraz $C_{15}H_{16}Cl_3N_3O_2$ [67747-09-5] TVLSRXIXMLFWEO-UHFFFAOYSA-N	6.0×10^2 5.8 6.4×10^3 5.9×10^{-1} 6.1×10^2		Duchowicz et al. (2020) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V X Q Q ?	186 567 568 241, 165
<i>cis</i> -propiconazole $C_{15}H_{17}Cl_2N_3O_2$ [112721-87-6]	1.2×10^4		Ebert et al. (2023)	?	318
<i>trans</i> -propiconazole $C_{15}H_{17}Cl_2N_3O_2$ [120523-07-1]	7.8×10^3		Ebert et al. (2023)	?	318
fenoxanil $C_{15}H_{18}Cl_2N_2O_2$ [115852-48-7] IUOKJNROJISWRO-UHFFFAOYSA-N	5.0×10^6		Ebert et al. (2023)	?	318
carpropamid $C_{15}H_{18}Cl_3NO$ [104030-54-8] RXDMAYSSBPYBFW-UHFFFAOYSA-N	8.4×10^2		Ebert et al. (2023)	?	318
propisochlor $C_{15}H_{22}ClNO_2$ [86763-47-5] KZNDFYDURHAESM-UHFFFAOYSA-N	5.6×10^1		Ebert et al. (2023)	?	318



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
mefenpyr-diethyl $C_{16}H_{18}Cl_2N_2O_4$ [135590-91-9] OPGCOAPTHCZZIW-UHFFFAOYSA-N	3.8×10^3 8.5×10^3		Maniere et al. (2011) Maniere et al. (2011)	? ?	165 12, 165
diazepam $C_{16}H_{13}ClN_2O$ [439-14-5] AAOVKJBEBIDNHE-UHFFFAOYSA-N	2.7×10^3		HSDB (2015)	Q	99
bendamustine $C_{16}H_{21}Cl_2N_3O_2$ [16506-27-7] YTKUWDBFDASYHO-UHFFFAOYSA-N	2.5×10^7		HSDB (2015)	Q	99
fentrazamide $C_{16}H_{20}ClN_5O_2$ [158237-07-1] LLQPHQFNMLZJMP-UHFFFAOYSA-N	5.1×10^4		Ebert et al. (2023)	?	318
piperalin $C_{16}H_{21}Cl_2NO_2$ [3478-94-2] BZGLBXYQOMFXAU-UHFFFAOYSA-N	4.3×10^2		HSDB (2015)	Q	99
tebuconazole $C_{16}H_{22}ClN_3O$ [107534-96-3] PXMMNQRDWABCY-UHFFFAOYSA-N	7.0×10^4 1.1×10^3 2.2×10^2 1.0×10^5		HSDB (2015) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V X Q ?	186 567 568, 571 12, 165
diethyl-ethyl $C_{16}H_{22}ClNO_3$ [38727-55-8] WFKSADNZWSKRZ-UHFFFAOYSA-N	7.9×10^2		Ebert et al. (2023)	?	318
fenarimol $C_{17}H_{12}Cl_2N_2O$ [60168-88-9] NHOWDZOIZKMVAI-UHFFFAOYSA-N	1.4×10^3 1.4×10^3 7.8×10^5		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020)	V V Q	186
cumyluron $C_{17}H_{19}ClN_2O$ [99485-76-4] VYNOULHXXDFBLU-UHFFFAOYSA-N	2.5×10^6		Ebert et al. (2023)	?	318
triticonazole $C_{17}H_{20}N_3OCl$ [131983-72-7] PPDBOQMKNKNODG-ZROIWOOFSA-N	6.6×10^4 3.3×10^4		HSDB (2015) Maniere et al. (2011)	Q ?	99 241, 165



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
furametpyr $C_{17}H_{20}ClN_3O_2$ [123572-88-3] NRTLIIOWVLVMQBO-UHFFFAOYSA-N	6.0×10^6		Ebert et al. (2023)	?	318
metconazole $C_{17}H_{22}ClN_3O$ [125116-23-6] XWPZUHJBOLQNMN-UHFFFAOYSA-N	3.8×10^3 1.3×10^3 4.5×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 12, 165
tepraloxymim $C_{17}H_{24}ClNO_4$ [149979-41-9] IOYNQIMAUDJVEI-BMVKAAMSA-N	5.2×10^4		Ebert et al. (2023)	?	318
cloquintocet-mexyl $C_{18}H_{22}ClNO_3$ [99607-70-2] COYBRKAVBMYYSF-UHFFFAOYSA-N	1.2×10^4 3.4×10^2 3.3×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 165
fenoxaprop-p-ethyl $C_{18}H_{16}ClNO_5$ [71283-80-2] PQKBPHSEKWERTG-LLVKDONJSA-N	6.2×10^2 2.3×10^3 3.7×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 12, 165
ipconazole $C_{18}H_{24}ClN_3O$ [125225-28-7] QTYCMBMOLSEAM-UHFFFAOYSA-N	3.9×10^3 1.3×10^3 3.3×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 241, 165
pyriofenone $C_{18}H_{20}ClNO_5$ [688046-61-9] NMVCBWZLXCXANER-UHFFFAOYSA-N	5.3×10^3		Maniere et al. (2011)	?	241, 165
cintofen $C_{18}H_{15}ClN_2O_5$	1.4×10^7 5.4×10^9		Maniere et al. (2011) Maniere et al. (2011)	? ?	12, 577, 165 12, 573, 165
(sintofen) [130561-48-7] QLMNCUHS DAGQGT-UHFFFAOYSA-N	6.1×10^9		Maniere et al. (2011)	?	12, 493, 165
boscalid $C_{18}H_{12}Cl_2N_2O$ [188425-85-6] WYEMLYFITZORAB-UHFFFAOYSA-N	1.9×10^4 1.9×10^4		MacBean (2012b) Maniere et al. (2011)	X ?	350 241, 165



Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tebufenpyrad $C_{18}H_{24}ClN_3O$ [119168-77-3] ZZYSLNWXGKKDOML-UHFFFAOYSA-N	$>8.2 \times 10^2$ $>9.1 \times 10^2$		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
8,9,10,11-tetrachloro-12-phthaloperinone $C_{18}H_6Cl_4N_2O$ [20749-68-2] UBZVRR0HBDCCQY-UHFFFAOYSA-N	4.8×10^5 7.5×10^9 5.7×10^3 1.9×10^5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
pigment red 254 $C_{18}H_{10}Cl_2N_2O_2$ [84632-65-5] JNNHVXMCVRYTTN-UHFFFAOYSA-N	3.4×10^9 3.9×10^6 1.9×10^{13} 2.2×10^{12}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
fenoxaprop-ethyl $C_{18}H_{16}ClNO_5$ [66441-23-4] PQKBPHSEKWERTG-UHFFFAOYSA-N	6.2×10^2		Ebert et al. (2023)	?	316
benzoylprop-ethyl $C_{18}H_{17}Cl_2NO_3$ [22212-55-1] SLCGUGMPSUYJAY-UHFFFAOYSA-N	1.2×10^4		Ebert et al. (2023)	?	739
difenoconazole $C_{19}H_{17}Cl_2N_3O_3$ [119446-68-3] BQYJATMQXGBDHF-UHFFFAOYSA-N	1.1×10^6 6.6×10^3 3.1×10^4 7.7×10^1 1.1×10^6		Duchowicz et al. (2020) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V X Q Q ?	186 567 568 165
quizalofop ethyl $C_{19}H_{17}ClN_2O_4$ [76578-14-8] OSUHJPCHFDQAIT-UHFFFAOYSA-N	9.3×10^2 9.0×10^2 4.0×10^4 1.5×10^4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 12, 165
quizalofop-p-ethyl $C_{19}H_{17}ClN_2O_4$ [100646-51-3] OSUHJPCHFDQAIT-GFCCVEGCSA-N	4.8×10^3		Ebert et al. (2023)	?	318
pyraclostrobine $C_{19}H_{18}ClN_3O_4$ [175013-18-0] HZRSNVGNWUDEFX-UHFFFAOYSA-N	1.9×10^5 1.9×10^5		MacBean (2012b) Maniere et al. (2011)	X ?	350 12, 165
pyrimidifen $C_{20}H_{28}ClN_3O_2$ [105779-78-0] ITKAIUGKVKDENI-UHFFFAOYSA-N	3.6×10^4		Ebert et al. (2023)	?	318



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Table A6.8: Chlorocarbons with nitrogen (C, H, O, N, Cl) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ponsol red violet 2rx $C_{21}H_8Cl_3NO_3$ [6373-31-5] SQAQTWYUQXFOMH-UHFFFAOYSA-N	2.4×10^{10} 4.1×10^7 9.9×10^8 4.6×10^9		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
dimethomorph $C_{21}H_{22}NO_4Cl$ [110488-70-5] QNBTYORWCCMPQP-JXAWBTAJSA-N	4.9×10^4 9.3×10^5 9.9×10^9 1.9×10^5 4.0×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015) Maniere et al. (2011) Maniere et al. (2011)	V Q Q ? ?	186 99 241, 165 241, 165
propaquizafop $C_{22}H_{22}ClN_3O_5$ [111479-05-1] FROBCXTULYFHEJ-UHFFFAOYSA-N	3.2×10^6 1.1×10^7 1.1×10^7		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 12, 165
aripiprazole $C_{23}H_{27}Cl_2N_3O_2$ [129722-12-9] CEUORZQYGODEFX-UHFFFAOYSA-N	9.9×10^{11}		HSDB (2015)	Q	99
ag-g-86814 $C_{26}H_6Cl_8N_2O_4$ [30125-47-4] ZEHOVWPIGREOPO-UHFFFAOYSA-N	1.8×10^{14} 9.7×10^{12} 1.1×10^{11} 4.1×10^{14}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
8,18-dichloro-5,15-diethyl-5,15-dihydroindolo(3,2-b:3',2'-m)triphenodioxazine $C_{34}H_{22}Cl_2N_4O_2$ [6358-30-1] CGLVZFOCZLHKOH-UHFFFAOYSA-N	8.0×10^6 1.8×10^{12} 6.2×10^6 1.0×10^{10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



A6.9 Chlorofluorocarbons (C, H, O, N, F, Cl)

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chlorofluoromethane CH ₂ FCl (R31) [593-70-4] XWCDGSDNJVCLO-UHFFFAOYSA-N	1.5×10^{-3}	2600	Wilhelm et al. (1977)	L	
	1.5×10^{-3}	2300	Boggs and Buck (1958)	M	
	1.5×10^{-3}		Duchowicz et al. (2020)	V	186
	1.5×10^{-3}		Hine and Mookerjee (1975)	V	
	1.6×10^{-3}		Yaws (2003)	X	237
	1.5×10^{-3}		Duchowicz et al. (2020)	Q	
	3.9×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.6×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-3}		Hilal et al. (2008)	Q	
	5.9×10^{-4}		Modarresi et al. (2007)	Q	67
		2600	Kühne et al. (2005)	Q	
		6.6×10^{-4}	Yao et al. (2002)	Q	229
	1.8×10^{-3}	English and Carroll (2001)	Q	230, 231	
	6.1×10^{-4}	Nirmalakhandan and Speece (1988)	Q		
	1.8×10^{-3}	Irmann (1965)	Q		
		2500	Kühne et al. (2005)	?	
	1.6×10^{-3}	Yaws (1999)	?	21	
	1.5×10^{-3}	Yaws and Yang (1992)	?	21	
chlorodifluoromethane CHF ₂ Cl (R22) [75-45-6] VOPWNXZWBVDODV-UHFFFAOYSA-N	3.5×10^{-4}	2600	Burkholder et al. (2019)	L	
	3.2×10^{-4}	2700	Burkholder et al. (2019)	L	70
	3.5×10^{-4}	2600	Burkholder et al. (2015)	L	
	3.2×10^{-4}	2700	Burkholder et al. (2015)	L	70
	3.4×10^{-4}	3400	Sander et al. (2011)	L	1
	3.4×10^{-4}	3400	Wilhelm et al. (1977)	L	
	2.9×10^{-4}	3100	Ooki and Yokouchi (2011)	M	70
	3.4×10^{-4}	3000	Zheng et al. (1997)	M	740
	3.5×10^{-4}	3100	Maaßen (1995)	M	741
	3.5×10^{-4}	3000	Reichl (1995)	M	742
	1.7×10^{-4}	3500	Chang and Criddle (1995)	M	743
	3.5×10^{-4}	2600	Boggs and Buck (1958)	M	
	3.3×10^{-4}		Mackay et al. (2006b)	V	
	3.3×10^{-4}		Mackay et al. (1993)	V	
	3.3×10^{-4}	3600	McLinden (1989)	V	744, 745
	3.4×10^{-4}		Hine and Mookerjee (1975)	V	
	3.2×10^{-4}		Irmann (1965)	V	
	3.3×10^{-4}		Yaws (2003)	X	237
		Kanakidou et al. (1995)	C	746	
	3.1×10^{-4}	Hayer et al. (2022)	Q	20	
	3.4×10^{-4}	3100	Li et al. (2019)	Q	1
	1.4×10^{-4}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243



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Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-5}		Raventos-Duran et al. (2010)	Q	245
	3.7×10^{-4}		Gharagheizi et al. (2010)	Q	246
	6.0×10^{-4}		Hilal et al. (2008)	Q	
	1.9×10^{-4}		Modarresi et al. (2007)	Q	67
		2600	Kühne et al. (2005)	Q	
	3.4×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	8.4×10^{-4}		English and Carroll (2001)	Q	230, 231
	1.0×10^{-4}		Katritzky et al. (1998)	Q	
	4.0×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	3.5×10^{-4}		Irmann (1965)	Q	
		3000	Kühne et al. (2005)	?	
	3.3×10^{-4}		Yaws (1999)	?	21
	2.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	3.3×10^{-4}		Yaws and Yang (1992)	?	21
dichlorofluoromethane CHFC ₂ (R21) [75-43-4] UMNKXPULJLSU-UHFFFAOYSA-N	9.1×10^{-4}		HSDB (2015)	V	
	1.8×10^{-3}		Mackay et al. (1993)	V	
	6.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-3}		Hilal et al. (2008)	Q	
	5.9×10^{-4}		Modarresi et al. (2007)	Q	67
	9.2×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	1.5×10^{-3}		Yao et al. (2002)	Q	229
	7.2×10^{-4}		Katritzky et al. (1998)	Q	
	1.9×10^{-3}		Yaws (1999)	?	21
	3.8×10^{-5}		Mackay et al. (1993)	?	
	1.9×10^{-3}		Yaws and Yang (1992)	?	21
chlorotrifluoromethane CF ₃ Cl (R13) [75-72-9] AFYPFACVUDMOHA-UHFFFAOYSA-N	9.9×10^{-6}	1700	Burkholder et al. (2019)	L	747
	8.0×10^{-6}	1500	Burkholder et al. (2019)	L	70
	9.9×10^{-6}	1700	Burkholder et al. (2015)	L	748
	8.0×10^{-6}	1500	Burkholder et al. (2015)	L	70
	9.9×10^{-6}	1700	Sander et al. (2011)	L	749
	9.3×10^{-6}	1600	Wilhelm et al. (1977)	L	
	8.9×10^{-6}	1900	Reichl (1995)	M	750
	9.0×10^{-6}	2100	Scharlin and Battino (1995)	M	751
	9.0×10^{-6}	2100	Scharlin and Battino (1994)	M	752
	7.8×10^{-6}		Park et al. (1982)	M	
	1.5×10^{-4}		Mackay et al. (1993)	V	
	5.7×10^{-6}		Hine and Mookerjee (1975)	V	
	8.8×10^{-6}		Yaws (2003)	X	237
	7.2×10^{-6}		Hilal et al. (2008)	C	
	5.7×10^{-6}		Irmann (1965)	C	
	8.3×10^{-6}		Hayer et al. (2022)	Q	20
	6.4×10^{-6}		Keshavarz et al. (2022)	Q	
	4.0×10^{-5}		Duchowicz et al. (2020)	Q	
	2.3×10^{-5}		Gharagheizi et al. (2012)	Q	
	6.9×10^{-6}		Gharagheizi et al. (2010)	Q	246



Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.6×10^{-5}		Hilal et al. (2008)	Q	
	2.1×10^{-5}	2600	Modarresi et al. (2007)	Q	67
	7.7×10^{-6}		Kühne et al. (2005)	Q	
	6.7×10^{-7}		Yaffe et al. (2003)	Q	248, 249
	1.4×10^{-5}		Katritzky et al. (1998)	Q	
	5.1×10^{-6}		Nirmalakhandan and Speece (1988)	Q	
	7.2×10^{-6}	2000	Irmann (1965)	Q	
	8.8×10^{-6}		Duchowicz et al. (2020)	?	185, 21
	8.7×10^{-6}		Kühne et al. (2005)	?	
			Yaws (1999)	?	21
			Yaws and Yang (1992)	?	21
dichlorodifluoromethane CF ₂ Cl ₂ (R12) [75-71-8] PXBRQCKWGAHEHS-UHFFFAOYSA-N	3.0×10^{-5}	3500	Burkholder et al. (2019)	L	
	2.6×10^{-5}	2100	Burkholder et al. (2019)	L	70
	3.0×10^{-5}	3500	Burkholder et al. (2015)	L	
	2.6×10^{-5}	2100	Burkholder et al. (2015)	L	70
	3.1×10^{-5}	3200	Brockbank (2013)	L	1
	3.0×10^{-5}	3400	Warneck and Williams (2012)	L	
	3.0×10^{-5}	3500	Sander et al. (2011)	L	
	3.0×10^{-5}	3500	Sander et al. (2006)	L	
	3.1×10^{-5}	3500	Staudinger and Roberts (2001)	L	
	2.1×10^{-5}	1800	Wilhelm et al. (1977)	L	
	1.3×10^{-4}	5500	Hiatt (2013)	M	
	3.0×10^{-5}	3000	Reichl (1995)	M	753
	2.9×10^{-5}	2900	Scharlin and Battino (1995)	M	754
	2.9×10^{-5}	2900	Scharlin and Battino (1994)	M	755
	3.1×10^{-5}	3500	Munz and Roberts (1987)	M	
	2.9×10^{-5}	3200	Warner and Weiss (1985)	M	
	2.3×10^{-5}	3400	Wisegarver and Cline (1985)	M	70
	2.9×10^{-5}		Park et al. (1982)	M	
	2.5×10^{-5}		Pearson and McConnell (1975)	M	649, 12
	2.4×10^{-5}		Mackay et al. (2006b)	V	
	2.4×10^{-5}		Mackay et al. (1993)	V	
	2.3×10^{-5}		Mackay and Shiu (1981)	V	
	2.3×10^{-5}		Hine and Mookerjee (1975)	V	
	2.5×10^{-5}		Yaws (2003)	X	237
	3.5×10^{-6}	-210	Goldstein (1982)	X	298
	3.6×10^{-5}		Hilal et al. (2008)	C	
	6.4×10^{-6}		Ryan et al. (1988)	C	
	2.3×10^{-5}		Irmann (1965)	C	
	2.4×10^{-5}		Hayer et al. (2022)	Q	20
	1.9×10^{-5}		Keshavarz et al. (2022)	Q	
	1.1×10^{-4}		Duchowicz et al. (2020)	Q	184
	2.8×10^{-5}	3300	Li et al. (2019)	Q	1
	1.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.4×10^{-5}		Gharagheizi et al. (2010)	Q	246
	5.4×10^{-5}		Hilal et al. (2008)	Q	
	7.7×10^{-5}		Modarresi et al. (2007)	Q	67



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Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
		3000	Kühne et al. (2005)	Q	
	2.5×10^{-5}		Yaffe et al. (2003)	Q	248, 249
	1.1×10^{-5}		Katritzky et al. (1998)	Q	
	4.7×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	2.0×10^{-5}		Irmann (1965)	Q	
	2.9×10^{-5}		Duchowicz et al. (2020)	?	185, 21
		3400	Kühne et al. (2005)	?	
	2.5×10^{-5}		Yaws (1999)	?	21
	2.3×10^{-5}		Abraham and Weathersby (1994)	?	21
	2.5×10^{-5}		Yaws and Yang (1992)	?	21
trichlorofluoromethane CFC ₃ (R11) [75-69-4] CYRMSUTZVYGINF-UHFFFAOYSA-N	1.1×10^{-4}	3300	Burkholder et al. (2019)	L	
	7.3×10^{-5}	3900	Burkholder et al. (2019)	L	70
	1.1×10^{-4}	3300	Burkholder et al. (2015)	L	
	7.3×10^{-5}	3900	Burkholder et al. (2015)	L	70
	1.0×10^{-4}	3400	Brockbank (2013)	L	1
	1.1×10^{-4}	3400	Warneck and Williams (2012)	L	
	1.1×10^{-4}	3300	Sander et al. (2011)	L	
	1.1×10^{-4}	3300	Sander et al. (2006)	L	
	1.1×10^{-4}	3300	Staudinger and Roberts (2001)	L	
	1.0×10^{-4}	3100	Staudinger and Roberts (1996)	L	
	2.8×10^{-4}	5100	Hiatt (2013)	M	
	6.0×10^{-5}	4900	Ooki and Yokouchi (2011)	M	70
	1.0×10^{-4}	3700	Maaßen (1995)	M	756
	1.5×10^{-4}	3700	Reichl (1995)	M	757
	9.8×10^{-5}	3500	Ashworth et al. (1988)	M	278
	1.0×10^{-4}	3600	Warner and Weiss (1985)	M	
	7.8×10^{-5}	3900	Wisegarver and Cline (1985)	M	70
	1.1×10^{-4}	2700	Hunter-Smith et al. (1983)	M	658
	1.1×10^{-4}		Park et al. (1982)	M	
	1.7×10^{-4}		Warner et al. (1980)	M	
	1.1×10^{-4}	2100	Balls (1980)	M	
	1.2×10^{-5}		Pearson and McConnell (1975)	M	649, 12
	7.8×10^{-5}		Mackay et al. (2006b)	V	
	9.9×10^{-5}	6100	Fogg and Sangster (2003)	V	
	7.8×10^{-5}		Mackay et al. (1993)	V	
	9.0×10^{-5}		Yoshida et al. (1983)	V	
	9.0×10^{-5}		Mackay and Shiu (1981)	V	
	9.5×10^{-5}		Warner et al. (1980)	V	
	9.8×10^{-5}		Irmann (1965)	V	
	8.0×10^{-5}		Yaws (2003)	X	237, 38
	1.7×10^{-4}	730	Goldstein (1982)	X	298
	1.0×10^{-4}		Hilal et al. (2008)	C	
	1.7×10^{-4}		Ryan et al. (1988)	C	
	1.7×10^{-4}		Shen (1982)	C	
	8.1×10^{-5}		Liss and Slater (1974)	C	
	9.4×10^{-5}		Hayer et al. (2022)	Q	20
	5.9×10^{-5}		Keshavarz et al. (2022)	Q	



Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.7×10^{-4}		Duchowicz et al. (2020)	Q	299
	6.5×10^{-4}		Gharagheizi et al. (2012)	Q	
	8.4×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-4}		Hilal et al. (2008)	Q	
	2.5×10^{-4}		Modarresi et al. (2007)	Q	67
		3300	Kühne et al. (2005)	Q	
	1.1×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	8.6×10^{-5}		Katritzky et al. (1998)	Q	
	8.6×10^{-5}		Irmann (1965)	Q	
	1.0×10^{-4}		Duchowicz et al. (2020)	?	185, 21
	9.8×10^{-5}		Mackay et al. (2006b)	?	
		3800	Kühne et al. (2005)	?	
	8.1×10^{-5}		Yaws (1999)	?	21, 38
	8.2×10^{-5}		Abraham and Weathersby (1994)	?	21
	9.8×10^{-5}		Mackay et al. (1993)	?	
	8.1×10^{-5}		Yaws and Yang (1992)	?	21
1,1,1,2-tetrachlorodifluoroethane $\text{C}_2\text{Cl}_4\text{F}_2$ [76-11-9] SLGOCMATMKJCE-UHFFFAOYSA-N	6.1×10^{-5}		Duchowicz et al. (2020)	V	186
	6.2×10^{-5}		HSDB (2015)	V	
	7.3×10^{-4}		Duchowicz et al. (2020)	Q	
	5.1×10^{-4}		Hilal et al. (2008)	Q	
	2.8×10^{-4}		Modarresi et al. (2007)	Q	67
	2.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	3.2×10^{-5}		Katritzky et al. (1998)	Q	
1,1,2,2-tetrachlorodifluoroethane $\text{C}_2\text{F}_2\text{Cl}_4$ (R112) [76-12-0] UGCSPKPEHQEOSR-UHFFFAOYSA-N	9.0×10^{-5}		HSDB (2015)	V	
	1.0×10^{-4}		Hine and Mookerjee (1975)	V	
	7.9×10^{-5}		Yaws (2003)	X	237
	2.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	7.1×10^{-5}		Gharagheizi et al. (2010)	Q	246
	5.1×10^{-4}		Hilal et al. (2008)	Q	
	3.2×10^{-4}		Modarresi et al. (2007)	Q	67
	1.1×10^{-4}		Yao et al. (2002)	Q	229
	7.9×10^{-5}		Yaws (1999)	?	21
1,1,1-trichloro-2,2,2-trifluoroethane $\text{C}_2\text{F}_3\text{Cl}_3$ (R113a) [354-58-5] BOSAWIQFTJIYIS-UHFFFAOYSA-N	3.4×10^{-5}	3200	Burkholder et al. (2019)	L	
	3.4×10^{-5}	3200	Burkholder et al. (2015)	L	
	3.7×10^{-5}		HSDB (2015)	Q	99
	3.7×10^{-5}		Zhang et al. (2010)	Q	287, 288
	2.1×10^{-4}		Zhang et al. (2010)	Q	287, 289
	5.8×10^{-5}		Zhang et al. (2010)	Q	287, 290
	3.0×10^{-5}		Zhang et al. (2010)	Q	287, 291



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Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,2-trichloro-1,2,2-trifluoroethane $\text{C}_2\text{F}_3\text{Cl}_3$ (R113) [76-13-1] AJDIZQLSFPQPEY-UHFFFAOYSA-N	2.9×10^{-5}	4100	Brockbank (2013)	L	1
	2.0×10^{-4}	5700	Hiatt (2013)	M	
	2.9×10^{-5}	4300	Dewulf et al. (1999)	M	
	2.9×10^{-5}	4000	Bu and Warner (1995)	M	758
	2.8×10^{-5}	6500	Reichl (1995)	M	759
	3.4×10^{-5}	3200	Ashworth et al. (1988)	M	278
	1.9×10^{-5}		HSDB (2015)	V	
			Mackay et al. (2006b)	V	683
	8.8×10^{-6}		Mackay et al. (1993)	V	
	2.0×10^{-5}		Hine and Mookerjee (1975)	V	
	2.0×10^{-5}		Yaws (2003)	X	237
	7.0×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-5}		Gharagheizi et al. (2010)	Q	246
	1.8×10^{-4}		Hilal et al. (2008)	Q	
	1.1×10^{-4}		Modarresi et al. (2007)	Q	67
		3700	Kühne et al. (2005)	Q	
	3.1×10^{-5}		Mackay et al. (2006b)	?	
		3800	Kühne et al. (2005)	?	
	2.1×10^{-5}		Yaws (1999)	?	21
	3.1×10^{-5}		Mackay et al. (1993)	?	
	2.0×10^{-5}		Yaws and Yang (1992)	?	21
	2.0×10^{-5}		Abraham et al. (1990)	?	
1,1-dichlorotetrafluoroethane $\text{C}_2\text{F}_4\text{Cl}_2$ (R114a) [374-07-2] BAMUEXIPKSRBTS-UHFFFAOYSA-N	8.2×10^{-6}		HSDB (2015)	V	
	5.8×10^{-6}		Hine and Mookerjee (1975)	V	
	7.5×10^{-6}		Hilal et al. (2008)	C	
	5.8×10^{-6}		Irmann (1965)	C	294
	8.8×10^{-5}		Hilal et al. (2008)	Q	
	6.6×10^{-6}		Irmann (1965)	Q	
1,2-dichlorotetrafluoroethane $\text{C}_2\text{F}_4\text{Cl}_2$ (R114) [76-14-2] DDMOUSALMHHKOS-UHFFFAOYSA-N	9.0×10^{-6}	2800	Reichl (1995)	M	760
	7.9×10^{-6}		Mackay et al. (1993)	V	
	8.0×10^{-6}		Hine and Mookerjee (1975)	V	
	8.1×10^{-6}		Yaws (2003)	X	237
	8.1×10^{-6}		Irmann (1965)	C	12
	7.1×10^{-4}		Hayer et al. (2022)	Q	20
	1.8×10^{-4}		Gharagheizi et al. (2012)	Q	
	8.1×10^{-6}		Gharagheizi et al. (2010)	Q	246
	8.4×10^{-5}		Hilal et al. (2008)	Q	
	2.8×10^{-5}		Modarresi et al. (2007)	Q	67
		3300	Kühne et al. (2005)	Q	
	1.1×10^{-4}		Yao et al. (2002)	Q	229
	6.6×10^{-6}		Irmann (1965)	Q	
		2700	Kühne et al. (2005)	?	
	8.2×10^{-6}		Yaws (1999)	?	21
	7.9×10^{-6}		Abraham and Weathersby (1994)	?	21
	8.1×10^{-6}		Yaws and Yang (1992)	?	21



Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chloropentafluoroethane $\text{C}_2\text{F}_5\text{Cl}$ (R115) [76-15-3] RfCAUADVODFSLZ-UHFFFAOYSA-N	3.4×10^{-6}	2800	Wilhelm et al. (1977)	L	
	3.1×10^{-6}	2100	Reichl (1995)	M	761
	1.8×10^{-6}		Duchowicz et al. (2020)	V	186
	1.8×10^{-6}		HSDB (2015)	V	
	3.8×10^{-6}		Mackay et al. (1993)	V	
	3.7×10^{-6}		Meylan and Howard (1991)	V	
	3.2×10^{-6}		Hine and Mookerjee (1975)	V	
	3.8×10^{-6}		Yaws (2003)	X	237
	3.2×10^{-6}		Irmann (1965)	C	
	3.1×10^{-6}		Hayer et al. (2022)	Q	20
	6.5×10^{-5}		Duchowicz et al. (2020)	Q	
	4.9×10^{-5}		Gharagheizi et al. (2012)	Q	
	2.5×10^{-6}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-5}		Hilal et al. (2008)	Q	
	7.6×10^{-6}		Modarresi et al. (2007)	Q	67
		2900	Kühne et al. (2005)	Q	
	2.4×10^{-5}		Yao et al. (2002)	Q	229
	1.2×10^{-6}		Meylan and Howard (1991)	Q	
	2.1×10^{-6}		Irmann (1965)	Q	
		2000	Kühne et al. (2005)	?	
	3.8×10^{-6}		Yaws (1999)	?	21
	3.8×10^{-6}		Yaws and Yang (1992)	?	21
1,1,2,2-tetrachloro-1-fluoroethane $\text{C}_2\text{HCl}_4\text{F}$ [354-14-3] LUBCGHUOCJOIJA-UHFFFAOYSA-N	3.3×10^{-3}		HSDB (2015)	Q	99
1,1-dichloro-1,2,2-trifluoroethane $\text{C}_2\text{HCl}_2\text{F}_3$ [812-04-4] AFTSHZRGGNMLHC-UHFFFAOYSA-N	1.0×10^{-4}		HSDB (2015)	Q	99
1,2-dichloro-1,1,2-trifluoroethane $\text{C}_2\text{HCl}_2\text{F}_3$ [354-23-4] YMRMDGSNYHCUCL-UHFFFAOYSA-N	1.0×10^{-4}		HSDB (2015)	Q	99
2,2-dichloro-1,1,1-trifluoroethane $\text{C}_2\text{HF}_3\text{Cl}_2$ (R123) [306-83-2] OHMHGWPWCHTMQE-UHFFFAOYSA-N	2.3×10^{-4}	2400	Kutsuna (2013)	M	
	3.2×10^{-4}	3100	Chang and Criddle (1995)	M	762
	2.8×10^{-4}	2600	McLinden (1989)	V	
	5.0×10^{-4}		Hilal et al. (2008)	Q	
	1.8×10^{-4}		Modarresi et al. (2007)	Q	67
1-chloro-1,1,2,2-tetrafluoroethane C_2HClF_4 [354-25-6] JQZFYIGAYWLRCC-UHFFFAOYSA-N	1.8×10^{-5}		HSDB (2015)	Q	99



Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-4}		Irmann (1965)	Q	
1-chloro-1,2-difluoroethane $\text{C}_2\text{H}_3\text{ClF}_2$ [338-64-7] UOVSDUIHNGNMBZ-UHFFFAOYSA-N		2900 3200	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
1-chloro-1,1,2-trifluoroethane $\text{C}_2\text{H}_2\text{F}_3\text{Cl}$ (R133b) [421-04-5] HILNUELUBMBJQ-UHFFFAOYSA-N		2900 3500	Kühne et al. (2005) Kühne et al. (2005)	Q ?	
2-chloro-1,1-difluoroethane C_2HClF_2 (R1122) [359-10-4] HTHNTJCVPNKCPZ-UHFFFAOYSA-N	1.7×10^{-4} 1.7×10^{-4} 1.9×10^{-4}	3300 3300 2800 3300	Maaßen (1995) Reichl (1995) Hayer et al. (2022) Kühne et al. (2005) Kühne et al. (2005)	M M Q Q ?	771 772 20
	1.1×10^{-4}		Abraham and Weathersby (1994)	?	21
chlorotrifluoroethene C_2ClF_3 [79-38-9] UUAGAQQZIEFAH-UHFFFAOYSA-N	3.2×10^{-5}		HSDB (2015)	Q	99
3,3-dichloro-1,1,1,2,2-pentafluoropropane $\text{CF}_3\text{CF}_2\text{CHCl}_2$ (R225ca) [422-56-0] COAUHYBSXMIJDK-UHFFFAOYSA-N	9.8×10^{-5} 1.5×10^{-5} 8.4×10^{-4} 9.0×10^{-5} 2.0×10^{-5} 3.0×10^{-4} 1.1×10^{-4} 3.9×10^{-5} 2.0×10^{-5}	3500	Kutsuna (2013) Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Duchowicz et al. (2020)	M Q Q Q Q Q Q Q ?	99 287, 288 287, 289 287, 291 185, 21
1,3-dichloro-1,1,2,2,3-pentafluoropropane $\text{CClF}_2\text{CF}_2\text{CHClF}$ (R225cb) [507-55-1] UJIGKESMIPTWJH-UHFFFAOYSA-N	1.1×10^{-4} 3.6×10^{-6}	3100	Kutsuna (2013) HSDB (2015)	M Q	99
1-chloro-2-fluorobenzene $\text{C}_6\text{H}_4\text{ClF}$ [348-51-6] ZCJAYDKWZAWMPR-UHFFFAOYSA-N	3.1×10^{-3}		Ebert et al. (2023)	?	316



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Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-chloro-3-fluorobenzene C_6H_4ClF [625-98-9] VZHJWZEOCBKRA-UHFFFAOYSA-N	1.6×10^{-3}		Ebert et al. (2023)	?	316
1-chloro-3-(trifluoromethyl)benzene $C_7H_4ClF_3$ [98-15-7] YTCGOUNVIAWCMG-UHFFFAOYSA-N	2.9×10^{-4}		Zhang et al. (2010)	Q	287, 288
	2.8×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.4×10^{-3}		Zhang et al. (2010)	Q	287, 290
	1.4×10^{-4}		Zhang et al. (2010)	Q	287, 291
1-chloro-4-(trifluoromethyl)benzene $C_7H_4ClF_3$ [98-56-6] QULYNCCPRWKEMF-UHFFFAOYSA-N	2.8×10^{-4}		HSDB (2015)	Q	99
	2.9×10^{-4}		Zhang et al. (2010)	Q	287, 288
	3.1×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.5×10^{-3}		Zhang et al. (2010)	Q	287, 290
	1.4×10^{-4}		Zhang et al. (2010)	Q	287, 291
3-chloro-4-fluorobenzotrifluoride $C_7H_3ClF_4$ [78068-85-6] BKHVEYHSOXVAOP-UHFFFAOYSA-N	2.4×10^{-4}		Zhang et al. (2010)	Q	287, 288
	2.5×10^{-3}		Zhang et al. (2010)	Q	287, 289
	8.6×10^{-4}		Zhang et al. (2010)	Q	287, 290
	1.1×10^{-4}		Zhang et al. (2010)	Q	287, 291
3,4-dichlorobenzotrifluoride $C_7H_3Cl_2F_3$ [328-84-7] XILPLWOGHPSJBK-UHFFFAOYSA-N	3.8×10^{-4}		HSDB (2015)	Q	99
	3.9×10^{-4}		Zhang et al. (2010)	Q	287, 288
	5.3×10^{-3}		Zhang et al. (2010)	Q	287, 289
	2.0×10^{-3}		Zhang et al. (2010)	Q	287, 290
	2.3×10^{-4}		Zhang et al. (2010)	Q	287, 291
chlorodifluoroethanoic acid $CF_2ClCOOH$ (chlorodifluoroacetic acid) [76-04-0] OAWAZQITIZDJRB-UHFFFAOYSA-N	2.5×10^2	10000	Burkholder et al. (2019)	L	
	2.5×10^2	10000	Burkholder et al. (2015)	L	
	2.5×10^2	10000	Sander et al. (2011)	L	
	2.4×10^2	10000	Bowden et al. (1998a)	M	
	5.6×10^2		Keshavarz et al. (2022)	Q	
	4.4×10^1		Duchowicz et al. (2020)	Q	
	9.9×10^1		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-1}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^1		Raventos-Duran et al. (2010)	Q	245
	2.4×10^2		Duchowicz et al. (2020)	?	185, 21
carbonic chloride fluoride $COFCl$ [353-49-1] OXVVNXMNLYYMOL-UHFFFAOYSA-N	9.9×10^{-2}		George et al. (1993)	X	627



Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
trifluoroacetylchloride CF_3COCl [354-32-5] PNQBEPDZQUOCNY-UHFFFAOYSA-N	2.0×10^{-2} 2.7×10^{-3} 2.0×10^{-2} 1.2×10^{-2} 9.3×10^{-3} 2.2×10^{-2}		Mirabel et al. (1996) De Bruyn et al. (1995a) George et al. (1994b) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	M M M Q Q ?	449 630 299 185, 21
2,2-dichloro-1,1-difluoro-1-methoxyethane $\text{C}_3\text{H}_4\text{Cl}_2\text{F}_2\text{O}$ (methoxyflurane) [76-38-0] RFKMCNOHBTXSMU-UHFFFAOYSA-N	2.9×10^{-3} 1.7×10^{-3} 3.0×10^{-3} 1.7×10^{-3} 2.9×10^{-3} 1.8×10^{-3} 2.9×10^{-2} 1.7×10^{-2} 4.1×10^{-3} 1.8×10^{-2} 2.7×10^{-3} 2.7×10^{-3} 1.7×10^{-3} 2.7×10^{-3}	4100 4300 3600 4800 4000	Fogg and Sangster (2003) Steward et al. (1973) Allott et al. (1973) Lerman et al. (1983) Smith et al. (1981b) Stoelting and Longshore (1972) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) HSDB (2015) Kühne et al. (2005) Abraham and Weathersby (1994) Abraham et al. (1990)	L L M M M Q Q Q Q Q ? ? ? ? ?	14 14 773 14 67 185, 21 419 21
2-(chlorodifluoromethoxy)-1,1,1-trifluoroethane $\text{C}_3\text{H}_2\text{ClF}_5\text{O}$ [33018-78-9] HPDPVPUPXPBZBOJ-UHFFFAOYSA-N	1.7×10^{-5}		Ebert et al. (2023)	?	365
2-(chlorofluoromethoxy)-1,1,1,2-tetrafluoroethane $\text{C}_3\text{H}_2\text{ClF}_5\text{O}$ [56885-28-0] GGEBMRHBGQLKJGJ-UHFFFAOYSA-N	2.2×10^{-4}		Ebert et al. (2023)	?	365
1-chloro-2,2,2-trifluoroethyl difluoromethyl ether $\text{C}_3\text{H}_2\text{ClF}_5\text{O}$ (forane; isoflurane) [26675-46-7] PIWKPBKJCKXDKJR-UHFFFAOYSA-N	2.4×10^{-4} 2.4×10^{-4} 2.4×10^{-4} 2.4×10^{-4} 4.8×10^{-4} 5.7×10^{-4} 1.2×10^{-3} 4.2×10^{-4} 1.2×10^{-3} 3.8×10^{-4}	5300 4400	Fogg and Sangster (2003) Steward et al. (1973) Allott et al. (1973) Lerman et al. (1983) Smith et al. (1981b) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Goss (2005)	L L L M M Q Q Q Q Q Q	14 14 14 184 67



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Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.4×10^{-4} 3.4×10^{-4}	4500	Duchowicz et al. (2020)	?	185, 21
			HSDB (2015)	?	419
	2.4×10^{-4}		Kühne et al. (2005)	?	
	3.4×10^{-4}		Abraham and Weathersby (1994)	?	21
			Abraham et al. (1990)	?	
2-chloro-1,1,2-trifluoroethyl difluoromethyl ether $C_3H_2ClF_5O$ (enflurane) [13838-16-9] JPGQOUSTVILISH-UHFFFAOYSA-N	3.0×10^{-4}		Fogg and Sangster (2003)	L	
	3.0×10^{-4}		Allott et al. (1973)	L	14
	2.7×10^{-4}		Guitart et al. (1989)	M	14
	2.9×10^{-4}		Lerman et al. (1983)	M	14
	1.3×10^{-3}		HSDB (2015)	V	
	3.0×10^{-4}		Steward et al. (1973)	C	14
	6.9×10^{-4}		Hilal et al. (2008)	Q	
	3.1×10^{-4}		Abraham and Weathersby (1994)	?	21
3-[2-chloro-4-(trifluoromethyl)phenoxy]benzoic acid $C_{14}H_8ClF_3O_3$ [63734-62-3] ONKRUAQFUNKYAX-UHFFFAOYSA-N	6.4×10^2		Zhang et al. (2010)	Q	287, 288
	3.3×10^2		Zhang et al. (2010)	Q	287, 289
	2.1×10^5		Zhang et al. (2010)	Q	287, 290
	2.9×10^3		Zhang et al. (2010)	Q	287, 291
3-(2-chloro-4-(trifluoromethyl)phenoxy)phenyl acetate $C_{15}H_{10}ClF_3O_3$ [50594-77-9] KNFRYRRZMRETJX-UHFFFAOYSA-N	1.1		Zhang et al. (2010)	Q	287, 288
	2.4×10^1		Zhang et al. (2010)	Q	287, 289
	2.9×10^1		Zhang et al. (2010)	Q	287, 290
	3.6		Zhang et al. (2010)	Q	287, 291
transfluthrin $C_{15}H_{12}Cl_2F_4O_2$ [118712-89-3] DDVNRFNDOPPVQJ-HQJQLMTSA-N	2.2×10^{-1}		Ebert et al. (2023)	?	318
tefluthrin $C_{17}H_{14}O_2ClF_7$ [79538-32-2] ZFHGXWPMULPQSE-GPCIZFCYSA-N	6.2×10^{-3} 5.0×10^{-3}		HSDB (2015)	V	
			Maniere et al. (2011)	?	12, 165
clobetasol $C_{22}H_{28}ClFO_4$ [25122-41-2] FCSHDIVRCWTZOX-DVTGEIKXSA-N	6.2×10^4		HSDB (2015)	Q	99
flufenprox $C_{24}H_{22}ClF_3O_3$ [107713-58-6] RURQAJURNMSSK-UHFFFAOYSA-N	2.1×10^1		Ebert et al. (2023)	?	318



Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
EINECS 273-236-7 $\text{C}_{28}\text{H}_{33}\text{Cl}_3\text{F}_6\text{O}_{11}$ [68954-01-8] KVXVLCBFSKMBAR-UHFFFAOYSA-N	1.5×10^{14} 6.9×10^{18} 2.3×10^{12} 1.6×10^{15}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,5-dichloro-2,4,6-trifluoropyridine $\text{C}_5\text{Cl}_2\text{F}_3\text{N}$ [1737-93-5] PKSORSNCSXBOT-UHFFFAOYSA-N	1.6 7.7×10^{-4} 1.6×10^{-3} 2.7×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
chlorodifluoronitrooxymethane $\text{CClF}_2\text{OONO}_2$ [70490-95-8] HWHZTSGXJYKIPK-UHFFFAOYSA-N	2.9×10^{-2}	5900	Kanakidou et al. (1995)	E	774
1-chloro-2-nitro-4-(trifluoromethyl)-benzene $\text{C}_7\text{H}_3\text{ClF}_3\text{NO}_2$ [121-17-5] TZGFQIXRVUHDLE-UHFFFAOYSA-N	7.2×10^{-2} 1.2×10^{-1} 1.1×10^{-1} 1.0×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-chloro-1,3-dinitro-5-(trifluoromethyl)-benzene $\text{C}_7\text{H}_2\text{ClF}_3\text{N}_2\text{O}_4$ [393-75-9] HFHAVERNVSNSH-UHFFFAOYSA-N	1.8×10^1 2.8 1.7×10^{-1} 9.0×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
fluroxyppyr $\text{C}_7\text{H}_5\text{Cl}_2\text{FN}_2\text{O}_3$ [69377-81-7] MEFQWPUMEMWTJP-UHFFFAOYSA-N	5.7×10^5 5.9×10^9		HSDB (2015) Maniere et al. (2011)	V ?	 12, 165
fluoroimide $\text{C}_{10}\text{H}_4\text{Cl}_2\text{FNO}_2$ [41205-21-4] IPENDKRRWFURRE-UHFFFAOYSA-N	7.7×10^{-1}		Ebert et al. (2023)	?	318
norflurazon $\text{C}_{12}\text{H}_9\text{ClF}_3\text{N}_3\text{O}$ [27314-13-2] NVGPFQZYNLDU-UHFFFAOYSA-N	2.9×10^4 2.9×10^4 5.5×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
fluchloralin $\text{C}_{12}\text{H}_{13}\text{ClF}_3\text{N}_3\text{O}_4$ [33245-39-5] MNFMIIVPXOGUMX-UHFFFAOYSA-N	6.6×10^{-1} 7.4×10^{-1}		HSDB (2015) Mackay et al. (2006d)	V V	
flurochloridone $\text{C}_{12}\text{H}_{10}\text{Cl}_2\text{F}_3\text{NO}$ [61213-25-0] QQZCSNDVOWYALR-UHFFFAOYSA-N	2.6×10^2 8.2×10^{-1} 4.2×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 165



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Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
flupyradifurone $C_{12}H_{11}ClF_2N_2O_2$ [951659-40-8] QOITYTRGFOFZKNKF-UHFFFAOYSA-N	6.5×10^6		Ebert et al. (2023)	?	318
fluxofenim $C_{12}H_{11}NO_3ClF_3$ [88485-37-4] UKSLKNUCVPZQQQ-GZTJUZNSA-N	2.6 5.8×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
fluazinam $C_{13}H_4Cl_2F_6N_4O_4$ [79622-59-6] UZCGKGPEKUCDTF-UHFFFAOYSA-N	3.9×10^{-2} 3.9×10^{-2}		HSDB (2015) Maniere et al. (2011)	V ?	12, 165
5-(2-chloro-4-(trifluoromethyl)phenoxy)-2-nitrophenol $C_{13}H_7ClF_3NO_4$ [42874-63-5] WYTRKEWETULQQA-UHFFFAOYSA-N	9.9 1.1×10^3 2.3×10^6 2.3×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
florpyrauxifen $C_{13}H_8Cl_2F_2N_2O_3$ [943832-81-3] XFZUQTKDBCXPP-UHFFFAOYSA-N	3.2×10^7		Ebert et al. (2023)	?	318
tetraconazole $C_{13}H_{11}Cl_2F_4N_3O$ [112281-77-3] LQDARGUHUSPFL-UHFFFAOYSA-N	2.3×10^3 2.8×10^3		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
fluopicolide $C_{14}H_8Cl_3F_3N_2O$ [239110-15-7] GBOYJIHYACSLGN-UHFFFAOYSA-N	9.0×10^3 2.4×10^4		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
diflubenzuron $C_{14}H_9ClF_2N_2O_2$ (difluron) [35367-38-5] QQQYTWIFVNKMRW-UHFFFAOYSA-N	2.1×10^3 2.1×10^3 2.1×10^3 2.1×10^1 7.2×10^3 3.3×10^1 1.7×10^3		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V V V X Q Q ?	186 567 568 165
efavirenz $C_{14}H_9ClF_3NO_2$ [154598-52-4] XPOQHMRABVBWPR-ZDUSSCGKSA-N	1.4×10^3		HSDB (2015)	Q	99



Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
halauxifen-methyl $C_{14}H_{11}Cl_2FN_2O_3$ [943831-98-9] KDHKOPYWYOHESS-UHFFFAOYSA-N	8.1×10^5		Maniere et al. (2011)	?	241, 570, 165
	8.2×10^5		Maniere et al. (2011)	?	241, 493, 165
	8.3×10^5		Maniere et al. (2011)	?	241, 573, 165
	9.0×10^5		Maniere et al. (2011)	?	241, 165
fluroxypr-butometyl $C_{14}H_{19}Cl_2FN_2O_4$ [154486-27-8] ZKFARSBUEBZZJT-UHFFFAOYSA-N	2.4×10^3		Ebert et al. (2023)	?	318
teflubenzuron $C_{14}H_6N_2O_2Cl_2F_4$ [83121-18-0] CJDWRQLODFKPEL-UHFFFAOYSA-N	6.2×10^4		Duchowicz et al. (2020)	V	186
	2.5×10^4		Duchowicz et al. (2020)	Q	
fluroxypr-meptyl $C_{15}H_{21}Cl_2FN_2O_3$ (attain A) [81406-37-3] OLZQTUCTGLHFTQ-UHFFFAOYSA-N	3.7×10^1		Maniere et al. (2011)	?	12, 165
quinoxifen $C_{15}H_8Cl_2FNO$ [124495-18-7] WRPIRSINYZBGPK-UHFFFAOYSA-N	1.0×10^3		HSDB (2015)	Q	99
5-(2-chloro-4-(trifluoromethyl)phenoxy)-2-nitrophenyl acetate $C_{15}H_9ClF_3NO_5$ [50594-44-0] PSWSPFSDVZVVC-UHFFFAOYSA-N	2.7×10^2		Zhang et al. (2010)	Q	287, 288
	1.5×10^3		Zhang et al. (2010)	Q	287, 289
	3.7×10^4		Zhang et al. (2010)	Q	287, 290
	3.1×10^2		Zhang et al. (2010)	Q	287, 291
triflumuron $C_{15}H_{10}ClF_3N_2O_3$ [64628-44-0] XAIPTRIXGHTTNT-UHFFFAOYSA-N	1.1×10^3		Ebert et al. (2023)	?	318
oxyfluorfen $C_{15}H_{11}ClF_3NO_4$ [42874-03-3] OQMBBFQZGJFLBU-UHFFFAOYSA-N	1.2×10^1		Duchowicz et al. (2020)	V	186
	1.2×10^1		HSDB (2015)	V	
	8.3×10^1		Duchowicz et al. (2020)	Q	
	4.2×10^1		Maniere et al. (2011)	?	165
pyraflufen-ethyl $C_{15}H_{13}Cl_2F_3N_2O_4$ [129630-19-9] APTZNLHMIGJTEW-UHFFFAOYSA-N	1.2×10^4		MacBean (2012b)	X	350
	4.5×10^4		Maniere et al. (2011)	?	12, 165



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Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
<i>cis</i> -furconazole $C_{15}H_{14}Cl_2F_3N_3O_2$ [112839-32-4] ULCWZQJLFZEXCS-KGLIPLIRSA-N	3.7×10^3		Ebert et al. (2023)	?	318
carfentrazone ethyl $C_{15}H_{14}Cl_2F_3N_3O_3$ [128639-02-1] MLKCGVHFJBRCD-UHFFFAOYSA-N	3.3×10^3 3.3×10^3 1.7×10^4 6.4×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 12, 165
triflumizole $C_{15}H_{15}ClF_3N_3O$ [68694-11-1] HSMVDPGQOIQYSR-UHFFFAOYSA-N	1.9×10^5 2.5×10^7 3.7×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020)	V V Q	186
diflometorim $C_{15}H_{16}N_3OClF_2$ [130339-07-0] NEKULYKCZPJMMJ-UHFFFAOYSA-N	3.1×10^2 2.8×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
3-(2,4-dichlorophenyl)-6-fluoro-2-(1H-1,2,4-triazol-1-yl)-quinazolin-4(3H)-one $C_{16}H_8Cl_2FN_5O$ (fluquinconazole) [136426-54-5] IJJVMEJXYNXOJ-UHFFFAOYSA-N	5.6×10^8 1.4×10^5 4.8×10^5		Hilal et al. (2008) Modarresi et al. (2007) Maniere et al. (2011)	Q Q ?	 67 241, 165
hexaflumuron $C_{16}H_8Cl_2F_6N_2O_3$ [86479-06-3] RGNPBRKPHBKNKX-UHFFFAOYSA-N	9.9×10^{-1} 9.9×10^{-1} 4.3×10^4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
fluopyram $C_{16}H_{11}ClF_6N_2O$ [658066-35-4] KVDJTXBXMWJJEJ-UHFFFAOYSA-N	3.4×10^4		Maniere et al. (2011)	?	241, 165
haloxyfop-p-methyl $C_{16}H_{13}ClF_3NO_4$ [72619-32-0] MFSWTRQUCLNFOM-SECBINFHSA-N	8.3×10^2		Maniere et al. (2011)	?	241, 165
flumetralin $C_{16}H_{12}ClF_4N_3O_4$ [62924-70-3] PWNAWOCHVWERAR-UHFFFAOYSA-N	5.2 4.0×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186



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Rolf Sander: Compilation of Henry's law constants

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
haloxyfop-methyl $C_{16}H_{13}ClF_3NO_4$ [69806-40-2] MFSWTRQUCLNFOM-UHFFFAOYSA-N	3.1×10^1 3.1×10^2		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
pydiflumetofen $C_{16}H_{16}Cl_3F_2N_3O_2$ [1228284-64-7] DGOAXBPOVUPPEB-UHFFFAOYSA-N	6.6×10^3		Ebert et al. (2023)	?	318
nuarimol $C_{17}H_{12}ClFN_2O$ [63284-71-9] SAPGTCDSEBGMXCD-UHFFFAOYSA-N	1.5×10^7		MacBean (2012a)	?	
clodinafop-propargyl $C_{17}H_{13}ClFNO_4$ [105512-06-9] JBDHZKLNJAIJNC-LLVKDONJSA-N	3.6×10^3 3.5×10^3 2.4×10^3 3.6×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 241, 165
flamprop-methyl $C_{17}H_{15}ClFNO_3$ [52756-25-9] RBNIGDFIUWJJEV-UHFFFAOYSA-N	2.2×10^3		MacBean (2012a)	?	
pyridalyl $C_{18}H_{14}Cl_4F_3NO_3$ [179101-81-6] UBSUICNBYBBPFHD-UHFFFAOYSA-N	4.9×10^6		HSDB (2015)	V	
mefentrifluconazole $C_{18}H_{15}ClF_3N_3O_2$ [1417782-03-6] JERZEQUUMJNCPRJ-UHFFFAOYSA-N	6.2×10^2		Maniere et al. (2011)	?	12, 165
bixafen $C_{18}H_{12}N_3OCl_2F_3$ [581809-46-3] LDLMOOXUCMHBMZ-UHFFFAOYSA-N	2.6×10^4		Maniere et al. (2011)	?	241, 165
benzovindiflupyr $C_{18}H_{15}Cl_2F_2N_3O$ [1072957-71-1] CCCGEKHKTPTUJ-UHFFFAOYSA-N	7.7×10^5		Maniere et al. (2011)	?	241, 165
lactofen $C_{19}H_{15}ClF_3NO_7$ [77501-63-4] CONWAEURSVPLRM-UHFFFAOYSA-N	2.1×10^1 2.3×10^1 4.0×10^4		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186



Rolf Sander: Compilation of Henry's law constants

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Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
flupoxam $C_{19}H_{14}N_4O_2ClF_5$ [119126-15-7] AOQMRUTZEYVDIL-UHFFFAOYSA-N	1.1×10^2 2.7×10^7		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
flamprop-m-isopropyl $C_{19}H_{19}NO_3ClF$ [63782-90-1] IKVXBIIHQGXQRQ-CYBMUJFWSA-N	3.9×10^2 2.3×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
haloxyfop-ethoxyethyl $C_{19}H_{19}ClF_3NO_5$ [87237-48-7] MIJLZGZLQLAQCM-UHFFFAOYSA-N	3.8×10^4		Ebert et al. (2023)	?	318
chlorfluazuron $C_{20}H_9Cl_3F_5N_3O_3$ [71422-67-8] UISUNVFOGSJSKD-UHFFFAOYSA-N	8.2×10^6 1.1×10^6 3.9×10^8 2.1×10^6 5.5×10^6		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	Q Q Q Q ?	67 185, 21
fluazuron $C_{20}H_{10}N_3O_3Cl_2F_5$ [86811-58-7] YOWNVPAUWYHLQX-UHFFFAOYSA-N	$>2.3 \times 10^{10}$		MacBean (2012a)	?	
flufenoxuron $C_{21}H_{11}ClF_6N_2O_3$ [101463-69-8] RYLHNOVXKXPDIU-UHFFFAOYSA-N	3.8×10^6		HSDB (2015)	Q	99
fluoxastrobin $C_{21}H_{16}N_4O_5ClF$ [361377-29-9] UFODZBUAFNAEU-NLRVBDNBSA-N	9.0×10^6 1.0×10^7		HSDB (2015) Maniere et al. (2011)	V ?	12, 165
haloperidol $C_{21}H_{23}ClFNO_2$ [52-86-8] LNEPOXFFQSENCJ-UHFFFAOYSA-N	4.3×10^8		HSDB (2015)	Q	99
indoxacarb $C_{22}H_{17}ClF_3N_3O_7$ [173584-44-6] VBCVPMMEZGZULK-NRFANRHFSA-N	1.5×10^4 $>1.7 \times 10^4$		HSDB (2015) Maniere et al. (2011)	V ?	165
cyfluthrin $C_{22}H_{18}Cl_2FNO_3$ [68359-37-5] QQODLKZGRKWIFG-UHFFFAOYSA-N	3.4×10^2 1.1×10^1 1.7		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011)	V ? ?	12, 165 12, 165



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Rolf Sander: Compilation of Henry's law constants

Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyfluthrin I $\text{C}_{22}\text{H}_{18}\text{Cl}_2\text{FNO}_3$ [86560-92-1] QQODLKZGRKWIFG-QSFXBCCZSA-N	2.2		Ebert et al. (2023)	?	318
β -cyfluthrin (cis) $\text{C}_{22}\text{H}_{18}\text{Cl}_2\text{FNO}_3$ [86560-93-2] QQODLKZGRKWIFG-XFQXTVEOSA-N	1.4×10^2		Ebert et al. (2023)	?	365
cyfluthrin II $\text{C}_{22}\text{H}_{18}\text{Cl}_2\text{FNO}_3$ [86560-94-3] QQODLKZGRKWIFG-BPAFIMBUSAN	1.1×10^2		Ebert et al. (2023)	?	365
β -cyfluthrin (trans) $\text{C}_{22}\text{H}_{18}\text{Cl}_2\text{FNO}_3$ [86560-95-4] QQODLKZGRKWIFG-QKYXUNIQSA-N	3.6×10^1		Ebert et al. (2023)	?	365
metamifop $\text{C}_{23}\text{H}_{18}\text{N}_2\text{O}_4\text{ClF}$ [256412-89-2] ADDQHLREJDZPMT-CQSZACIVSAN	1.6×10^1		MacBean (2012a)	?	12
pyriminostrobin $\text{C}_{23}\text{H}_{18}\text{Cl}_2\text{F}_3\text{N}_3\text{O}_4$ [1257598-43-8] YYXSCUSVVALMNW-FOWTUZBSSAN	8.3×10^3		Ebert et al. (2023)	?	318
cyhalothrin $\text{C}_{23}\text{H}_{19}\text{NO}_3\text{ClF}_3$ [68085-85-8] ZXQYGBMAQZUVMIBWHPXCRDSAN	7.0×10^{-1}		HSDB (2015)	Q	99
bifenthrin $\text{C}_{23}\text{H}_{22}\text{ClF}_3\text{O}_2$ [82657-04-3] OMFRMAHOOUJSGP-UNOMPAQXSAN	9.9 9.9 9.9 2.7×10^{-1} 4.7		Duchowicz et al. (2020) HSDB (2015) Hilal et al. (2008) Duchowicz et al. (2020) Hilal et al. (2008)	V V C Q Q	186
λ -cyhalothrin $\text{C}_{23}\text{H}_{19}\text{ClF}_3\text{NO}_3$ [91465-08-6] DFVKOWFGNASVPK-QQDHXZELSAN	5.0×10^1		Maniere et al. (2011)	?	12, 165
γ -cyhalothrin $\text{C}_{23}\text{H}_{19}\text{ClF}_3\text{NO}_3$ [76703-62-3] ZXQYGBMAQZUVMIGCMPRSNUSAN	4.5×10^1		Maniere et al. (2011)	?	241, 165



Rolf Sander: Compilation of Henry's law constants

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Table A6.9: Chlorofluorocarbons (C, H, O, N, F, Cl) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
flucycloxuron $\text{C}_{25}\text{H}_{20}\text{ClF}_2\text{N}_3\text{O}_3$ [94050-52-9] PCKNFPQPGUWFHO-UQRQXUALSA-N	3.8×10^1		MacBean (2012a)	?	
τ -fluvalinate $\text{C}_{26}\text{H}_{22}\text{ClF}_3\text{N}_2\text{O}_3$ [102851-06-9] INISTDXBRIBGOC-XMMISQBUSA-N	8.3×10^3		Maniere et al. (2011)	?	165
fluvalinate $\text{C}_{26}\text{H}_{22}\text{ClF}_3\text{N}_2\text{O}_3$ [69409-94-5] INISTDXBRIBGOC-UHFFFAOYSA-N	6.6×10^2		HSDB (2015)	Q	99



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Rolf Sander: Compilation of Henry's law constants

A7 Organic species with bromine (Br)

A7.1 Bromocarbons (C, H, O, N, Br)

Table A7.1: Bromocarbons (C, H, O, N, Br)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
bromomethane	1.5×10^{-3}	3300	Burkholder et al. (2019)	L	775
CH ₃ Br	1.5×10^{-3}	3000	Burkholder et al. (2019)	L	70
(methyl bromide)	1.7×10^{-3}	3100	Burkholder et al. (2015)	L	
[74-83-9]	1.5×10^{-3}	3000	Burkholder et al. (2015)	L	70
GZUXJHMPEANEGY-UHFFFAOYSA-N	1.5×10^{-3}	3800	Brockbank (2013)	L	1
	1.7×10^{-3}	3100	Sander et al. (2011)	L	
	1.7×10^{-3}	3100	Sander et al. (2006)	L	
	1.7×10^{-3}	3100	Staudinger and Roberts (2001)	L	
	1.6×10^{-3}	3100	Wilhelm et al. (1977)	L	
	1.3×10^{-3}	2800	Hiatt (2013)	M	
	2.0×10^{-3}		Thomas et al. (2006)	M	154, 703
	1.8×10^{-3}	2500	De Bruyn and Saltzman (1997)	M	776
	1.4×10^{-3}		Gan and Yates (1996)	M	294
	1.7×10^{-3}	3400	Elliott and Rowland (1993)	M	
	1.5×10^{-3}	2600	Swain and Thornton (1962)	M	
	1.6×10^{-3}	3200	Glew and Moelwyn-Hughes (1953)	M	777
	1.6×10^{-3}		Mackay et al. (2006b)	V	
	1.6×10^{-3}		Lide and Frederikse (1995)	V	
	1.6×10^{-3}		Mackay et al. (1993)	V	
	1.9×10^{-3}		Mackay and Shiu (1981)	V	12
	1.5×10^{-3}		Hine and Mookerjee (1975)	V	
	1.5×10^{-3}		Yaws (2003)	X	237
	4.4×10^{-5}	350	Goldstein (1982)	X	298
	1.8×10^{-4}		Keshavarz et al. (2022)	Q	
	3.5×10^{-3}		Duchowicz et al. (2020)	Q	184
	5.5×10^{-4}		Wang et al. (2017)	Q	80, 238
	3.8×10^{-3}		Wang et al. (2017)	Q	80, 239
	2.3×10^{-3}		Wang et al. (2017)	Q	80, 240
	3.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.7×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.3×10^{-3}		Modarresi et al. (2007)	Q	67
		3400	Kühne et al. (2005)	Q	
	1.9×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.8×10^{-3}		Yao et al. (2002)	Q	229
	1.2×10^{-3}		English and Carroll (2001)	Q	230, 231
	9.9×10^{-5}		Katritzky et al. (1998)	Q	
	1.5×10^{-3}		Suzuki et al. (1992)	Q	232
	3.1×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	7.9×10^{-4}		Irmann (1965)	Q	
	1.3×10^{-3}		Duchowicz et al. (2020)	?	185, 21



Rolf Sander: Compilation of Henry's law constants

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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8×10^{-3}		Thomas et al. (2006)	?	154, 704
		3200	Kühne et al. (2005)	?	
	1.5×10^{-3}		Yaws (1999)	?	21
	1.7×10^{-3}		Yates and Gan (1998)	?	
	1.4×10^{-3}		Yaws and Yang (1992)	?	21
	1.6×10^{-3}		Abraham et al. (1990)	?	
dibromomethane	1.2×10^{-2}	4300	Burkholder et al. (2019)	L	1
CH ₂ Br ₂	9.0×10^{-3}	4600	Burkholder et al. (2019)	L	70
[74-95-3]	9.0×10^{-3}	4600	Burkholder et al. (2015)	L	70
FJBFPHVGVWTDIP-UHFFFAOYSA-N	1.2×10^{-2}	4300	Brockbank (2013)	L	1, 778
	3.1×10^{-2}		Mackay and Shiu (1981)	L	
	1.2×10^{-2}	5000	Hiatt (2013)	M	
	8.9×10^{-3}	4400	Ooki and Yokouchi (2011)	M	70
	1.4×10^{-2}		Dohnal and Hovorka (1999)	M	12
	1.5×10^{-2}		Hovorka and Dohnal (1997)	M	12
	1.2×10^{-2}	4900	Kondoh and Nakajima (1997)	M	
	9.7×10^{-3}	3800	Moore et al. (1995)	M	779, 70
	1.1×10^{-2}	4000	Wright et al. (1992)	M	780
	1.1×10^{-2}	4100	Tse et al. (1992)	M	
	1.1×10^{-2}	4400	Rex (1906)	M	
	1.1×10^{-2}		Mackay et al. (2006b)	V	
	1.3×10^{-2}	4200	Fogg and Sangster (2003)	V	
	7.1×10^{-3}		Mackay et al. (1993)	V	
	1.1×10^{-2}		Hine and Mookerjee (1975)	V	
	1.1×10^{-2}		Yaws (2003)	X	237
	3.2×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-1}		Gharagheizi et al. (2010)	Q	246
	3.8×10^{-2}		Hilal et al. (2008)	Q	
	1.7×10^{-3}		Modarresi et al. (2007)	Q	67
		4500	Kühne et al. (2005)	Q	
	1.2×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	8.2×10^{-3}		Yao et al. (2002)	Q	229, 267
	2.7×10^{-3}		Katritzky et al. (1998)	Q	
	9.5×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.2×10^{-2}		Mackay et al. (2006b)	?	
		4300	Kühne et al. (2005)	?	
	1.1×10^{-2}		Yaws (1999)	?	21
	1.2×10^{-2}		Mackay et al. (1993)	?	
	1.1×10^{-2}		Abraham et al. (1990)	?	



Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tribromomethane	1.7×10^{-2}	5200	Burkholder et al. (2019)	L	
CHBr ₃	1.1×10^{-2}	6200	Burkholder et al. (2019)	L	70
(bromoform)	1.7×10^{-2}	5200	Burkholder et al. (2015)	L	
[75-25-2]	1.1×10^{-2}	6200	Burkholder et al. (2015)	L	70
DIKBFYAXUHHXCS-UHFFFAOYSA-N	1.8×10^{-2}	4800	Brockbank (2013)	L	1
	1.7×10^{-2}	5200	Sander et al. (2011)	L	
	1.7×10^{-2}	5200	Sander et al. (2006)	L	
	1.7×10^{-2}	5200	Staudinger and Roberts (2001)	L	
	1.7×10^{-2}	5200	Staudinger and Roberts (1996)	L	
	1.6×10^{-2}		Mackay and Shiu (1981)	L	
	2.2×10^{-2}	6300	Hiatt (2013)	M	
	9.9×10^{-3}	6200	Oooki and Yokouchi (2011)	M	70
	2.0×10^{-2}		Ruiz-Bevia and Fernandez-Torres (2010)	M	
	9.6×10^{-3}		Zhang et al. (2002)	M	14
	2.3×10^{-2}		Hovorka and Dohnal (1997)	M	12
	1.4×10^{-2}	4500	Kondoh and Nakajima (1997)	M	
	1.5×10^{-2}	4300	Moore et al. (1995)	M	781, 70
	8.5×10^{-3}	1500	Khalfaoui and Newsham (1994a)	M	
	2.4×10^{-2}	4100	Wright et al. (1992)	M	782
	1.9×10^{-2}	5000	Tse et al. (1992)	M	
	1.8×10^{-2}	4700	Munz and Roberts (1987)	M	
	1.6×10^{-2}	5700	Nicholson et al. (1984)	M	
	1.9×10^{-2}		Warner et al. (1980)	M	
	1.7×10^{-2}		Mackay et al. (2006b)	V	
	1.8×10^{-2}	5300	Fogg and Sangster (2003)	V	
	1.7×10^{-2}		Mackay et al. (1993)	V	
	1.7×10^{-2}		Warner et al. (1980)	V	
	1.5×10^{-2}		Hine and Mookerjee (1975)	V	
	1.8×10^{-2}	2700	Goldstein (1982)	X	298
	1.7×10^{-2}		Ryan et al. (1988)	C	
	1.7×10^{-2}		Nicholson et al. (1984)	C	
	1.9×10^{-2}		Shen (1982)	C	
	8.8×10^{-3}		Keshavarz et al. (2022)	Q	
	1.0×10^{-2}		Duchowicz et al. (2020)	Q	
	7.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	7.3×10^{-3}		Hilal et al. (2008)	Q	
	9.8×10^{-4}		Modarresi et al. (2007)	Q	67
		5600	Kühne et al. (2005)	Q	
	1.8×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.3×10^{-2}		Yao et al. (2002)	Q	229
	1.4×10^{-2}		Katritzky et al. (1998)	Q	
	2.4×10^{-2}		Nirmalakhandan and Speece (1988)	Q	
	1.8×10^{-2}		Duchowicz et al. (2020)	?	185, 21



Rolf Sander: Compilation of Henry's law constants

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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.1×10^{-2}	5000	Mackay et al. (2006b)	?	
	1.7×10^{-2}		Kühne et al. (2005)	?	
	2.1×10^{-2}		Yaws (1999)	?	21
	2.1×10^{-2}		Mackay et al. (1993)	?	
	1.5×10^{-2}		Abraham et al. (1990)	?	
tetrabromomethane CBr ₄ [558-13-4] HJUGFYREWKUQT-UHFFFAOYSA-N	2.0×10^{-2}		Duchowicz et al. (2020)	V	186
	2.0×10^{-2}		HSDB (2015)	V	
	1.2×10^{-2}		Fogg and Sangster (2003)	V	783, 38
	2.0×10^{-2}		Hilal et al. (2008)	C	
	9.8×10^{-4}		Duchowicz et al. (2020)	Q	
	2.1×10^{-3}		Hilal et al. (2008)	Q	
	2.2×10^{-4}		Modarresi et al. (2007)	Q	67
bromoethane C ₂ H ₅ Br [74-96-4] RDHPKYGYEGBMSE-UHFFFAOYSA-N	1.3×10^{-3}	3900	Burkholder et al. (2019)	L	
	1.3×10^{-3}	3900	Brockbank (2013)	L	1
	1.3×10^{-3}		Li et al. (1993)	M	
	1.3×10^{-3}	3900	Rex (1906)	M	
	1.3×10^{-3}		Duchowicz et al. (2020)	V	186
			Mackay et al. (2006b)	V	683
	8.1×10^{-4}		Mackay et al. (1993)	V	
	1.4×10^{-3}		Abraham (1984)	V	
	1.3×10^{-3}		Hine and Mookerjee (1975)	V	
	1.3×10^{-3}		Yaws (2003)	X	237
	9.2×10^{-5}		Ryan et al. (1988)	C	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	3.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-3}		Hilal et al. (2008)	Q	
	1.2×10^{-3}		Modarresi et al. (2007)	Q	67
		3700	Kühne et al. (2005)	Q	
	1.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	7.7×10^{-4}		Yao et al. (2002)	Q	229
	1.1×10^{-3}		English and Carroll (2001)	Q	230, 231
	2.3×10^{-4}		Katritzky et al. (1998)	Q	
	1.1×10^{-3}		Suzuki et al. (1992)	Q	232
	1.6×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
		3800	Kühne et al. (2005)	?	
	1.3×10^{-3}		Yaws (1999)	?	21
	1.3×10^{-3}		Yaws and Yang (1992)	?	21
	1.4×10^{-3}		Abraham et al. (1990)	?	



Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	8.4×10^{-4}		Suzuki et al. (1992)	Q	232
	1.3×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-3}		Yaws (1999)	?	21, 12
	1.4×10^{-3}		Yaws and Yang (1992)	?	21, 12
	1.0×10^{-3}		Abraham et al. (1990)	?	
2-bromopropane C_3H_7Br [75-26-3] NAMYKGV DVNB CFQ-UHFFFAOYSA-N	9.0×10^{-4}	3900	Brockbank (2013)	L	1
	8.4×10^{-4}		Li et al. (1993)	M	
	9.0×10^{-4}	4500	Rex (1906)	M	
	9.0×10^{-4}		Duchowicz et al. (2020)	V	186
	9.0×10^{-4}		HSDB (2015)	V	
	7.9×10^{-4}		Mackay et al. (2006b)	V	
	7.9×10^{-4}		Mackay et al. (1993)	V	
	9.0×10^{-4}		Hine and Mookerjee (1975)	V	
	1.0×10^{-3}		Yaws (2003)	X	237, 12
	5.4×10^{-4}		Duchowicz et al. (2020)	Q	
	3.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	9.4×10^{-4}		Gharagheizi et al. (2010)	Q	246
	1.5×10^{-3}		Hilal et al. (2008)	Q	
	7.5×10^{-4}		Modarresi et al. (2007)	Q	67
	9.2×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	3.4×10^{-4}		Yao et al. (2002)	Q	229, 267
	6.7×10^{-4}		English and Carroll (2001)	Q	230, 231
	3.3×10^{-4}		Katritzky et al. (1998)	Q	
	7.3×10^{-4}		Suzuki et al. (1992)	Q	232
	9.2×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
	8.1×10^{-4}		Yaws (1999)	?	21, 12
	1.0×10^{-3}		Yaws and Yang (1992)	?	21, 12
	9.0×10^{-4}		Abraham et al. (1990)	?	
1,2-dibromopropane $C_3H_6Br_2$ [78-75-1] XFNJYAKDBJUAJ-UHFFFAOYSA-N	5.3×10^{-3}		Albanese et al. (1987)	M	
	6.8×10^{-3}		Duchowicz et al. (2020)	V	186
	6.8×10^{-3}		HSDB (2015)	V	
	6.8×10^{-3}		Mackay et al. (2006b)	V	
	1.1×10^{-2}		Hine and Mookerjee (1975)	V	
	6.3×10^{-3}		Yaws (2003)	X	237
	1.5×10^{-3}		Duchowicz et al. (2020)	Q	
	3.5×10^{-2}		Gharagheizi et al. (2012)	Q	
	6.6×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-2}		Hilal et al. (2008)	Q	
	2.8×10^{-3}		Modarresi et al. (2007)	Q	67
	6.9×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	5.2×10^{-3}		Katritzky et al. (1998)	Q	
	4.4×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	6.6×10^{-3}		Yaws and Yang (1992)	?	21



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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3-dibromopropane $C_3H_6Br_2$ [109-64-8] VEFLKXRACNJOHV-UHFFFAOYSA-N	1.1×10^{-3}		Mackay et al. (1993)	V	
	1.1×10^{-2}		Hine and Mookerjee (1975)	V	
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	3.0×10^{-3}		Duchowicz et al. (2020)	Q	299
	7.2×10^{-2}		Hilal et al. (2008)	Q	
	5.0×10^{-3}		Modarresi et al. (2007)	Q	67
	1.2×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	5.6×10^{-3}		Katritzky et al. (1998)	Q	
1-bromobutane C_4H_9Br [109-65-9] MPPPKRYCTPRNTB-UHFFFAOYSA-N	6.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-2}		Duchowicz et al. (2020)	?	185, 21
	7.4×10^{-4}		Brockbank (2013)	L	
	4.6×10^{-4}		Hoff et al. (1993)	M	
	8.2×10^{-4}		Li et al. (1993)	M	
	1.1×10^{-3}		Duchowicz et al. (2020)	V	186
	1.1×10^{-3}		HSDB (2015)	V	
	8.0×10^{-4}		Abraham (1984)	V	
	8.0×10^{-4}		Hine and Mookerjee (1975)	V	
	8.0×10^{-4}		Yaws (2003)	X	237
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	9.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	244	
4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245	
7.5×10^{-4}		Gharagheizi et al. (2010)	Q	246	
2.2×10^{-3}		Hilal et al. (2008)	Q		
8.7×10^{-4}		Modarresi et al. (2007)	Q	67	
1.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249	
2.7×10^{-4}		Yao et al. (2002)	Q	229	
6.2×10^{-4}		English and Carroll (2001)	Q	230, 231	
4.1×10^{-4}		Katritzky et al. (1998)	Q		
5.8×10^{-4}		Russell et al. (1992)	Q	279	
6.5×10^{-4}		Suzuki et al. (1992)	Q	232	
1.0×10^{-3}		Nirmalakhandan and Speece (1988)	Q		
8.3×10^{-4}		Haynes (2014)	?	786	
8.1×10^{-4}		Yaws (1999)	?	21	
8.1×10^{-4}		Yaws and Yang (1992)	?	21	
7.9×10^{-4}		Abraham et al. (1990)	?		
2-bromobutane C_4H_9Br [78-76-2] UPSXPQYNGXVBF-UHFFFAOYSA-N	8.8×10^{-4}		Brockbank (2013)	L	
	7.7×10^{-4}		Li et al. (1993)	M	
	6.2×10^{-4}		HSDB (2015)	Q	99
	1.4×10^{-3}		Hilal et al. (2008)	Q	



Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-bromo-2-methylpropane C_4H_9Br [78-77-3] HLVFKOKELQSQIX-UHFFFAOYSA-N	4.2×10^{-4}		Hine and Mookerjee (1975)	V	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	2.0×10^{-3}		Hilal et al. (2008)	Q	
	7.7×10^{-4}		Modarresi et al. (2007)	Q	67
	4.2×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	4.0×10^{-4}		English and Carroll (2001)	Q	230, 231
	8.6×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	5.8×10^{-4}		Suzuki et al. (1992)	Q	232
4.2×10^{-4}		Abraham et al. (1990)	?		
2-bromo-2-methylpropane C_4H_9Br [507-19-7] RKSOP LXZQNSWAS-UHFFFAOYSA-N	2.4×10^{-4}		Duchowicz et al. (2020)	V	186
	2.4×10^{-4}		HSDB (2015)	V	
	2.0×10^{-4}		Duchowicz et al. (2020)	Q	
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	5.2×10^{-4}		Hilal et al. (2008)	Q	
	5.1×10^{-4}		Modarresi et al. (2007)	Q	67
	4.5×10^{-4}		English and Carroll (2001)	Q	230, 231
	4.2×10^{-4}		Katritzky et al. (1998)	Q	
5.2×10^{-4}		Nirmalakhandan et al. (1997)	Q		
3.1×10^{-4}		Yaws and Yang (1992)	?	21, 28	
9.7×10^{-5}		Abraham et al. (1990)	?		
1-bromo-3-methylbutane $C_5H_{11}Br$ [107-82-4] YXZFFTJAHVMMMLF-UHFFFAOYSA-N	4.9×10^{-4}		Mackay et al. (1993)	V	
	2.9×10^{-4}		Hine and Mookerjee (1975)	V	
	5.9×10^{-4}		Keshavarz et al. (2022)	Q	
	4.5×10^{-4}		Duchowicz et al. (2020)	Q	184
	1.8×10^{-3}		Hilal et al. (2008)	Q	
	7.8×10^{-4}		Modarresi et al. (2007)	Q	67
	4.7×10^{-4}		Katritzky et al. (1998)	Q	
	7.0×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	4.5×10^{-4}		Suzuki et al. (1992)	Q	232
2.9×10^{-4}		Duchowicz et al. (2020)	?	185, 21	
1,4-dibromobutane $C_4H_8Br_2$ [110-52-1] ULTHEAFYOPTTB-UHFFFAOYSA-N	1.7×10^{-2}		Albanese et al. (1987)	M	
	7.3×10^{-2}		Hilal et al. (2008)	Q	
	4.3×10^{-3}		Modarresi et al. (2007)	Q	67
1-bromopentane $C_5H_{11}Br$ [110-53-2] YZWKKMVJZFACTU-UHFFFAOYSA-N	5.0×10^{-4}		Duchowicz et al. (2020)	V	186
	4.7×10^{-4}		Abraham (1984)	V	
	5.6×10^{-4}		Yaws (2003)	X	237
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	6.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	5.1×10^{-4}		Gharagheizi et al. (2010)	Q	246
1.8×10^{-3}		Hilal et al. (2008)	Q		



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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.5×10^{-4}		Modarresi et al. (2007)	Q	67
	5.1×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	4.6×10^{-4}		English and Carroll (2001)	Q	230, 231
	5.1×10^{-4}		Katritzky et al. (1998)	Q	
	8.0×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	5.6×10^{-4}		Yaws (1999)	?	21
	5.0×10^{-4}		Yaws and Yang (1992)	?	21
	4.7×10^{-4}		Abraham et al. (1990)	?	
1-bromo-2-methylbutane $C_5H_{11}Br$ [10422-35-2] XKVLZBNEPALHIO-UHFFFAOYSA-N	8.8×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
1-bromohexane $C_6H_{13}Br$ [111-25-1] MNDIARAMWBIFKW-UHFFFAOYSA-N	3.0×10^{-4}		Duchowicz et al. (2020)	V	186
	3.0×10^{-4}		Abraham (1984)	V	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.5×10^{-3}		Hilal et al. (2008)	Q	
	5.2×10^{-4}		Modarresi et al. (2007)	Q	67
	2.2×10^{-4}		Yaffe et al. (2003)	Q	248, 272
	3.4×10^{-4}		English and Carroll (2001)	Q	230, 231
	5.3×10^{-4}		Katritzky et al. (1998)	Q	
	6.2×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	3.0×10^{-4}		Abraham et al. (1990)	?	
1-bromo-3-methylpentane $C_6H_{13}Br$ [51116-73-5] MDCCBJLCTOTLKM-UHFFFAOYSA-N	2.3×10^{-4}		English and Carroll (2001)	Q	230, 231
	5.8×10^{-4}		Nirmalakhandan and Speece (1988)	Q	
bromocyclohexane $C_6H_{11}Br$ [108-85-0] AQNQQHJNRPDOQV-UHFFFAOYSA-N	7.0×10^{-3}		Hilal et al. (2008)	Q	
1-bromoheptane $C_7H_{15}Br$ [629-04-9] LSXKDWGTSCHCFPP-UHFFFAOYSA-N	2.2×10^{-4}		Brockbank (2013)	L	
	2.2×10^{-4}		Duchowicz et al. (2020)	V	186
	2.3×10^{-4}		Abraham (1984)	V	
	2.2×10^{-4}		Yaws (2003)	X	237
	1.1×10^{-3}		Duchowicz et al. (2020)	Q	
	3.5×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	2.3×10^{-4}		Gharagheizi et al. (2010)	Q	246
	1.2×10^{-3}		Hilal et al. (2008)	Q	
	4.7×10^{-4}		Modarresi et al. (2007)	Q	67



Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	6.5×10^{-5}		Yao et al. (2002)	Q	229
	2.6×10^{-4}		English and Carroll (2001)	Q	230, 274
	5.6×10^{-4}		Katritzky et al. (1998)	Q	
	5.0×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	2.2×10^{-4}		Yaws (1999)	?	21
	2.3×10^{-4}		Abraham et al. (1990)	?	
1-bromooctane $C_8H_{17}Br$ [111-83-1] VMKOFRJSULQZRM-UHFFFAOYSA-N	1.7×10^{-4}	4600	Duchowicz et al. (2020)	V	186
	2.4×10^{-4}		Sarraute et al. (2004)	V	
	1.7×10^{-4}		Abraham (1984)	V	
	1.1×10^{-3}		Duchowicz et al. (2020)	Q	
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	1.6×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	9.7×10^{-4}		Hilal et al. (2008)	Q	
	4.0×10^{-4}		Modarresi et al. (2007)	Q	67
	1.7×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	1.9×10^{-4}		English and Carroll (2001)	Q	230, 231
	5.6×10^{-4}		Katritzky et al. (1998)	Q	
	3.9×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	1.7×10^{-4}		Abraham et al. (1990)	?	
1,8-dibromooctane $C_8H_{16}Br_2$ [4549-32-0] DKEGCUDAFWNSSO-UHFFFAOYSA-N	1.3×10^{-2}	6900	Sarraute et al. (2006)	M	787
1,2-dibromo-4-(1,2-dibromoethyl)cyclohexane $C_8H_{12}Br_4$ [3322-93-8] PQRRSJBLKOPVJV-UHFFFAOYSA-N	1.7×10^2		HSDB (2015)	Q	99
	2.4×10^{-1}		Zhang et al. (2010)	Q	287, 288
	2.9		Zhang et al. (2010)	Q	287, 289
	1.0×10^1		Zhang et al. (2010)	Q	287, 290
	2.5×10^{-1}		Zhang et al. (2010)	Q	287, 291
1-bromononane $C_9H_{19}Br$ [693-58-3] AYMUQTNXKPEMLM-UHFFFAOYSA-N	7.9×10^{-4}		Hilal et al. (2008)	Q	
1-bromodecane $C_{10}H_{21}Br$ [112-29-8] MYMSJFSOOQERIO-UHFFFAOYSA-N	1.7×10^{-4}		Ebert et al. (2023)	?	316



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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexabromocyclododecane $C_{12}H_{18}Br_6$ [3194-55-6] DEIGXXQKDWULML-UHFFFAOYSA-N	2.1×10^{-1} 2.1×10^{-1} 1.6×10^{-2} 1.3×10^{-2}		Duchowicz et al. (2020) HSDB (2015) HSDB (2015) Duchowicz et al. (2020)	V V V Q	186
	5.7 1.7×10^2 5.7×10^3 6.5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
vinyl bromide C_2H_3Br [593-60-2] INLLPKCGLOXCIV-UHFFFAOYSA-N	7.0×10^{-4} 8.0×10^{-4} 7.7×10^{-4} 4.8×10^{-4} 8.2×10^{-4}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
1,2-dibromoethene $C_2H_2Br_2$ [540-49-8] UWTUEMKLYAGTNQ-UHFFFAOYSA-N	1.2×10^{-2} 1.2×10^{-2} 4.8×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
(<i>Z</i>)-1,2-dibromoethene $C_2H_2Br_2$ (<i>cis</i> -1,2-dibromoethene) [590-11-4] UWTUEMKLYAGTNQ-UPHRSURJSA-N	2.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249
3-bromo-1-propene C_3H_5Br (allyl bromide) [106-95-6] BHELZAPQIKSEDF-UHFFFAOYSA-N	1.7×10^{-3} 9.0×10^{-4} 3.9×10^{-3} 1.6×10^{-3} 8.6×10^{-3} 2.6×10^{-3} 1.0×10^{-3} 1.7×10^{-3} 1.7×10^{-3} 1.7×10^{-3}		Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yao et al. (2002) Yaws (1999) Yaws and Yang (1992) Abraham et al. (1990)	X Q Q Q Q Q Q ? ? ?	237 99 246 67 229 21 21 ?
3-bromo-1-propyne C_3H_3Br (propargyl bromide) [106-96-7] YORCIIVHUBAYBQ-UHFFFAOYSA-N	8.8×10^{-3} 1.6×10^{-2} 8.4×10^{-3} 8.7×10^{-3}	4000 3200 4200	Yates and Gan (1998) Keshavarz et al. (2022) Duchowicz et al. (2020) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005) Fogg and Sangster (2003)	M Q Q Q ? ? W	1 185, 21 788
1-bromocyclohexene C_6H_9Br [2044-08-8] QBUMXSSCYUMVAW-UHFFFAOYSA-N	2.0×10^{-3}		Hilal et al. (2008)	Q	



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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bromobenzene-d5 C_6D_5Br [4165-57-5] QARVLSVVCXYDNA-RALIUCGRSA-N	6.5×10^{-3}	4200	Hiatt (2013)	M	
1,2-dibromobenzene $C_6H_4Br_2$ [583-53-9] WQONPSCCEXUXTQ-UHFFFAOYSA-N	9.5×10^{-3}		Schüürmann (2000)	V	
1,3-dibromobenzene $C_6H_4Br_2$ [108-36-1] JSRLURSZEMLAFO-UHFFFAOYSA-N	1.2×10^{-2} 8.0×10^{-3} 5.0×10^{-3} 1.2×10^{-2} 7.7×10^{-3} 1.2×10^{-2} 2.0×10^{-2} 1.2×10^{-2} 1.2×10^{-2} 9.0×10^{-3} 6.4×10^{-3} 7.0×10^{-3} 4.2×10^{-2} 1.2×10^{-2}		Brockbank (2013) Duchowicz et al. (2020) Mackay and Shiu (1981) Yaws (2003) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yao et al. (2002) Katritzky et al. (1998) Yaws (1999)	L V V X Q Q Q Q Q Q Q Q Q ?	186 555 237 242, 243 244 245 246 67 229 21
1,4-dibromobenzene $C_6H_4Br_2$ [106-37-6] SWJPEBQEEAHIGZ-UHFFFAOYSA-N	9.4×10^{-3} 1.1×10^{-2} 1.1×10^{-2} 4.3×10^{-3} 4.8×10^{-3} 2.0×10^{-2} 1.1×10^{-2} 7.1×10^{-3} 1.2×10^{-2} 2.5×10^{-2} 1.2×10^{-2} 1.2×10^{-2} 1.2×10^{-2} 1.0×10^{-2} 4.5×10^{-3} 4.1×10^{-2} 2.4×10^{-2}		Kuramochi et al. (2004) Duchowicz et al. (2020) HSDB (2015) Schüürmann (2000) Mackay and Shiu (1981) Hine and Mookerjee (1975) Kuramochi et al. (2004) Duchowicz et al. (2020) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan and Speece (1988) Kühne et al. (2005)	M V V V V V C Q Q Q Q Q Q Q Q Q Q Q Q ?	186 555 242, 243 244 245 67 230, 274
1,2,4-tribromobenzene $C_6H_3Br_3$ [615-54-3] FWAJPSIPOULHHH-UHFFFAOYSA-N	3.1×10^{-2} 2.9×10^{-2} 1.8×10^{-2}		Kuramochi et al. (2004) Kuramochi et al. (2004) Hilal et al. (2008)	M C Q	



Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,3,5-tribromobenzene $C_6H_3Br_3$ [626-39-1] YWDUZLFWHVQCHY-UHFFFAOYSA-N	1.3×10^{-2} 5.8×10^{-3} 2.9×10^{-2} 4.0×10^{-2} 2.5×10^{-2} 2.6×10^{-2} 5.1×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Katritzky et al. (1998)	V Q Q Q Q Q Q	186 287, 288 287, 289 287, 290 287, 291
1,2,4,5-tetrabromobenzene $C_6H_2Br_4$ [636-28-2] QCKHVNQHBQZER-UHFFFAOYSA-N	2.7×10^{-3} 2.0×10^{-2}		Kuramochi et al. (2004) Hilal et al. (2008)	M Q	
hexabromobenzene C_6Br_6 [87-82-1] CAYGQBVSZLICD-UHFFFAOYSA-N	9.3×10^{-2} 4.1×10^{-1} 7.1 3.5×10^{-1} 4.0×10^{-1} 4.6×10^{-1} 4.6×10^{-1} 6.0×10^{-2} 6.7×10^{-1} 1.2×10^{-2}		Kuramochi et al. (2004) Kuramochi et al. (2014) Tittlemier et al. (2002) HSDB (2015) Xiao et al. (2012) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008)	M V V Q Q Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
(bromomethyl)-benzene C_7H_7Br (benzyl bromide) [100-39-0] AGEZXOZHKGVCN-UHFFFAOYSA-N	1.4×10^{-3} 5.4×10^{-2} 2.2×10^{-2}		HSDB (2015) Hilal et al. (2008) Abraham et al. (1990)	Q Q ?	99
<i>p</i> -bromobenzyl bromide $C_7H_6Br_2$ [589-15-1] YLRBJYMANQKEAW-UHFFFAOYSA-N	3.6×10^{-2} 2.7×10^{-1} 2.0×10^{-1} 2.4×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1-bromo-2-methylbenzene $BrC_6H_4CH_3$ (<i>o</i> -bromotoluene) [95-46-5] QSSXJPIWXQTSIX-UHFFFAOYSA-N	4.1×10^{-3} 5.3×10^{-3}		HSDB (2015) Hilal et al. (2008)	Q Q	99
1-bromo-3-methylbenzene $BrC_6H_4CH_3$ (<i>m</i> -bromotoluene) [591-17-3] WJIFKOVZJNTSGO-UHFFFAOYSA-N	1.5×10^{-3} 1.5×10^{-3} 4.0×10^{-3} 5.2×10^{-3} 4.8×10^{-3} 1.5×10^{-3} 7.9×10^{-3}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) Katritzky et al. (1998)	V V Q Q Q Q Q	186 67 248, 249



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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-bromo-4-methylbenzene $\text{BrC}_6\text{H}_4\text{CH}_3$ (<i>p</i> -bromotoluene) [106-38-7] ZBTMRBYMKUEVEU-UHFFFAOYSA-N	3.6×10^{-3} 3.4×10^{-3} 4.2×10^{-3} 5.3×10^{-2} 4.0×10^{-3} 4.2×10^{-3} 5.6×10^{-3} 5.5×10^{-3} 4.5×10^{-3} 3.4×10^{-3} 8.0×10^{-3} 5.2×10^{-3} 3.6×10^{-3} 5.2×10^{-3} 4.2×10^{-3} 4.2×10^{-3}	4800 4600	Brockbank (2013) Brockbank et al. (2013) Hine and Mookerjee (1975) Keshavarz et al. (2022) Duchowicz et al. (2020) Li et al. (2014) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Nirmalakhandan and Speece (1988) Duchowicz et al. (2020) Abraham et al. (1990)	L M V Q Q Q Q Q Q Q Q Q Q Q Q ?	1 299 241 67 248, 249 230, 231 232 185, 21 ?
3,5-dibromotoluene $\text{C}_7\text{H}_6\text{Br}_2$ [1611-92-3] DPKKOVGCHDUSAI-UHFFFAOYSA-N	1.7×10^{-2}	4800	Hiatt (2013)	M	
pentabromotoluene $\text{C}_7\text{H}_3\text{Br}_5$ [87-83-2] OZHJQVYCBTHJT-UHFFFAOYSA-N	4.0×10^{-1}		Xiao et al. (2012)	Q	
1-bromo-2-ethylbenzene $\text{C}_8\text{H}_9\text{Br}$ [1973-22-4] HVRUGFJYCAFAAN-UHFFFAOYSA-N	3.0×10^{-3} 4.3×10^{-3} 2.8×10^{-3} 2.9×10^{-3} 4.5×10^{-3}		Hine and Mookerjee (1975) Hilal et al. (2008) English and Carroll (2001) Suzuki et al. (1992) Nirmalakhandan and Speece (1988)	V Q Q Q Q	 230, 231 232
1-bromo-4-ethylbenzene $\text{C}_8\text{H}_9\text{Br}$ [1585-07-5] URFPRAHGGBYNPW-UHFFFAOYSA-N	3.1×10^{-3} 6.1×10^{-3} 4.2×10^{-3} 5.2×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1-(bromomethyl)-2-methylbenzene $\text{C}_8\text{H}_9\text{Br}$ (<i>o</i> -xylyl bromide) [89-92-9] WGVYCXYPNNQUA-UHFFFAOYSA-N	1.3×10^{-2}		HSDB (2015)	Q	99
1-(bromomethyl)-3-methylbenzene $\text{C}_8\text{H}_9\text{Br}$ (<i>m</i> -xylyl bromide) [620-13-3] FWLWTLKTABGKQ-UHFFFAOYSA-N	1.3×10^{-2}		HSDB (2015)	Q	99



Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-(bromomethyl)-4-methylbenzene C_8H_9Br (<i>p</i> -xylyl bromide) [104-81-4] WZRKSPFYXUXINF-UHFFFAOYSA-N	1.3×10^{-2}		HSDB (2015)	Q	99
(2-bromoethyl)-benzene C_8H_9Br [103-63-9] WMPPDTMATNBGJN-UHFFFAOYSA-N	6.5×10^{-3} 6.5×10^{-3} 7.9×10^{-3} 2.2×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Modarresi et al. (2007)	V V Q Q	186 67
2-bromostyrene C_8H_7Br [125904-11-2] SSZOCIFYWVWSAI-UHFFFAOYSA-N	9.0×10^{-3} 9.5×10^{-3} 7.3×10^{-3} 1.5×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
(2-bromoethyl)benzene C_8H_7Br [103-64-0] YMOONIIMQBGTDU-VOTSOKGWSA-N	1.8×10^{-2}		HSDB (2015)	Q	99
2,3,4,5,6-pentabromoethylbenzene $C_8H_5Br_5$ [85-22-3] FIAXCDIQXJNIX-UHFFFAOYSA-N	1.2×10^{-1} 3.6×10^{-1} 3.3×10^{-2} 9.7×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1-bromo-2-(2-propyl)-benzene $BrC_6H_4C_3H_7$ (<i>o</i> -bromocumene) [7073-94-1] LECYCYNAEJDSIL-UHFFFAOYSA-N	1.7×10^{-3} 2.5×10^{-3} 2.0×10^{-3} 3.1×10^{-3}		Hine and Mookerjee (1975) Hilal et al. (2008) Suzuki et al. (1992) Nirmalakhandan and Speece (1988)	V Q Q Q	 232
1-bromonaphthalene $C_{10}H_7Br$ [90-11-9] DLKQHBOKULLWDQ-UHFFFAOYSA-N	3.5×10^{-2} 5.0×10^{-2} 3.0×10^{-2} 5.0×10^{-2} 8.2×10^{-2} 3.7×10^{-2} 1.8×10^{-2} 3.5×10^{-2}		Duchowicz et al. (2020) Yaws (2003) Duchowicz et al. (2020) Duchowicz et al. (2020) Gharagheizi et al. (2010) Hilal et al. (2008) Yaffe et al. (2003) Katritzky et al. (1998) Yaws (1999)	V X Q Q Q Q Q Q ?	186 237, 294 246 248, 249 21, 294
2-bromonaphthalene $C_{10}H_7Br$ [580-13-2] APSMUYLXZULMS-UHFFFAOYSA-N	4.3×10^{-2}		Ebert et al. (2023)	?	318



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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,4-dibromonaphthalene $C_{10}H_6Br_2$ [83-53-4] IBGUDZMIAZLJNY-UHFFFAOYSA-N	5.8×10^{-2}		Ebert et al. (2023)	?	316
decabromobiphenyl $C_{12}Br_{10}$ [13654-09-6] AQPBYQUCKHJLT-UHFFFAOYSA-N	2.3×10^2 2.4×10^2 3.0×10^2 2.3×10^2 5.0×10^2		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
4-bromo-1,1'-biphenyl $C_{12}H_9Br$ [92-66-0] PKJBWOWQJHHAHG-UHFFFAOYSA-N	6.0×10^{-2} 6.9×10^{-2} 1.7×10^{-1} 3.5×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
octabromobiphenyl $C_{12}H_2Br_8$ [27858-07-7] NDRKXFLZSRHAJE-UHFFFAOYSA-N	4.1×10^3		HSDB (2015)	V	
2,2',4,4',5,5'-hexabromobiphenyl $C_{12}H_4Br_6$ [59080-40-9] HMBBJSKXDBUNNT-UHFFFAOYSA-N	2.3		HSDB (2015)	V	
1,2-bis(pentabromophenyl) ethane $C_{14}H_4Br_{10}$ [84852-53-9] BZQKBFHEWDPQHD-UHFFFAOYSA-N	1.5×10^2 8.8×10^2 8.6×10^1 1.7×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,3,6,8-tetrabromopyrene $C_{16}H_6Br_4$ [128-63-2] ZKBKRTZIYOKNRG-UHFFFAOYSA-N	4.7×10^1 4.4×10^1 6.2×10^{-1} 6.5×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
6-bromobenzo[<i>a</i>]pyrene $C_{20}H_{11}Br$ [21248-00-0] MJSYSGSEADMTK-UHFFFAOYSA-N	1.2×10^2		HSDB (2015)	Q	99
bromomethanol CH_2BrOH [50398-29-3] OEDMOCYNWLHUDP-UHFFFAOYSA-N	4.1 3.2×10^1 2.5×10^2 2.0×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Kryzstofiak et al. (2012)	Q Q Q Q	80, 238 80, 239 80, 240
dibromomethanol $CHBr_2OH$ [166600-78-8] WICMSCLXMMZMFF-UHFFFAOYSA-N	1.7×10^2		Kryzstofiak et al. (2012)	Q	



Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tribromomethanol CBr ₃ OH [5405-30-1] ACRLLXANWELLX-UHFFFAOYSA-N	1.5×10^3		Kryzstofiak et al. (2012)	Q	
formyl bromide CHBrO [7726-11-6] AIFARXRIYKCEEV-UHFFFAOYSA-N	4.5×10^{-1} 3.2×10^{-2} 3.7×10^{-3} 7.3×10^{-1}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Kryzstofiak et al. (2012)	Q Q Q Q	80, 238 80, 239 80, 240
carbonyl bromide CBr ₂ O [593-95-3] MOIPGXQKZSQOX-UHFFFAOYSA-N	2.1×10^{-1}		Kryzstofiak et al. (2012)	Q	
bromomethyl peroxide CH ₂ BrO ₂ H WXVCUAGYVVWQBP-UHFFFAOYSA-N	3.7×10^1 1.3×10^2 3.0×10^1 2.5×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Kryzstofiak et al. (2012)	Q Q Q Q	80, 238 80, 239 80, 240
dibromomethyl peroxide CHBr ₂ O ₂ H JBJKQCSQVMCXPZ-UHFFFAOYSA-N	2.2×10^2		Kryzstofiak et al. (2012)	Q	
tribromomethyl peroxide CBr ₃ O ₂ H WJYKADCZNTKBI-UHFFFAOYSA-N	1.9×10^3		Kryzstofiak et al. (2012)	Q	
bromoethanoic acid CH ₂ BrCOOH (bromoacetic acid) [79-08-3] KDPAWGWELVVRCH-UHFFFAOYSA-N	1.5×10^3 1.5×10^3 1.5×10^3 1.5×10^3 5.6×10^2 1.5×10^2 4.2×10^2 5.6×10^3 5.5×10^2 2.0×10^3 2.5×10^3 1.6×10^2	9300 9300 9300 9300	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Bowden et al. (1998a) Keshavarz et al. (2022) Duchowicz et al. (2020) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005)	L L L M Q Q Q Q Q Q Q Q Q Q ?	184 80, 238 80, 239 80, 240 242, 243 244 245 8800 185, 21
dibromoethanoic acid CHBr ₂ COOH (dibromoacetic acid) [631-64-1] SIEILFNCFEENQ-UHFFFAOYSA-N	2.3×10^3 2.3×10^3 2.3×10^3 2.2×10^3 5.6×10^2 4.9×10^2 3.9×10^3	8900 8900 8900 8900	Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Bowden et al. (1998a) Keshavarz et al. (2022) Duchowicz et al. (2020) Raventos-Duran et al. (2010)	L L L M Q Q Q	184 242, 243



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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	6.2×10^2		Raventos-Duran et al. (2010)	Q	244
	1.2×10^3		Raventos-Duran et al. (2010)	Q	245
		9900	Kühne et al. (2005)	Q	
	2.2×10^3		Duchowicz et al. (2020)	?	185, 21
		9000	Kühne et al. (2005)	?	
tribromoethanoic acid	3.0×10^3	9000	Burkholder et al. (2019)	L	
CBr_3COOH	3.0×10^3	9000	Burkholder et al. (2015)	L	
(tribromoacetic acid)	3.0×10^3	9000	Sander et al. (2011)	L	
[75-96-7]	2.9×10^3	9000	Bowden et al. (1998a)	M	
QIONYIKHPASLHO-UHFFFAOYSA-N	5.6×10^2		Keshavarz et al. (2022)	Q	
	3.5×10^2		Duchowicz et al. (2020)	Q	
	2.0×10^3		Raventos-Duran et al. (2010)	Q	271, 243
	9.9		Raventos-Duran et al. (2010)	Q	244
	1.2×10^4		Raventos-Duran et al. (2010)	Q	245
	3.0×10^3		Duchowicz et al. (2020)	?	185, 21
MCM:BRETO3H	4.5×10^2		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_3\text{O}_3\text{Br}$	1.4×10^2		Wang et al. (2017)	Q	80, 239
RGXORGOPJDPEIK-UHFFFAOYSA-N	9.8×10^{-1}		Wang et al. (2017)	Q	80, 240
MCM:DIBRETO2H	5.4×10^2		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_4\text{O}_2\text{Br}_2$	2.2×10^2		Wang et al. (2017)	Q	80, 239
ZXSZEFURCAPOD-UHFFFAOYSA-N	9.6×10^1		Wang et al. (2017)	Q	80, 240
MCM:DIBRETOH	1.1×10^2		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_4\text{OBr}_2$	1.1×10^2		Wang et al. (2017)	Q	80, 239
IYJYRKYSUOTLAE-UHFFFAOYSA-N	1.7×10^3		Wang et al. (2017)	Q	80, 240
MCM:BRETAL	4.1×10^{-1}		Wang et al. (2017)	Q	80, 238
$\text{C}_2\text{H}_3\text{OBr}$	6.0		Wang et al. (2017)	Q	80, 239
NMPVEAUHMEAP-UHFFFAOYSA-N	2.5×10^{-1}		Wang et al. (2017)	Q	80, 240
3-bromopropanol	8.2		Modarresi et al. (2007)	Q	67
$\text{C}_3\text{H}_7\text{BrO}$					
[627-18-9]					
RQFUZUMFPRMVDX-UHFFFAOYSA-N					
2,3-dibromopropanol	1.6×10^2		HSDB (2015)	Q	99
$\text{C}_3\text{H}_6\text{Br}_2\text{O}$	1.6×10^2		Zhang et al. (2010)	Q	287, 288
[96-13-9]	1.1×10^2		Zhang et al. (2010)	Q	287, 289
QWVCIORZLNBIIC-UHFFFAOYSA-N	1.2×10^1		Zhang et al. (2010)	Q	287, 290
	1.4×10^1		Zhang et al. (2010)	Q	287, 291
bromoacetone	1.7		HSDB (2015)	Q	99
$\text{C}_3\text{H}_5\text{BrO}$					
[598-31-2]					
VQFAIAKCILWQPZ-UHFFFAOYSA-N					



Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(bromomethyl)oxirane $\text{C}_3\text{H}_5\text{BrO}$ (epibromohydrin) [3132-64-7] GKIPXFAANLTWBM-UHFFFAOYSA-N	4.1		HSDB (2015)	Q	99
2,3-dibromobutane-1,4-diol $\text{C}_4\text{H}_8\text{Br}_2\text{O}_2$ [90801-18-6] OXYNQEOLHRWEPE-QWWZVWQMSA-N	3.2×10^3 1.0×10^5 1.5×10^6 4.7×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
bromoacetic acid, ethyl ester $\text{C}_4\text{H}_7\text{BrO}_2$ [105-36-2] PQJJMRNHATNKG-UHFFFAOYSA-N	3.7×10^{-1}		HSDB (2015)	Q	99
brometone $\text{C}_4\text{H}_7\text{Br}_3\text{O}$ (1,1,1-tribromo-2-methyl-2-propanol) [76-08-4] JUGRTVJQTFZHOM-UHFFFAOYSA-N	1.0×10^3		HSDB (2015)	Q	99
2,2-bis(bromomethyl)-1,3-propanediol $\text{C}_5\text{H}_{10}\text{Br}_2\text{O}_2$ [3296-90-0] CHUGKEQJSLLOHL-UHFFFAOYSA-N	2.4×10^3		HSDB (2015)	Q	99
tribromoneopentyl alcohol $\text{C}_5\text{H}_9\text{Br}_3\text{O}$ [36483-57-5] HQWKMYFWGMCJSW-UHFFFAOYSA-N	7.7×10^2 7.5 1.1×10^1 1.0		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-bromophenol $\text{HOC}_6\text{H}_4\text{Br}$ [95-56-7] VADKRMSMGWJZCF-UHFFFAOYSA-N	4.5×10^1 4.2		HSDB (2015) Hilal et al. (2008)	Q Q	99
3-bromophenol $\text{HOC}_6\text{H}_4\text{Br}$ [591-20-8] MNOJRWOWILAHAV-UHFFFAOYSA-N	4.5×10^1 2.3×10^1		HSDB (2015) Hilal et al. (2008)	Q Q	99
4-bromophenol $\text{HOC}_6\text{H}_4\text{Br}$ [106-41-2] GZFGOTFRPZRKDS-UHFFFAOYSA-N	6.7×10^1 6.8×10^1 4.3 1.5×10^2 6.5×10^1 2.0×10^1 2.5×10^1	8200	Abraham et al. (1994a) Parsons et al. (1971) Keshavarz et al. (2022) Duchowicz et al. (2020) Li et al. (2014) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	R T Q Q Q Q Q	417 241 242, 243 244



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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.9×10^1		Raventos-Duran et al. (2010)	Q	245
	1.6×10^1		Hilal et al. (2008)	Q	
	2.3×10^1		Modarresi et al. (2007)	Q	67
	6.5×10^1		Yaffe et al. (2003)	Q	248, 249
	3.5×10^1		English and Carroll (2001)	Q	230, 231
	1.3×10^2		Katritzky et al. (1998)	Q	
	3.0×10^2		Nirmalakhandan et al. (1997)	Q	
	3.3×10^1		Nirmalakhandan and Speece (1988)	Q	
	6.5×10^1		Duchowicz et al. (2020)	?	185, 21
	6.9×10^1		Abraham et al. (1990)	?	
2,4-dibromophenol $C_6H_4Br_2O$ [615-58-7] FAXWFCTVSHEODL-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	99
2,6-dibromophenol $C_6H_4Br_2O$ [608-33-3] SSIZLKDLKIHEV-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	99
2,4,6-tribromophenol $C_6H_3Br_3O$ [118-79-6] BSWWXRVMJHFBN-UHFFFAOYSA-N	2.1×10^2 2.8×10^2 1.5×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	99 287, 288 287, 289
	6.2		Zhang et al. (2010)	Q	287, 290
	7.7		Zhang et al. (2010)	Q	287, 291
2,3,4,6-tetrabromophenol $C_6H_2Br_4O$ [14400-94-3] CXPJZISGIVIVNEL-UHFFFAOYSA-N	7.0×10^2		HSDB (2015)	Q	99
pentabromophenol C_6HBr_5O [608-71-9] SVHOVVJFOWGYJO-UHFFFAOYSA-N	1.8×10^3 1.8×10^3 1.2		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	99 287, 288 287, 289
	2.2×10^1		Zhang et al. (2010)	Q	287, 290
	1.3×10^2		Zhang et al. (2010)	Q	287, 291
1-bromo-2-methoxybenzene C_7H_7BrO (2-bromoanisole) [578-57-4] HTDQSWDEWGSAMN-UHFFFAOYSA-N	2.9×10^{-2}		Pfeifer et al. (2001)	M	731
1-bromo-3-methoxybenzene C_7H_7BrO (3-bromoanisole) [2398-37-0] PLDWAJLZAAHOGG-UHFFFAOYSA-N	7.2×10^{-3}		Pfeifer et al. (2001)	M	731



Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-bromo-4-methoxybenzene C_7H_7BrO (4-bromoanisole) [104-92-7] QJPJQTDYNNZXKQF-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	731
1,5-dibromo-2-methoxybenzene $C_7H_6Br_2O$ (2,4-dibromoanisole) [21702-84-1] XGXUGXPKRBQINS-UHFFFAOYSA-N	8.1×10^{-2}		Pfeifer et al. (2001)	M	731
1,3-dibromo-2-methoxybenzene $C_7H_6Br_2O$ (2,6-dibromoanisole) [38603-09-7] BMZVDHQOAJUZJL-UHFFFAOYSA-N	3.7×10^{-2}		Pfeifer et al. (2001)	M	731
1,2,3-tribromo-4-methoxybenzene $C_7H_5Br_3O$ (2,3,4-tribromoanisole) [95970-13-1] NKWYZAWFQZLPSU-UHFFFAOYSA-N	9.9×10^{-3}		Ebert et al. (2023)	?	789
1,3,4-tribromo-2-methoxybenzene $C_7H_5Br_3O$ (2,3,6-tribromoanisole) [95970-19-7] XZYCSFIRWAPGJV-UHFFFAOYSA-N	5.2×10^{-3}	2800	Diaz et al. (2005)	M	790
1,3,5-tribromo-2-methoxybenzene $C_7H_5Br_3O$ (2,4,6-tribromoanisole) [607-99-8] YXTRCOAFNXQTKL-UHFFFAOYSA-N	1.9×10^{-2} 1.3×10^{-2} 3.1×10^{-2}	6400	Diaz et al. (2005) Pfeifer et al. (2001) HSDB (2015)	M M Q	 731 99
pentabromomethoxybenzene $C_7H_3Br_5O$ (pentabromoanisole) [1825-26-9] VEFNQGLEJPUJF-UHFFFAOYSA-N	1.0		Pfeifer et al. (2001)	M	731
1,3,5-tribromo-2-methoxy-4-methylbenzene $C_8H_7Br_3O$ [41424-36-6] NMPPAMFEYWGNCCI-UHFFFAOYSA-N	4.4×10^{-1} 2.0×10^{-1} 3.2×10^{-1} 1.9×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,5,6,7-tetrabromo-1,3-isobenzofurandione $C_8Br_4O_3$ [632-79-1] QHWHLYUUGSCW-UHFFFAOYSA-N	6.1×10^1 4.4×10^5 2.4×10^2 8.0×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
allyl 2,4,6-tribromophenyl ether $C_9H_7Br_3O$ [3278-89-5] RZLLIOPGUFOWOD-UHFFFAOYSA-N	3.8×10^{-1} 1.3×10^{-1} 2.0×10^{-1} 6.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2,4-dibromo-6-methylphenyl glycidyl ether $C_{10}H_{10}Br_2O_2$ [75150-13-9] XQTJZNGNEJLXTR-UHFFFAOYSA-N	8.2×10^1 7.0 5.2×10^1 5.4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-(2,4,6-tribromophenoxy)ethyl acrylate $C_{11}H_9Br_3O_3$ [7347-19-5] AMBJXYFIMKHOQE-UHFFFAOYSA-N	2.9×10^2 1.6×10^1 4.3×10^3 1.3×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2,3,7,8-tetrabromodibenzo- <i>p</i> -dioxin $C_{12}H_4Br_4O_2$ [50585-41-6] JZLQUWSWOJPCAK-UHFFFAOYSA-N	3.0		Ebert et al. (2023)	?	318
octabromodibenzo- <i>p</i> -dioxin $C_{12}Br_8O_2$ [2170-45-8] XAHTWKGGNHXJRP-UHFFFAOYSA-N	5.1×10^1		Ebert et al. (2023)	?	318
4,4'-methylenebis(2,6-dibromophenol) $C_{13}H_8Br_4O_2$ [21825-03-6] WPZJSWWEJJSIZ-UHFFFAOYSA-N	7.5×10^7 9.0×10^1 1.3×10^4 3.4×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1'-[1,2-ethanediylbis(oxy)]bis pentabromobenzene $C_{14}H_4Br_{10}O_2$ [61262-53-1] JJEPQBZQAGCZTH-UHFFFAOYSA-N	5.3×10^4 8.6×10^2 2.2×10^2 1.1×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4,4'-dibromobenzil $C_{14}H_8Br_2O_2$ [35578-47-3] NYCBYBDDCLFPE-UHFFFAOYSA-N	8.0×10^3 2.6×10^3 1.9×10^2 1.3×10^5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2-bis(2,4,6-tribromophenoxy)ethane $C_{14}H_8Br_6O_2$ (BTBPE) [37853-59-1] YATIGPZCMOYEGE-UHFFFAOYSA-N	1.8×10^1 2.3×10^1 6.4×10^1 1.3×10^3 7.3×10^1 1.1×10^3 1.0×10^3		Kuramochi et al. (2014) HSDB (2015) Xiao et al. (2012) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q Q Q	 99 287, 288 287, 289 287, 290 287, 291
2-ethylhexyl-2,3,4,5-tetrabromobenzoate $C_{15}H_{18}Br_4O_2$ (EHTeBB) [183658-27-7] HVDXCGSGEQKWGB-UHFFFAOYSA-N	1.6		Xiao et al. (2012)	Q	
tribromobisphenol A $C_{15}H_{13}Br_3O_2$ [6386-73-8] WYBOEVJIVYIEJL-UHFFFAOYSA-N	1.1×10^2		HSDB (2015)	Q	447
4,4'-(1-methylethylidene)bis(2,6-dibromophenol) $C_{15}H_{12}Br_4O_2$ [79-94-7] VEORPZCZCFIRK-UHFFFAOYSA-N	2.4×10^2 4.2×10^7 3.9×10^1 8.0×10^4 1.6×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	V Q Q Q Q	 287, 288 287, 289 287, 290 287, 291
4-[2-[2,6-bis(bromanyl)-4-oxidanyl-phenyl]propan-2-yl]-3,5-bis(bromanyl)phenol $C_{15}H_{12}Br_4O_2$ [94334-64-2] KIZJVNGSIWXYTL-UHFFFAOYSA-N	4.2×10^7 2.0×10^7 2.2×10^7 1.7×10^8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-(2-hydroxyethoxy)ethyl 2-hydroxypropyl 3,4,5,6-tetrabromophthalate $C_{15}H_{16}Br_4O_7$ [20566-35-2] OQHSHASWHOGRCRC-UHFFFAOYSA-N	3.6×10^{10} 1.5×10^{11} 3.1×10^{13} 5.7×10^{10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
bromopropylate $C_{17}H_{16}Br_2O_3$ [18181-80-1] FOANIXZHAMJWOI-UHFFFAOYSA-N	2.1×10^1 2.1×10^1 4.2×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186



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Table A7.1: Bromocarbons (C, H, O, N, Br) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,2,4,5-tetrabromo-3,6-bis(pentabromophenoxy)benzene $C_{18}H_2Br_{14}$ [58965-66-5] YMIUHIAWWDYGGU-UHFFFAOYSA-N	1.5×10^6		Zhang et al. (2010)	Q	287, 288
2,2-bis(3,5-dibromo-4-(2-hydroxyethoxy)phenyl)propane $C_{19}H_{20}Br_4O_4$ [4162-45-2] RVHUMFJSCJBNGS-UHFFFAOYSA-N	4.1×10^5 2.1×10^6 6.7×10^5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	287, 289 287, 290 287, 291
metrafenone $C_{19}H_{21}BrO_5$ [220899-03-6] AMSPWOYQQAWRRM-UHFFFAOYSA-N	7.6		Maniere et al. (2011)	?	12, 165
solvent red 43 $C_{20}H_8Br_4O_5$ [15086-94-9] DBZJJPROPLPMSN-UHFFFAOYSA-N	4.4×10^{12} 1.5×10^8 2.7×10^{10} 2.9×10^8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2,2-bis[4-(2,3-dibromopropoxy)-3,5-dibromophenyl]-propane $C_{21}H_{20}Br_8O_2$ [21850-44-2] LXIZRZRTWSDLKK-UHFFFAOYSA-N	2.4×10^5 4.0×10^4 1.7×10^5 8.6×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2,2-bis(4-allyloxy-3,5-dibromophenyl)propane $C_{21}H_{20}Br_4O_2$ [25327-89-3] PWXTUWQHMIFLKL-UHFFFAOYSA-N	7.7×10^1 1.3×10^1 1.7×10^2 1.9×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
AC1MJ2TG $C_{21}H_{24}Br_4O_4$ [33294-14-3] UTMWWVHZWNKBNKF-UHFFFAOYSA-N	1.3×10^8 4.7×10^6 9.2×10^6 1.2×10^6		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
tetrabromophenolphthalein, ethyl ester $C_{22}H_{14}Br_4O_4$ [1176-74-5] SQFXATUXPUCFFO-UHFFFAOYSA-N	1.0×10^{11} 1.2×10^7 3.1×10^{10} 3.5×10^8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4,10-dibromodibenzo[def,mno]chrysene-6,12-dione $C_{22}H_8Br_2O_2$ [4378-61-4] HTENFZMEHKCNMD-UHFFFAOYSA-N	5.8×10^6 2.7×10^5 4.1×10^6 1.1×10^8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A7.1: Bromocarbons (C, H, O, N, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bis(2-ethylhexyl)-3,4,5,6-tetrabromophthalate $C_{24}H_{34}Br_4O_4$ (TBPH) [26040-51-7] UUEDINPOVKWVAZ-UHFFFAOYSA-N	4.0×10^2		Xiao et al. (2012)	Q	
bromadiolone $C_{30}H_{23}BrO_4$ [28772-56-7] OWNRRUFQJFKCU-UHFFFAOYSA-N	1.1×10^6 1.1×10^6		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
brodifacoum $C_{31}H_{23}BrO_3$ [56073-10-0] VEUZZDOCACZPRY-UHFFFAOYSA-N	4.6×10^2		Rubbiani (2013)	?	



A7.2 Polybrominated diphenyl ethers (PBDEs)

Table A7.2: Polybrominated diphenyl ethers (PBDEs)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-bromodiphenyl ether $C_{12}H_9BrO$ (PBDE-1) [36563-47-0] RRWFUWRLNIZICP-UHFFFAOYSA-N	2.3×10^{-2}	7400	Long et al. (2017)	Q	287
3-bromodiphenyl ether $C_{12}H_9BrO$ (PBDE-2) [6876-00-2] AHDAKFFMKLQPTD-UHFFFAOYSA-N	2.3×10^{-2}	7400	Long et al. (2017)	Q	287
4-bromodiphenyl ether $C_{12}H_9BrO$ (PBDE-3) [101-55-3] JDUYPUMLQRCN-UHFFFAOYSA-N	5.0×10^{-2} 4.3×10^{-2} 5.8×10^{-2} 9.6×10^{-2}	5500	Lau et al. (2006) Lau et al. (2006) Charles and Destailats (2005) Mackay et al. (1993)	M M M V	719 720
	1.4×10^{-2} 8.2×10^{-2}	7400	Long et al. (2017) HSDB (2015)	Q Q	287 99
2,2'-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-4) [51452-87-0] JMSKYMHFNWGUJG-UHFFFAOYSA-N	9.5×10^{-2}	7400	Long et al. (2017)	Q	287
2,3-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-5) [446254-14-4] JTYRXXKXOULVAP-UHFFFAOYSA-N	5.1×10^{-2}	7400	Long et al. (2017)	Q	287
2,3'-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-6) [147217-72-9] GODQTPRKFHOLPH-UHFFFAOYSA-N	9.4×10^{-2}	7400	Long et al. (2017)	Q	287
2,4-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-7) [171977-44-9] JMCIHKKTRDLVCO-UHFFFAOYSA-N	6.9×10^{-2}	7400	Long et al. (2017)	Q	287



Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4'-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-8) [147217-71-8] RJQLQJZMLISKRJ-UHFFFAOYSA-N	5.8×10^{-2}	7400	Long et al. (2017)	Q	287
2,5-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-9) [337513-66-3] URDWJMUOJJXSXAE-UHFFFAOYSA-N	8.0×10^{-2}	7400	Long et al. (2017)	Q	287
2,6-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-10) [51930-04-2] MUVDKHMQIZJFTC-UHFFFAOYSA-N	8.3×10^{-2}	7400	Long et al. (2017)	Q	287
3,3'-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-11) [6903-63-5] ALSVFJIXSNRBLE-UHFFFAOYSA-N	7.8×10^{-2}	7400	Long et al. (2017)	Q	287
3,4-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-12) [189084-59-1] SUUJFDKVPDCZQZ-UHFFFAOYSA-N	3.3×10^{-2}	7400	Long et al. (2017)	Q	287
3,4'-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-13) [83694-71-7] BGPOVBPKODCMMN-UHFFFAOYSA-N	5.5×10^{-2}	7400	Long et al. (2017)	Q	287
3,5-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-14) [46438-88-4] FOXBJLXVUHYQZ-UHFFFAOYSA-N	9.9×10^{-2}	7400	Long et al. (2017)	Q	287
4,4'-dibromodiphenyl ether $C_{12}H_8Br_2O$ (PBDE-15) [2050-47-7] YAWIAFUBXXPJMQ-UHFFFAOYSA-N	8.3×10^{-2} 7.1×10^{-2} 7.3×10^{-2} 4.8×10^{-2} 2.4×10^{-1} 3.9×10^{-2} 9.0×10^{-2}	4500	Lau et al. (2006) Lau et al. (2006) Charles and Destailats (2005) Tittlemier et al. (2002) Wania and Dugani (2003) Long et al. (2017) Hilal et al. (2008)	M M M V R Q Q	719 720



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-16) [147217-74-1] VRNGWCVCSHJUEJ-UHFFFAOYSA-N	2.2×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',4-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-17) [147217-75-2] VYBFILXLBMWOLI-UHFFFAOYSA-N	2.3×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',5-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-18) [407606-55-7] FAZLXBWRNJAGSV-UHFFFAOYSA-N	2.4×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',6-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-19) [147217-73-0] YDFQHBRKURQGAH-UHFFFAOYSA-N	3.6×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,3'-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-20) [147217-76-3] RQJUBSPXDSGLRB-UHFFFAOYSA-N	1.8×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,4-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-21) [337513-67-4] RXWRVYYPLRPDOS-UHFFFAOYSA-N	1.0×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,4'-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-22) [446254-15-5] WZHNIFQVNBINLF-UHFFFAOYSA-N	1.2×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,5-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-23) [446254-16-6] XQHLKDAUZRXBGC-UHFFFAOYSA-N	2.3×10^{-1}	7400	Long et al. (2017)	Q	287



Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,6-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-24) [218304-36-0] GFLRHBRMAZDOIG-UHFFFAOYSA-N	1.8×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',4-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-25) [147217-77-4] AURKEOPYVUYTLO-UHFFFAOYSA-N	2.3×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',5-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-26) [337513-75-4] VUOBKVBAFJQQDB-UHFFFAOYSA-N	2.5×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',6-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-27) [337513-53-8] JUPZALSVNWJHII-UHFFFAOYSA-N	3.4×10^{-1}	7400	Long et al. (2017)	Q	287
2,4,4'-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-28) [41318-75-6] UPNBETHXPIWQX-UHFFFAOYSA-N	1.6×10^{-1} 1.1×10^{-1} 7.7×10^{-2} 1.8×10^{-1} 1.2×10^{-1} 2.0×10^{-1} 5.2×10^{-1} 1.8×10^{-1} 1.4×10^{-1}	8100 7400 12000 7400	Long et al. (2017) Lau et al. (2006) Lau et al. (2006) Cetin and Odabasi (2005) Charles and Destailats (2005) Tittlemier et al. (2002) Wania and Dugani (2003) Long et al. (2017) Hilal et al. (2008)	M M M M M V R Q Q	287 719 720 33 287
2,4,5-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-29) [337513-56-1] LTMKAFUXYKEDLR-UHFFFAOYSA-N	1.6×10^{-1}	7400	Long et al. (2017)	Q	287
2,4,6-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-30) [155999-95-4] TVZAPPGLBLTACB-UHFFFAOYSA-N	3.4×10^{-1}	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,4',5'-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-31) [65075-08-3] PURZBWMLFRWRMG-UHFFFAOYSA-N	1.9×10^{-1}	7400	Long et al. (2017)	Q	287
2,4',6'-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-32) [189084-60-4] TYDVYKIQSZGUMV-UHFFFAOYSA-N	1.6×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',4'-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-33) [49690-94-0] BUQBQEYUVAKJQK-UHFFFAOYSA-N	1.3×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',5'-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-34) [446254-17-7] XMNXHCHZIPYCNA-UHFFFAOYSA-N	4.2×10^{-1}	7400	Long et al. (2017)	Q	287
3,3',4'-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-35) [147217-80-9] CDVYKQPKJYPWRO-UHFFFAOYSA-N	1.2×10^{-1}	7400	Long et al. (2017)	Q	287
3,3',5'-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-36) [147217-79-6] XUKPJLVONRTECE-UHFFFAOYSA-N	2.8×10^{-1}	7400	Long et al. (2017)	Q	287
3,4,4'-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-37) [147217-81-0] YALAYFVVZFORPV-UHFFFAOYSA-N	9.0×10^{-2}	7400	Long et al. (2017)	Q	287
3,4,5'-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-38) [337513-54-9] DPGVQKLGQZZLMI-UHFFFAOYSA-N	9.9×10^{-2}	7400	Long et al. (2017)	Q	287



Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,4',5-tribromodiphenyl ether $C_{12}H_7Br_3O$ (PBDE-39) [407606-57-9] UFFNOPDHJNQYKD-UHFFFAOYSA-N	2.0×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',3,3'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-40) [337513-77-6] SXSUUFZWSVMTRL-UHFFFAOYSA-N	4.8×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',3,4-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-41) [337513-68-5] UAEBSKBXZAIRMX-UHFFFAOYSA-N	3.2×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',3,4'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-42) [446254-18-8] HQDQKPAHIDGGMH-UHFFFAOYSA-N	5.2×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',3,5-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-43) [446254-19-9] LKMQHSDVDIECC-UHFFFAOYSA-N	6.6×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',3,5'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-44) [446254-20-2] VBGBGTYMDIVKNK-UHFFFAOYSA-N	5.7×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',3,6-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-45) [446254-21-3] VTFWUBIOZQCMQS-UHFFFAOYSA-N	7.3×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',3,6'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-46) [446254-22-4] GBUUKJRFKCMTB-UHFFFAOYSA-N	1.1	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,4'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-47) [5436-43-1] XYBSIYMGXUVUGY-UHFFFAOYSA-N	9.1×10^{-1} 1.6×10^{-1} 1.7×10^{-1} 8.7×10^{-1} 1.7×10^{-1} 9.3×10^{-1} 6.7×10^{-1} 9.0×10^{-1} 8.5×10^{-1} 2.2×10^{-1}	7400 7300 620 7400	Long et al. (2017) Lau et al. (2006) Lau et al. (2006) Cetin and Odabasi (2005) Charles and Destailats (2005) Kuramochi et al. (2014) Tittlemier et al. (2002) Wania and Dugani (2003) Long et al. (2017) Hilal et al. (2008)	M M M M M V V R Q Q	287 719 720 42 287
2,2',4,5-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-48) [337513-55-0] FJGDNHOVDFREMP-UHFFFAOYSA-N	4.8×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',4,5'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-49) [243982-82-3] QWVDUBDYUPHNHY-UHFFFAOYSA-N	8.6×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',4,6-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-50) [446254-23-5] FXUAKFRJBFDSY-UHFFFAOYSA-N	1.1	7400	Long et al. (2017)	Q	287
2,2',4,6'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-51) [189084-57-9] WKBBTLDLKYGBI-UHFFFAOYSA-N	1.3	7400	Long et al. (2017)	Q	287
2,2',5,5'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-52) [446254-24-6] CDTHXJORUCZHMD-UHFFFAOYSA-N	8.9×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',5,6'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-53) [446254-25-7] SDVQGIMOFXMKHR-UHFFFAOYSA-N	1.4	7400	Long et al. (2017)	Q	287



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Rolf Sander: Compilation of Henry's law constants

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',6,6'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-54) [446254-26-8] WDCCHQGVTZHVSO-UHFFFAOYSA-N	1.7	7400	Long et al. (2017)	Q	287
2,3,3',4-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-55) [446254-27-9] VIHUMJGEWQPWOT-UHFFFAOYSA-N	3.0×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,3',4'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-56) [446254-28-0] NFOIVCGFYJIYIB-UHFFFAOYSA-N	2.8×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,3',5-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-57) [337513-82-3] CSIFWDKYUJLQEB-UHFFFAOYSA-N	6.2×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,3',5'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-58) [446254-29-1] SWOYBZHGPZIRHS-UHFFFAOYSA-N	1.3	7400	Long et al. (2017)	Q	287
2,3,3',6-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-59) [446254-30-4] DMAMJZQQOWYEHT-UHFFFAOYSA-N	6.5×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,4,4'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-60) [446254-31-5] ARERIMFZYPFJAV-UHFFFAOYSA-N	2.3×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,4,5-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-61) [446254-32-6] NDRSXNBQWAOQPP-UHFFFAOYSA-N	3.2×10^{-1}	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,4,6-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-62) [446254-33-7] YIQYWYZZLOZVRM-UHFFFAOYSA-N	5.5×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,4',5-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-63) [446254-34-8] HNICYXFGCWPYGC-UHFFFAOYSA-N	5.0×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,4',6-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-64) [446254-35-9] LDCXVFJUWKBNY-UHFFFAOYSA-N	3.3×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,5,6-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-65) [446254-36-0] HPEUYVBOPJQVPN-UHFFFAOYSA-N	4.8×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',4,4'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-66) [189084-61-5] DHUMTYRHKMCVAG-UHFFFAOYSA-N	2.0 4.7×10^{-1}	7400	Tittlemier et al. (2002) Long et al. (2017)	V Q	287
2,3',4,5-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-67) [446254-37-1] OARGWSONVLGXQA-UHFFFAOYSA-N	4.7×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',4,5'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-68) [446254-38-2] UFWGRLCUOLLWAO-UHFFFAOYSA-N	1.6	7400	Long et al. (2017)	Q	287
2,3',4,6-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-69) [327185-09-1] NHZNRVCYNZJADTG-UHFFFAOYSA-N	9.8×10^{-1}	7400	Long et al. (2017)	Q	287



Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4',5'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-70) [446254-39-3] GHQMTYQVJZWAR-UHFFFAOYSA-N	5.2×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',4',6'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-71) [189084-62-6] COPAGYRSCJVION-UHFFFAOYSA-N	5.2×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',5,5'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-72) [446254-40-6] GBBNZKQTOOZGIS-UHFFFAOYSA-N	9.6×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',5',6'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-73) [446254-41-7] WQFLVWXBCRJAQN-UHFFFAOYSA-N	1.7	7400	Long et al. (2017)	Q	287
2,4,4',5'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-74) [446254-42-8] LXCDFVVDUVPAGR-UHFFFAOYSA-N	3.9×10^{-1}	7400	Long et al. (2017)	Q	287
2,4,4',6'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-75) [189084-63-7] BWCNKMFUGBFGB-UHFFFAOYSA-N	6.3×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',4',5'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-76) [446254-43-9] NCSWBJSFVJPJK-UHFFFAOYSA-N	4.7×10^{-1}	7400	Long et al. (2017)	Q	287
3,3',4,4'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-77) [93703-48-1] RYGLOWMCGZHYRQ-UHFFFAOYSA-N	8.3×10^{-1} 2.3×10^{-1}	7400	Tittlemier et al. (2002) Long et al. (2017)	V Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3',4,5-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-78) [446254-45-1] HWOBLTZSVXBOJ-UHFFFAOYSA-N	2.9×10^{-1}	7400	Long et al. (2017)	Q	287
3,3',4,5'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-79) [446254-48-4] LELQGHJEUVRPEV-UHFFFAOYSA-N	4.7×10^{-1}	7400	Long et al. (2017)	Q	287
3,3',5,5'-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-80) [103173-66-6] HFIOZJQRZKNPKJ-UHFFFAOYSA-N	1.1	7400	Long et al. (2017)	Q	287
3,4,4',5-tetrabromodiphenyl ether $C_{12}H_6Br_4O$ (PBDE-81) [446254-50-8] ULFOIXCXIWHJDS-UHFFFAOYSA-N	2.4×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',3,3',4-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-82) [327185-11-5] RQMSPGJESCCPQX-UHFFFAOYSA-N	7.1×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',3,3',5-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-83) [446254-51-9] XAHYSNUYJLNDBX-UHFFFAOYSA-N	1.4	7400	Long et al. (2017)	Q	287
2,2',3,3',6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-84) [446254-52-0] PPIZNRAVQHNLMJ-UHFFFAOYSA-N	1.8	7400	Long et al. (2017)	Q	287



Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-85) [182346-21-0] DMLQSUZPTTUUDP-UHFFFAOYSA-N	9.1		Tittlemier et al. (2002)	V	
2,2',3,4,5-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-86) [446254-53-1] YMWVYUWOUQQQP-UHFFFAOYSA-N	1.3	7400	Long et al. (2017)	Q	287
2,2',3,4,5'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-87) [446254-54-2] WKYQUGCIKNOXFW-UHFFFAOYSA-N	9.2×10^{-1}	7400	Long et al. (2017)	Q	287
2,2',3,4,6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-88) [446254-55-3] OPZUHBCVIZNZFB-UHFFFAOYSA-N	1.1×10^2	7400	Long et al. (2017)	Q	287
2,2',3,4,6'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-89) [446254-56-4] XGFLJLJXVIMCNR-UHFFFAOYSA-N	1.2	7400	Long et al. (2017)	Q	287
2,2',3,4,7-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-90) [446254-57-5] BATFXMGTVIESIQ-UHFFFAOYSA-N	1.8	7400	Long et al. (2017)	Q	287
2,2',3,4',5-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-91) [446254-58-6] HWNJTKDPNZUSO-UHFFFAOYSA-N	2.3	7400	Long et al. (2017)	Q	287
2,2',3,4',6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-91) [446254-58-6] HWNJTKDPNZUSO-UHFFFAOYSA-N	1.7	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,5,5'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-92) [446254-59-7] QWSQOVAGRDRZLM-UHFFFAOYSA-N	1.9	7400	Long et al. (2017)	Q	287
2,2',3,5,6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-93) [446254-60-0] BRTPVVPJQMWL DNO-UHFFFAOYSA-N	1.5	7400	Long et al. (2017)	Q	287
2,2',3,5,6'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-94) [446254-61-1] JOPASNJHCFYVHD-UHFFFAOYSA-N	3.8	7400	Long et al. (2017)	Q	287
2,2',3,5',6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-95) [446254-62-2] BZDYRALIEYVMEP-UHFFFAOYSA-N	1.8	7400	Long et al. (2017)	Q	287
2,2',3,6,6'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-96) [446254-63-3] ZFCJNRDWBGBZUED-UHFFFAOYSA-N	3.9	7400	Long et al. (2017)	Q	287
2,2',3,4',5'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-97) [446254-64-4] MAGYDGRJRSCLJL-UHFFFAOYSA-N	1.0	7400	Long et al. (2017)	Q	287
2,2',3,4',6'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-98) [38463-82-0] OCLWEJVGAUFXQU-UHFFFAOYSA-N	3.5	7400	Long et al. (2017)	Q	287



Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,4',5-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-99) [60348-60-9] WHPVYXDIFXRKLN-UHFFFAOYSA-N	1.5	8900	Long et al. (2017)	M	287
	6.2×10^{-1}		Lau et al. (2006)	M	719
	3.3×10^{-1}		Lau et al. (2006)	M	720
	1.5	8800	Cetin and Odabasi (2005)	M	
	2.7×10^{-1}	-6700	Charles and Destailats (2005)	M	42
	2.1		Kuramochi et al. (2014)	V	
	4.3		Tittlemier et al. (2002)	V	
	1.9		Wania and Dugani (2003)	R	
	1.6	7400	Long et al. (2017)	Q	287
	8.4		Zhang et al. (2010)	Q	287, 288
	3.7		Zhang et al. (2010)	Q	287, 289
	1.2×10^2		Zhang et al. (2010)	Q	287, 290
	2.4×10^1		Zhang et al. (2010)	Q	287, 291
	4.3×10^{-1}		Hilal et al. (2008)	Q	
2,2',4,4',6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-100) [189084-64-8] NSKIRYMHNFTRLR-UHFFFAOYSA-N	3.6	7300	Long et al. (2017)	M	287
	3.3×10^{-1}		Lau et al. (2006)	M	719
	3.2×10^{-1}		Lau et al. (2006)	M	720
	3.8	6800	Cetin and Odabasi (2005)	M	
	1.9×10^{-1}	12	Charles and Destailats (2005)	M	42
	1.4×10^1		Tittlemier et al. (2002)	V	
	2.6		Wania and Dugani (2003)	R	
	3.9	7400	Long et al. (2017)	Q	287
	3.7×10^{-1}		Hilal et al. (2008)	Q	
2,2',4,5,5'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-101) [446254-65-5] QUZWDWNIWQAQDI-UHFFFAOYSA-N	1.4	7400	Long et al. (2017)	Q	287
2,2',4,5,6'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-102) [446254-66-6] JHFMCUVMAIQWRI-UHFFFAOYSA-N	2.8	7400	Long et al. (2017)	Q	287
2,2',4,5',6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-103) [446254-67-7] RJEMKRNASVHYKR-UHFFFAOYSA-N	3.4	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,6,6'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-104) [446254-68-8] CRSCWEYUUPUKHPI-UHFFFAOYSA-N	6.7	7400	Long et al. (2017)	Q	287
2,3,3',4,4'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-105) [373594-78-6] LBPWAGZGYNOKAM-UHFFFAOYSA-N	6.1×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,3',4,5-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-106) [446254-69-9] KLQKWMYXEWUAFP-UHFFFAOYSA-N	8.5×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,3',4',5-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-107) [446254-70-2] OMGVAMFMRSETEG-UHFFFAOYSA-N	1.9	7400	Long et al. (2017)	Q	287
2,3,3',4,5'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-108) [446254-71-3] VBKPKHVLHGOKOJ-UHFFFAOYSA-N	2.0	7400	Long et al. (2017)	Q	287
2,3,3',4,6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-109) [446254-72-4] FXXXWTMLIQLDRP-UHFFFAOYSA-N	1.2	7400	Long et al. (2017)	Q	287
2,3,3',4',6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-110) [446254-73-5] LESZGJVTZILBTK-UHFFFAOYSA-N	9.4×10^{-1}	7400	Long et al. (2017)	Q	287



Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',5,5'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-111) [446254-74-6] PCHDCOXHJBWEPW-UHFFFAOYSA-N	2.1	7400	Long et al. (2017)	Q	287
2,3,3',5,6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-112) [446254-75-7] MFBMNSFADPTAKZ-UHFFFAOYSA-N	1.7	7400	Long et al. (2017)	Q	287
2,3,3',5',6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-113) [446254-76-8] OGZHLJXRGZFLI-UHFFFAOYSA-N	3.1	7400	Long et al. (2017)	Q	287
2,3,4,4',5-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-114) [446254-77-9] SFNAUTSNWPPDSY-UHFFFAOYSA-N	6.2×10^{-1} 7.7×10^{-1} 8.8×10^{-1} 7.5×10^{-1}	 4000 7400	Lau et al. (2006) Lau et al. (2006) Charles and Destailats (2005) Long et al. (2017)	M M M Q	719 720 42 287
2,3,4,4',6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-115) [446254-78-0] BKTLDVXDOSTEV-UHFFFAOYSA-N	9.8×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,4,5,6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-116) [189084-65-9] ACRQLFSHISNWRY-UHFFFAOYSA-N	6.1×10^{-1}	7400	Long et al. (2017)	Q	287
2,3,4',5,6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-117) [446254-79-1] SOJBOGWFBDDWEG-UHFFFAOYSA-N	8.6×10^{-1}	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4,4',5-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-118) [446254-80-4] VTMFEPLDDHZBGI-UHFFFAOYSA-N	9.2×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',4,4',6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-119) [189084-66-0] KXEOYBYEJCRPGB-UHFFFAOYSA-N	1.8	7400	Long et al. (2017)	Q	287
2,3',4,5,5'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-120) [417727-71-0] AKSBEUHDRZJAN-UHFFFAOYSA-N	1.7	7400	Long et al. (2017)	Q	287
2,3',4,5',6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-121) [446254-81-5] GVGNVZBJVFDAAO-UHFFFAOYSA-N	5.9	7400	Long et al. (2017)	Q	287
2,3,3',4',5'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-122) [446254-82-6] CDNHGSPFIUITTN-UHFFFAOYSA-N	7.2×10^{-1}	7400	Long et al. (2017)	Q	287
2,3',4,4',5'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-123) [446254-83-7] SBKMUEQNZNDYFW-UHFFFAOYSA-N	1.2	7400	Long et al. (2017)	Q	287
2,3',4',5,5'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-124) [446254-84-8] FGHJTAAHIFEHLT-UHFFFAOYSA-N	1.1	7400	Long et al. (2017)	Q	287



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Rolf Sander: Compilation of Henry's law constants

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4',5',6-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-125) [446254-85-9] SESXKFPOVUVGLR-UHFFFAOYSA-N	1.3	7400	Long et al. (2017)	Q	287
3,3',4,4',5-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-126) [366791-32-4] SJNIIWPIAVQNRK-UHFFFAOYSA-N	5.6×10^{-1}	7400	Long et al. (2017)	Q	287
3,3',4,5,5'-pentabromodiphenyl ether $C_{12}H_5Br_5O$ (PBDE-127) [446254-86-0] RATMRXKBPDCKCZ-UHFFFAOYSA-N	1.1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,4'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-128) [182677-28-7] WFLVELCLEGVBIH-UHFFFAOYSA-N	2.1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,5-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-129) [446254-87-1] PRNCVYAUCSGSOE-UHFFFAOYSA-N	1.9	7400	Long et al. (2017)	Q	287
2,2',3,3',4,5'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-130) [446254-88-2] YURCHLXPAGSJHU-UHFFFAOYSA-N	3.7	7400	Long et al. (2017)	Q	287
2,2',3,3',4,6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-131) [446254-89-3] MGKVPJFIGGBCBA-UHFFFAOYSA-N	1.0×10^1	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,6'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-132) [446254-90-6] FFEKBOKDYRZGRV-UHFFFAOYSA-N	4.0	7400	Long et al. (2017)	Q	287
2,2',3,3',5,5'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-133) [446254-91-7] XTBFPFHQPGZZJX-UHFFFAOYSA-N	6.3	7400	Long et al. (2017)	Q	287
2,2',3,3',5,6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-134) [446254-92-8] MIBDGPWSGDWIQR-UHFFFAOYSA-N	4.8	7400	Long et al. (2017)	Q	287
2,2',3,3',5,6'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-135) [446254-93-9] AMGHASDTWACNCS-UHFFFAOYSA-N	8.6	7400	Long et al. (2017)	Q	287
2,2',3,3',6,6'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-136) [446254-94-0] NTWGDLSLWLPDWC-UHFFFAOYSA-N	7.8	7400	Long et al. (2017)	Q	287
2,2',3,4,4',5-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-137) [446254-95-1] HSTYYNPYXZYIAG-UHFFFAOYSA-N	3.0	7400	Long et al. (2017)	Q	287
2,2',3,4,4',5'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-138) [182677-30-1] IZFQCEZFGCMHOM-UHFFFAOYSA-N	2.7	7400	Long et al. (2017)	Q	287



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Rolf Sander: Compilation of Henry's law constants

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',6'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-140) [243982-83-4] FLRODCDHJZNIGA-UHFFFAOYSA-N	7.7	7400	Long et al. (2017)	Q	287
2,2',3,4,5,5'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-141) [446254-97-3] XTXIYMGRRUJOIT-UHFFFAOYSA-N	2.6	7400	Long et al. (2017)	Q	287
2,2',3,4,5,6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-142) [446254-98-4] LJDGJCNHVGGOFW-UHFFFAOYSA-N	1.4	7400	Long et al. (2017)	Q	287
2,2',3,4,5,6'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-143) [446254-99-5] RQLZDUSZXOBTM-UHFFFAOYSA-N	5.1	7400	Long et al. (2017)	Q	287
2,2',3,4,5',6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-144) [446255-00-1] ZMSJCQOCTPYCQP-UHFFFAOYSA-N	5.2	7400	Long et al. (2017)	Q	287
2,2',3,4,6,6'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-145) [446255-01-2] BTKLHMBWCRVCLC-UHFFFAOYSA-N	1.0×10^1	7400	Long et al. (2017)	Q	287
2,2',3,4',5,5'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-146) [446255-02-3] HGXPYDNHBUCTR-UHFFFAOYSA-N	5.3	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4',5,6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-147) [116995-33-6] OWBKWMDBTWHGHS-UHFFFAOYSA-N	5.1	7400	Long et al. (2017)	Q	287
2,2',3,4',5,6'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-148) [446255-03-4] OJMHGMSMQZEBFH-UHFFFAOYSA-N	1.2×10^1	7400	Long et al. (2017)	Q	287
2,2',3,4',5',6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-149) [446255-04-5] UJOUSZKYGGTPFQ-UHFFFAOYSA-N	5.1	7400	Long et al. (2017)	Q	287
2,2',3,4',6,6'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-150) [446255-05-6] SQNOZOVDXSLSG-UHFFFAOYSA-N	1.7×10^1	7400	Long et al. (2017)	Q	287
2,2',3,5,5',6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-151) [446255-06-7] NGOQUYCSISZMY-UHFFFAOYSA-N	4.4	7400	Long et al. (2017)	Q	287
2,2',3,5,6,6'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-152) [446255-07-8] BYBJJARTBKUIJD-UHFFFAOYSA-N	9.4	7400	Long et al. (2017)	Q	287
2,2',4,4',5,5'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-153) [68631-49-2] RZXIRSKYBISPGF-UHFFFAOYSA-N	3.7 3.5 6.1 1.5×10^1 2.9	7200 7800	Long et al. (2017) Cetin and Odabasi (2005) Kuramochi et al. (2014) Tittlemier et al. (2002) Wania and Dugani (2003)	M M V V R	287
	3.9 8.4×10^{-1}	7400	Long et al. (2017) Hilal et al. (2008)	Q Q	287



Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',4,4',5,6'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-154) [207122-15-4] VHNFPZYQKWIWOD-UHFFFAOYSA-N	7.1	6800	Long et al. (2017)	M	287
	7.3	6800	Cetin and Odabasi (2005)	M	
	4.2		Tittlemier et al. (2002)	V	
	1.1×10^1	7400	Long et al. (2017)	Q	287
	7.2×10^{-1}		Hilal et al. (2008)	Q	
2,2',4,4',6,6'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-155) [35854-94-5] HRSCBOSGEKXXSI-UHFFFAOYSA-N	2.5×10^1	7400	Long et al. (2017)	Q	287
2,3,3',4,4',5-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-156) [405237-85-6] JSDPCMJWYRDQEV-UHFFFAOYSA-N	1.5	7400	Long et al. (2017)	Q	287
2,3,3',4,4',5'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-157) [446255-08-9] JUOAMVUIJQZSZ-UHFFFAOYSA-N	1.9	7400	Long et al. (2017)	Q	287
2,3,3',4,4',6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-158) [446255-09-0] KRYHHTVQOOJNHQ-UHFFFAOYSA-N	2.7	7400	Long et al. (2017)	Q	287
2,3,3',4,5,5'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-159) [446255-10-3] IDYFFNCFRLCOPZ-UHFFFAOYSA-N	3.0	7400	Long et al. (2017)	Q	287
2,3,3',4,5,6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-160) [446255-11-4] OCVOYHGOXIIIONK-UHFFFAOYSA-N	2.8	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4,5',6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-161) [446255-12-5] WEYWRBBPPKSRGU-UHFFFAOYSA-N	9.0	7400	Long et al. (2017)	Q	287
2,3,3',4',5,5'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-162) [446255-13-6] UKPNCLHMNJCGCJ-UHFFFAOYSA-N	2.7	7400	Long et al. (2017)	Q	287
2,3,3',4',5,6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-163) [446255-14-7] NUEAHMLXQFHEJN-UHFFFAOYSA-N	2.3	7400	Long et al. (2017)	Q	287
2,3,3',4',5',6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-164) [446255-15-8] UJVVYXIHTJOJBZ-UHFFFAOYSA-N	3.1	7400	Long et al. (2017)	Q	287
2,3,3',5,5',6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-165) [446255-16-9] KXERERDGMTWBGZ-UHFFFAOYSA-N	7.9	7400	Long et al. (2017)	Q	287
2,3,4,4',5,6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-166) [189084-58-0] KVYODBMKQYVNEK-UHFFFAOYSA-N	1.2	7400	Long et al. (2017)	Q	287
2,3',4,4',5,5'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-167) [446255-17-0] NMUPLZRHSXJCJQ-UHFFFAOYSA-N	3.1	7400	Long et al. (2017)	Q	287



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Rolf Sander: Compilation of Henry's law constants

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3',4,4',5',6-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-168) [53551-87-4] HWZAPXGFMVEGPW-UHFFFAOYSA-N	5.0	7400	Long et al. (2017)	Q	287
3,3',4,4',5,5'-hexabromodiphenyl ether $C_{12}H_4Br_6O$ (PBDE-169) [446255-18-1] JKFBMDHBJYKFL-UHFFFAOYSA-N	1.2	7400	Long et al. (2017)	Q	287
2,2',3,3',4,4',5-heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-170) [327185-13-7] DLPNCMQTNWLTHD-UHFFFAOYSA-N	4.9	7400	Long et al. (2017)	Q	287
2,2',3,3',4,4',6-heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-171) [446255-19-2] FRMMMROUUPQUMZ-UHFFFAOYSA-N	1.2×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,5,5'-heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-172) [407606-59-1] DSRRSKFMOJQETR-UHFFFAOYSA-N	1.6×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,5,6-heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-173) [446255-20-5] NLBLNZDNOSSGPW-UHFFFAOYSA-N	6.7	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,5,6'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-174) [446255-21-6] VUUWOHUOYUGBEO-UHFFFAOYSA-N	1.2×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,5',6'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-175) [6255-22-7] YATZWTXATDYQCK-UHFFFAOYSA-N	1.7×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,6,6'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-176) [407606-61-5] SWUALKCOTZOSMY-UHFFFAOYSA-N	2.5×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,5',6'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-177) [446255-23-8] ZHUHLPXIJIBQBJ-UHFFFAOYSA-N	9.9	7400	Long et al. (2017)	Q	287
2,2',3,3',5,5',6'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-178) [446255-24-9] UWUVZUPEEORCRG-UHFFFAOYSA-N	1.3×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',5,6,6'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-179) [446255-25-0] COVXWWKOLMNRQE-UHFFFAOYSA-N	2.2×10^1	7400	Long et al. (2017)	Q	287



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Rolf Sander: Compilation of Henry's law constants

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',5,5'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-180) [446255-26-1] STMBXVOJNOJRPZ-UHFFFAOYSA-N	7.3	7400	Long et al. (2017)	Q	287
2,2',3,4,4',5,6- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-181) [189084-67-1] GVNRIAPLVGNZPL-UHFFFAOYSA-N	8.9	7400	Long et al. (2017)	Q	287
2,2',3,4,4',5,6'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-182) [442690-45-1] ZYHDTADADSNMLV-UHFFFAOYSA-N	1.9×10^1	7400	Long et al. (2017)	Q	287
2,2',3,4,4',5',6- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-183) [207122-16-5] ILPSCQCLBHQUEM-UHFFFAOYSA-N	1.4×10^2		Tittlemier et al. (2002)	V	
2,2',3,4,4',5',6'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-184) [117948-63-7] JHDCZVAQPRXHEL-UHFFFAOYSA-N	1.3×10^1	7400	Long et al. (2017)	Q	287
2,2',3,4,4',6,6'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-184) [117948-63-7] JHDCZVAQPRXHEL-UHFFFAOYSA-N	3.7×10^1	7400	Long et al. (2017)	Q	287
2,2',3,4,5,5',6- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-185) [405237-86-7] YRNMIFAQDSUFTR-UHFFFAOYSA-N	5.1	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,5,6,6'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-186) [446255-27-2] WUFQDCMRKDNSF-UHFFFAOYSA-N	1.4×10^1	7400	Long et al. (2017)	Q	287
2,2',3,4',5,5',6- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-187) [446255-28-3] RFZPXOBFDARWHV-UHFFFAOYSA-N	9.4	7400	Long et al. (2017)	Q	287
2,2',3,4',5,6,6'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-188) [116995-32-5] YGYDHFDPVGAMTL-UHFFFAOYSA-N	3.5×10^1	7400	Long et al. (2017)	Q	287
2,3,3',4,4',5,5'- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-189) [259087-35-9] CQVLRUESBMMJW-UHFFFAOYSA-N	4.4	7400	Long et al. (2017)	Q	287
2,3,3',4,4',5,6- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-190) [189084-68-2] OUEYHQIMJGHOQN-UHFFFAOYSA-N	4.0	7400	Long et al. (2017)	Q	287
2,3,3',4,4',5',6- heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-191) [446255-30-7] BNBFKFSIPERIM-UHFFFAOYSA-N	8.4	7400	Long et al. (2017)	Q	287



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Rolf Sander: Compilation of Henry's law constants

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,3',4,5,5',6-heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-192) [407578-53-4] ABLZOLAUBUSUHT-UHFFFAOYSA-N	1.3×10^1	7400	Long et al. (2017)	Q	287
2,3,3',4',5,5',6-heptabromodiphenyl ether $C_{12}H_3Br_7O$ (PBDE-193) [446255-34-1] AUFJSWANTKXCFZ-UHFFFAOYSA-N	7.3	7400	Long et al. (2017)	Q	287
2,2',3,3',4,4',5,5'-octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-194) [32536-52-0] ORYGKUIDIMIRNN-UHFFFAOYSA-N	1.3×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,4',5,6-octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-195) [446255-38-5] GPQLSLKPHQEEOP-UHFFFAOYSA-N	1.6×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,4',5,6'-octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-196) [446255-39-6] IEWFKOVTVJNWFF-UHFFFAOYSA-N	3.7×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,4',6,6'-octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-197) [117964-21-3] AAFUUKPTSPVXJH-UHFFFAOYSA-N	7.1×10^1	7400	Long et al. (2017)	Q	287



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,3',4,5,5',6'- octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-198) [446255-42-1] IBKRHVDFHQQSC-UHFFFAOYSA-N	1.8×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,5,5',6'- octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-199) [446255-43-2] JNSLJYRXDGBNBE-UHFFFAOYSA-N	3.3×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,5,6,6'- octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-200) [446255-46-5] JWMXGEPFVCRXQR-UHFFFAOYSA-N	3.7×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,5',6,6'- octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-201) [446255-50-1] HQWFMMKREWXIGN-UHFFFAOYSA-N	6.8×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',5,5',6,6'- octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-202) [67797-09-5] AHNZLQAZTWRRDW-UHFFFAOYSA-N	5.7×10^1	7400	Long et al. (2017)	Q	287
2,2',3,4,4',5,5',6'- octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-203) [337513-72-1] RTUZOQFRIPWPS-UHFFFAOYSA-N	2.0×10^1	7400	Long et al. (2017)	Q	287



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Rolf Sander: Compilation of Henry's law constants

Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2',3,4,4',5,6,6'- octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-204) [446255-54-5] YZABCBOJTHQTSX-UHFFFAOYSA-N	6.2×10^1	7400	Long et al. (2017)	Q	287
2,3,3',4,4',5,5',6- octabromodiphenyl ether $C_{12}H_2Br_8O$ (PBDE-205) [446255-56-7] CVMKCYDBEYHNBM-UHFFFAOYSA-N	1.8×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,4',5,5',6- nonabromodiphenyl ether $C_{12}HBr_9O$ (PBDE-206) [63387-28-0] CYRHBNRLQMLULE-UHFFFAOYSA-N	4.7×10^1	7400	Long et al. (2017)	Q	287
2,2',3,3',4,4',5,6,6'- nonabromodiphenyl ether $C_{12}HBr_9O$ (PBDE-207) [437701-79-6] IEEVDIIVLGLVOW-UHFFFAOYSA-N	1.2×10^2	7400	Long et al. (2017)	Q	287
2,2',3,3',4,5,5',6,6'- nonabromodiphenyl ether $C_{12}HBr_9O$ (PBDE-208) [437701-78-5] ASGZXYIDLFWXID-UHFFFAOYSA-N	1.1×10^2	7400	Long et al. (2017)	Q	287
decabromodiphenyl ether $C_{12}Br_{10}O$ (PBDE-209) [1163-19-5] WHHGLZMJPXIBIX-UHFFFAOYSA-N	1.8×10^1 1.8×10^1 2.7×10^1 8.2×10^2 8.2×10^2	7600 7900 7400	Long et al. (2017) Cetin and Odabasi (2005) Long et al. (2017) HSDB (2015) Zhang et al. (2010)	M M Q Q Q	287 287 99 287, 288
	4.1×10^2 1.3×10^3 6.7×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	287, 289 287, 290 287, 291



Rolf Sander: Compilation of Henry's law constants

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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dibromoacetonitrile $\text{C}_2\text{HBr}_2\text{N}$ [3252-43-5] NDSBDLSWTGLNQA-UHFFFAOYSA-N	2.4×10^1		HSDB (2015)	Q	99
bromoacetonitrile $\text{C}_2\text{H}_2\text{BrN}$ [590-17-0] REXUYBKPWIPONM-UHFFFAOYSA-N	2.8		HSDB (2015)	Q	447
2-bromopyridine $\text{C}_5\text{H}_4\text{BrN}$ [109-04-6] IMRWILPUOVGIMU-UHFFFAOYSA-N	1.3 1.8×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
3-bromopyridine $\text{C}_5\text{H}_4\text{BrN}$ [626-55-1] NYPYPOZNGOXSU-UHFFFAOYSA-N	8.3×10^{-1}		Ebert et al. (2023)	?	316
1,2-dibromo-2,4-dicyanobutane $\text{C}_6\text{H}_6\text{Br}_2\text{N}_2$ [35691-65-7] DHVLDKHFVGEIP-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	V	
4-bromobenzenamine $\text{C}_6\text{H}_6\text{BrN}$ [106-40-1] WDFQBORIUYODSI-UHFFFAOYSA-N	1.1×10^1		HSDB (2015)	Q	447
2,4,6-tribromobenzenamine $\text{C}_6\text{H}_4\text{Br}_3\text{N}$ [147-82-0] GVPODVKBTHCGFU-UHFFFAOYSA-N	8.2×10^1 2.6 6.0×10^{-1} 1.2×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
N,N'-dimethyl-3,3',4,4',5,5'-hexabromo-2,2'-bipyrrole $\text{C}_{10}\text{H}_6\text{Br}_6\text{N}_2$ (DBP-Br6) [253798-63-9] BUKWTHPBLJVVMZ-UHFFFAOYSA-N	5.0×10^2 5.1×10^1		Tittlemier et al. (2004) Hilal et al. (2008)	V Q	
1,1'-ethylene 2,2'-dipyridylum dibromide $\text{C}_{12}\text{H}_{12}\text{N}_2\text{Br}_2$ (diquat dibromide) [85-00-7] JXEXEPZXXFNEHA-UHFFFAOYSA-M	7.0×10^7		HSDB (2015)	Q	99



Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tralomethrin $C_{22}H_{19}NO_3Br_4$ [66841-25-6] YWSCPYYRJKUDB-KAKFPZCNSA-N	2.5×10^4 2.5×10^4 1.2×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
bromomethyl peroxyhydrate $CH_2BrO_2NO_2$ JTAFUKGUWIYDNI-UHFFFAOYSA-N	3.5×10^{-1}		Kryzstofiak et al. (2012)	Q	
dibromomethyl peroxyhydrate $CHBr_2O_2NO_2$ CRBGJNSRTFAVGH-UHFFFAOYSA-N	3.0		Kryzstofiak et al. (2012)	Q	
tribromomethyl peroxyhydrate $CBr_3O_2NO_2$ BVMOLEXBJGZUAI-UHFFFAOYSA-N	4.0		Kryzstofiak et al. (2012)	Q	
MCM:BRETPAN $C_2H_2NO_5Br$ OOFXJVGALRPLK-UHFFFAOYSA-N	2.0×10^1 8.7×10^1 3.3×10^{-3}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
2,2-dibromo-2-cyanoacetamide $C_3H_2Br_2N_2O$ (2,2-dibromo-3-nitrilopropionamide) [10222-01-2] UUIVKBHZENILKB-UHFFFAOYSA-N	5.2×10^2 5.2×10^2 8.5×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
bronopol $C_3H_6BrNO_4$ [52-51-7] LVDKZNITIUWNER-UHFFFAOYSA-N	7.6×10^5		HSDB (2015)	V	
2,6-dibromo-4-nitroaniline $C_6H_4Br_2N_2O_2$ [827-94-1] YMZIFDLWYUSZCC-UHFFFAOYSA-N	8.2×10^3 1.7×10^2 1.9×10^3 5.7×10^3		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-bromo-4,6-dinitroaniline $C_6H_4BrN_3O_4$ [1817-73-8] KWMDHCLJYMBNS-UHFFFAOYSA-N	3.9×10^4 2.7×10^2 1.8×10^3 5.7×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3-bromonitrobenzene $C_6H_4BrNO_2$ (<i>m</i> -bromonitrobenzene) [585-79-5] FWIROFMBWVMWLB-UHFFFAOYSA-N	5.3 5.4 1.8		Duchowicz et al. (2020) Schüürmann (2000) Duchowicz et al. (2020)	V V Q	186



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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-bromonitrobenzene $C_6H_4BrNO_2$ (<i>p</i> -bromonitrobenzene) [586-78-7] ZDFBKZUDCQKAC-UHFFFAOYSA-N	2.2×10^{-1}		Li et al. (2014)	Q	241
3,5-dibromo-4-hydroxy- benzonitrile $C_7H_3Br_2NO$ (bromoxynil) [1689-84-5] UPMXNNIRAGDFEH-UHFFFAOYSA-N	7.4×10^2 1.0×10^6 2.2×10^3 1.1×10^6		Mackay et al. (2006d) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V ? ? ?	 241, 573, 165 241, 577, 165 241, 493, 165
2,6-dibromo-3-methyl-4- nitroanisole $C_8H_7Br_2NO_3$ [62265-99-0] RBAJFFLBHVZCDY-UHFFFAOYSA-N	4.5×10^1 3.5×10^1 4.7 9.7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
bromacil $C_9H_{13}BrN_2O_2$ [314-40-9] CTSLUCNDVMMDHG-UHFFFAOYSA-N	7.6×10^4 7.8×10^4 5.3×10^2 5.2 2.1×10^1		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 12 567 568
N'-(4-bromophenyl)-N-methoxy- N-methylurea $C_9H_{11}BrN_2O$ (metobromuron) [3060-89-7] WLFDQEVORAMCIM-UHFFFAOYSA-N	3.2×10^3 3.2×10^3 3.2×10^1 8.5 8.8×10^3		HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V V X Q ?	 567 568 12, 165
bromuron $C_9H_{11}BrN_2O$ [3408-97-7] GSNZNZUNAJCHDO-UHFFFAOYSA-N	2.0×10^4		MacBean (2012a)	?	
bromoxynil butyrate $C_{11}H_9Br_2NO_2$ [3861-41-4] PGMZYNZXIYOOHJ-UHFFFAOYSA-N	5.6×10^1		Maniere et al. (2011)	?	12, 165
tris(2,3- dibromopropyl)isocyanurate $C_{12}H_{15}Br_6N_3O_3$ [52434-90-9] NZUPFZNVGSLQOC-UHFFFAOYSA-N	8.2×10^{12} 6.5×10^7 2.7×10^8 1.2×10^{10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bromofenoxim $C_{13}H_7Br_2N_3O_6$ [13181-17-4] VTQWKUZUPOTXEH-UHFFFAOYSA-N	3.1×10^{-3} 8.1×10^{-4} 1.3×10^5		Barcelo and Hennion (1997) Goodarzi et al. (2010) MacBean (2012a)	X Q ?	567 568, 569 12
tribromsalan $C_{13}H_8Br_3NO_2$ [87-10-5] KVSJGMLNBAPGKH-UHFFFAOYSA-N	9.7×10^5 1.2×10^6 1.6×10^6 1.2×10^6		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
bromoxynil heptanoate $C_{14}H_{15}Br_2NO_2$ [56634-95-8] BHZWBQPHPLFZSV-UHFFFAOYSA-N	5.3		Maniere et al. (2011)	?	12, 165
1-amino-2,4-dibromo-9,10- anthracenedione $C_{14}H_7Br_2NO_2$ (1-amino-2,4- dibromoanthraquinone) [81-49-2] ZINRVIQBCHAZMM-UHFFFAOYSA-N	5.5×10^7		HSDB (2015)	Q	99
2,6-dibromo-4-cyanophenyl octanoate $C_{15}H_{17}Br_2NO_2$ [1689-99-2] DQKWXTIYGWPGOO-UHFFFAOYSA-N	3.1×10^{-1} 3.1×10^{-1} 4.1×10^1 <5.3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 12, 165
bromobutide $C_{15}H_{22}BrNO$ [74712-19-9] WZDDLAXUYIVMU-UHFFFAOYSA-N	1.9×10^2		Ebert et al. (2023)	?	318
(2E)-N,N'-bis(2,4,6- tribromophenyl)-2-butenediamide $C_{16}H_8Br_6N_2O_2$ [92484-07-6] IJUNKLAVMFKPCX-OWOJBTEDSA-N	9.0×10^9 5.1×10^8 6.2×10^9 7.2×10^{13}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
SAYTEX BT 93 $C_{18}H_4Br_8N_2O_4$ [32588-76-4] DYIZJUDNMOIZQO-UHFFFAOYSA-N	2.7×10^{15} 2.7×10^{15} 2.3×10^{11} 3.5×10^9 2.3×10^{13}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
SAYTEX BN 451 $C_{20}H_{20}Br_4N_2O_4$ [52907-07-0] WOFYQUJNULCFLN-UHFFFAOYSA-N	2.5×10^{15} 1.4×10^{11} 5.7×10^{11} 1.6×10^{15}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A7.2: Polybrominated diphenyl ethers (PBDEs) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
deltamethrin	2.0		Duchowicz et al. (2020)	V	186
$C_{22}H_{19}Br_2NO_3$	2.0		HSDB (2015)	V	
[52918-63-5]	4.0×10^{-1}		Mackay et al. (2006d)	V	
OWZREIFADZCYQD-NSHGMRRFSA-N	2.0		Siebers and Mattusch (1996)	V	12
	1.0×10^3		Duchowicz et al. (2020)	Q	
	3.2×10^1		Maniere et al. (2011)	?	165
2,2'-(methylenedi-4,1-phenylene)bis(4,5,6,7-tetrabromo-1H-isoindole-1,3(2H)-dione	5.3×10^{14}		Zhang et al. (2010)	Q	287, 288
$C_{29}H_{10}N_2O_4Br_8$	1.7×10^{14}		Zhang et al. (2010)	Q	287, 289
[32588-74-2]	9.5×10^9		Zhang et al. (2010)	Q	287, 290
RHFKNBDBKARGKL-UHFFFAOYSA-N	4.7×10^{15}		Zhang et al. (2010)	Q	287, 291



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A7.3 Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br)

Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bromotrifluoromethane CF_3Br [75-63-8] RJCQBQGAPKAMLL-UHFFFAOYSA-N	2.0×10^{-5}		Hine and Mookerjee (1975)	V	
	2.0×10^{-5}		Yaws (2003)	X	237
	2.0×10^{-5}		Irmann (1965)	C	
	6.4×10^{-6}		Keshavarz et al. (2022)	Q	
	5.3×10^{-5}		Duchowicz et al. (2020)	Q	299
	4.7×10^{-5}		Gharagheizi et al. (2012)	Q	
	1.8×10^{-5}		Gharagheizi et al. (2010)	Q	246
	3.2×10^{-5}		Hilal et al. (2008)	Q	
	1.1×10^{-5}		Modarresi et al. (2007)	Q	67
	2.7×10^{-5}		Nirmalakhandan and Speece (1988)	Q	
	5.6×10^{-6}		Irmann (1965)	Q	
	2.0×10^{-5}		Duchowicz et al. (2020)	?	185, 21
	2.1×10^{-5}		Yaws (1999)	?	21
dibromodifluoromethane CBr_2F_2 [75-61-6] AZSZCFSOHXEJQE-UHFFFAOYSA-N	3.3×10^{-4}		HSDB (2015)	Q	99
1-bromo-1,2,2,2-tetrafluoroethane C_2HBrF_4 (teflurane) [124-72-1] RZXZIZDRFQFCTA-UHFFFAOYSA-N	1.7×10^{-4}	2700	Allott et al. (1973)	L	
	1.2×10^{-4}		Edelist et al. (1964)	M	14
	1.4×10^{-4}		Keshavarz et al. (2022)	Q	
	1.5×10^{-3}		Duchowicz et al. (2020)	Q	
	2.1×10^{-4}		Hilal et al. (2008)	Q	
	6.7×10^{-5}		Modarresi et al. (2007)	Q	67
	1.7×10^{-4}		Duchowicz et al. (2020)	?	185, 21
	1.3×10^{-4}		Abraham and Weathersby (1994)	?	21
	1.7×10^{-4}		Abraham et al. (1990)	?	
1,2-dibromotetrafluoroethane $\text{C}_2\text{Br}_2\text{F}_4$ [124-73-2] KVBKAPANDHPRDG-UHFFFAOYSA-N	2.7×10^{-7}		Duchowicz et al. (2020)	V	186
	2.7×10^{-7}		HSDB (2015)	V	
	2.4×10^{-4}		Duchowicz et al. (2020)	Q	
1-bromo-2-fluorobenzene $\text{C}_6\text{H}_4\text{BrF}$ [1072-85-1] IPWBFQUBXWMIPIR-UHFFFAOYSA-N	4.1×10^{-3}		Ebert et al. (2023)	?	316
1-bromo-3-fluorobenzene $\text{C}_6\text{H}_4\text{BrF}$ [1073-06-9] QDFKKJYEIFBEFC-UHFFFAOYSA-N	2.9×10^{-3}		Ebert et al. (2023)	?	316



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Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-bromo-4-fluorobenzene C_6H_4BrF [460-00-4] AITNMTXHTIIIBB-UHFFFAOYSA-N	5.3×10^{-3}	4400	Hiatt (2013)	M	
bromopentafluorobenzene C_6BrF_5 [344-04-7] XEKTVXADUPBF0A-UHFFFAOYSA-N	2.1×10^{-3} 1.6×10^{-4} 1.4×10^{-4} 6.7×10^{-4}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
halfenprox $C_{24}H_{23}BrF_2O_3$ [111872-58-3] WIFXJBMOTMKRMM-UHFFFAOYSA-N	1.9×10^1		Ebert et al. (2023)	?	318
bromethalin $C_{14}H_7Br_3F_3N_3O_4$ [63333-35-7] USMZPYXTVKAYST-UHFFFAOYSA-N	2.5×10^3		HSDB (2015)	Q	99
brofluthrinat $C_{26}H_{22}BrF_2NO_4$ [160791-64-0] BUHNCQOJJZAO MJ-UHFFFAOYSA-N	1.6×10^1		Ebert et al. (2023)	?	316
bromochloromethane CH_2BrCl [74-97-5] JPOXNPPZZKNXOV-UHFFFAOYSA-N	6.6×10^{-3} 7.8×10^{-3} 6.8×10^{-3} 5.8×10^{-3} 5.8×10^{-3} 6.2×10^{-3} 1.1×10^{-2} 2.5×10^{-2} 5.7×10^{-3} 5.3×10^{-3} 6.2×10^{-3}	4700 4600	Hiatt (2013) Kondoh and Nakajima (1997) HSDB (2015) Mackay et al. (2006b) Mackay et al. (1993) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Katritzky et al. (1998) Yaws (1999) Fogg and Sangster (2003)	M M V V V X Q Q Q Q Q ?	237 246 229 21 791
bromodichloromethane $CHCl_2Br$ [75-27-4] FMWLWUPQPKEARP-UHFFFAOYSA-N	4.0×10^{-3} 3.9×10^{-3} 4.0×10^{-3} 3.9×10^{-3} 4.0×10^{-3} 4.0×10^{-3} 4.8×10^{-3} 4.0×10^{-3} 4.0×10^{-3} 5.2×10^{-3} 5.8×10^{-3}	5200 4900 5200 4900 5200 5200 3700 5200 5200 5200 4700	Burkholder et al. (2019) Burkholder et al. (2019) Burkholder et al. (2015) Burkholder et al. (2015) Sander et al. (2011) Sander et al. (2006) Fogg and Sangster (2003) Staudinger and Roberts (2001) Staudinger and Roberts (1996) Hiatt (2013) Ruiz-Bevia and Fernandez-Torres (2010)	L L L L L L L L L L M M	70 70



Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.9×10^{-3}		Zhang et al. (2002)	M	14
	5.4×10^{-3}	4400	Kondoh and Nakajima (1997)	M	
	3.9×10^{-3}	4800	Moore et al. (1995)	M	792, 70
	4.8×10^{-3}	4200	Tse et al. (1992)	M	
	4.7×10^{-3}	5200	Nicholson et al. (1984)	M	
	3.5×10^{-3}	5200	Ervin et al. (1980)	M	
	4.7×10^{-3}		Warner et al. (1980)	M	
	4.1×10^{-3}		Mackay et al. (2006b)	V	
	4.1×10^{-3}		Mackay et al. (1993)	V	
	4.6×10^{-3}	1200	Goldstein (1982)	X	298
	7.7×10^{-3}		Hilal et al. (2008)	C	
	4.3×10^{-3}		Nicholson et al. (1984)	C	
	4.7×10^{-3}		Nicholson et al. (1984)	C	12
	4.7×10^{-3}		Shen (1982)	C	
	8.8×10^{-3}		Keshavarz et al. (2022)	Q	
	9.4×10^{-3}		Duchowicz et al. (2020)	Q	184
	3.1×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	3.9×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.9×10^{-3}		Hilal et al. (2008)	Q	
	2.4×10^{-3}		Modarresi et al. (2007)	Q	67
		4100	Kühne et al. (2005)	Q	
	4.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	3.2×10^{-3}		Katritzky et al. (1998)	Q	
	4.7×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	6.2×10^{-3}		Mackay et al. (2006b)	?	
		3800	Kühne et al. (2005)	?	
	6.2×10^{-3}		Mackay et al. (1993)	?	
bromotrichloromethane CBrCl ₃ [75-62-7] XNNQFQFUQLJSQT-UHFFFAOYSA-N	2.7×10^{-2}		HSDB (2015)	Q	99
dibromochloromethane CHClBr ₂ [124-48-1] GATVIKZLVQHOMN-UHFFFAOYSA-N	8.6×10^{-3}	5500	Burkholder et al. (2019)	L	
	7.2×10^{-3}	5200	Burkholder et al. (2019)	L	70
	8.6×10^{-3}	5500	Burkholder et al. (2015)	L	
	7.2×10^{-3}	5200	Burkholder et al. (2015)	L	70
	8.6×10^{-3}	5500	Sander et al. (2011)	L	
	8.6×10^{-3}	5500	Sander et al. (2006)	L	
	8.7×10^{-3}	4400	Fogg and Sangster (2003)	L	
	8.6×10^{-3}	5500	Staudinger and Roberts (2001)	L	
	8.5×10^{-3}	5500	Staudinger and Roberts (1996)	L	
	1.1×10^{-2}	5300	Hiatt (2013)	M	
	1.1×10^{-2}		Ruiz-Bevia and Fernandez-Torres (2010)	M	
	4.6×10^{-3}		Zhang et al. (2002)	M	14
	9.8×10^{-3}	5100	Kondoh and Nakajima (1997)	M	



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Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	7.4×10^{-3}	4600	Moore et al. (1995)	M	793, 70
	9.3×10^{-3}	4600	Tse et al. (1992)	M	
	8.5×10^{-3}	6400	Ashworth et al. (1988)	M	278
	8.6×10^{-3}	5200	Nicholson et al. (1984)	M	
	8.5×10^{-3}	5000	Ervin et al. (1980)	M	
	1.3×10^{-2}		Warner et al. (1980)	M	
	1.2×10^{-2}		Mackay et al. (2006b)	V	
	1.2×10^{-2}		Goldstein (1982)	X	446
	1.2×10^{-2}	2500	Goldstein (1982)	X	298
	1.2×10^{-2}		Nicholson et al. (1984)	C	
	1.1×10^{-2}		Nicholson et al. (1984)	C	12
	1.3×10^{-2}		Shen (1982)	C	
	5.4×10^{-3}		Hilal et al. (2008)	Q	
	2.2×10^{-3}		Modarresi et al. (2007)	Q	67
		4800	Kühne et al. (2005)	Q	
	1.3×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.6×10^{-2}		Katritzky et al. (1998)	Q	
		4600	Kühne et al. (2005)	?	
	1.2×10^{-2}		Mackay et al. (1993)	?	
1-chloro-2-bromoethane $\text{C}_2\text{H}_4\text{BrCl}$ [107-04-0] IBYHHJPAARCAIE-UHFFFAOYSA-N	1.1×10^{-2}		Hine and Mookerjee (1975)	V	
	1.1×10^{-2}		Sieg et al. (2008)	C	
	1.2×10^{-2}		Keshavarz et al. (2022)	Q	
	3.6×10^{-3}		Duchowicz et al. (2020)	Q	
	1.8×10^{-2}		Hilal et al. (2008)	Q	
	5.5×10^{-3}		Modarresi et al. (2007)	Q	67
	1.2×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	1.7×10^{-2}		Katritzky et al. (1998)	Q	
	3.7×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.1×10^{-2}		Duchowicz et al. (2020)	?	185, 21
1,2-dibromo-1,1-dichloroethane $\text{C}_2\text{H}_2\text{Br}_2\text{Cl}_2$ [75-81-0] FIYBYNHDEOSJPL-UHFFFAOYSA-N	6.2×10^{-2}		HSDB (2015)	Q	99
1-bromo-3-chloropropane $\text{C}_3\text{H}_6\text{BrCl}$ [109-70-6] MFESCUIQSIBMSM-UHFFFAOYSA-N	3.9×10^{-2}		HSDB (2015)	Q	99
1,2-dibromo-3-chloropropane $\text{C}_3\text{H}_5\text{Br}_2\text{Cl}$ [96-12-8] WBEJYOJBDISQU-UHFFFAOYSA-N	9.7×10^{-2}	7100	Hiatt (2013)	M	
	5.0×10^{-1}	10000	Kondoh and Nakajima (1997)	M	
	6.6×10^{-2}		HSDB (2015)	V	
	6.7×10^{-2}		Meylan and Howard (1991)	V	
	9.0×10^{-2}		Hilal et al. (2008)	Q	
	1.1×10^{-2}		Modarresi et al. (2007)	Q	67
	6.4×10^{-2}		Yaffe et al. (2003)	Q	248, 249
	2.1×10^{-1}		Katritzky et al. (1998)	Q	



Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^{-2}		Meylan and Howard (1991)	Q	
	4.0×10^{-2}		MacBean (2012a)	?	
1,2,3,4,5-pentabromo-6-chlorocyclohexane $C_6H_6Br_5Cl$ [87-84-3] UZOSVZSBPTTWIG-UHFFFAOYSA-N	1.0×10^1		Zhang et al. (2010)	Q	287, 288
	1.1×10^2		Zhang et al. (2010)	Q	287, 289
	1.8×10^3		Zhang et al. (2010)	Q	287, 290
	1.2×10^1		Zhang et al. (2010)	Q	287, 291
1,2,3,4-tetrabromo-5,6-dichlorocyclohexane $C_6H_6Br_4Cl_2$ GABFTOZBVQIDBB-UHFFFAOYSA-N	3.4		Zhang et al. (2010)	Q	287, 288
	6.2×10^1		Zhang et al. (2010)	Q	287, 289
	9.9×10^2		Zhang et al. (2010)	Q	287, 290
	6.2		Zhang et al. (2010)	Q	287, 291
1,2,3-tribromo-4,5,6-trichlorocyclohexane $C_6H_6Br_3Cl_3$ ZDEQCIGFZLXZBZ-UHFFFAOYSA-N	1.1		Zhang et al. (2010)	Q	287, 288
	3.6×10^1		Zhang et al. (2010)	Q	287, 289
	4.1×10^2		Zhang et al. (2010)	Q	287, 290
	3.0		Zhang et al. (2010)	Q	287, 291
1-bromo-4-chlorobenzene C_6H_4BrCl [106-39-8] NHDODQWIKUYWMW-UHFFFAOYSA-N	6.8×10^{-3}		Duchowicz et al. (2020)	V	186
	6.8×10^{-3}		Mackay and Shiu (1981)	V	
	7.7×10^{-3}		Duchowicz et al. (2020)	Q	
	7.8×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	1.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	9.0×10^{-3}		Hilal et al. (2008)	Q	
	6.8×10^{-3}		Modarresi et al. (2007)	Q	67
	6.9×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	3.3×10^{-2}		Katritzky et al. (1998)	Q	
1,2,4-tribromo-3,5,6-trichlorobenzene $C_6Br_3Cl_3$ [13075-01-9] XAIKFWSTNFEXDC-UHFFFAOYSA-N	4.1×10^{-2}		HSDB (2015)	Q	99
1-(bromomethyl)-2-chlorobenzene C_7H_6BrCl [611-17-6] PURSZYWBQIANP-UHFFFAOYSA-N	1.9×10^{-2}		HSDB (2015)	Q	447
2-bromo-4-chloro-1-methoxybenzene C_7H_6BrClO (2-bromo-4-chloroanisole) [60633-25-2] YJEMGEBDXDPSP-UHFFFAOYSA-N	1.8×10^{-2}		Pfeifer et al. (2001)	M	731



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Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-bromo-6-chloro-1-methoxybenzene C_7H_6BrClO (2-bromo-6-chloroanisole) [174913-10-1] NWOYYECMNBWCNK-UHFFFAOYSA-N	1.4×10^{-2}		Pfeifer et al. (2001)	M	731
4-bromo-2-chloro-1-methoxybenzene C_7H_6BrClO (4-bromo-2-chloroanisole) [50638-47-6] FPIQNBOUYZLESW-UHFFFAOYSA-N	1.3×10^{-2}		Pfeifer et al. (2001)	M	731
2-bromo-3,5-dichloro-1-methoxybenzene $C_7H_5BrCl_2O$ (2-bromo-3,5-dichloroanisole) [73931-43-8] LCHJNNXHVDDVAT-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	731
2-bromo-4,6-dichloro-1-methoxybenzene $C_7H_5BrCl_2O$ (2-bromo-4,6-dichloroanisole) [60633-26-3] OEYKUHBCPJRXGZ-UHFFFAOYSA-N	8.2×10^{-3}	3100	Diaz et al. (2005)	M	
	1.2×10^{-2}		Pfeifer et al. (2001)	M	731
4-bromo-2,3-dichloro-1-methoxybenzene $C_7H_5BrCl_2O$ (4-bromo-2,3-dichloroanisole) [109803-52-3] BTRCDLZQISXWHZ-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	731
4-bromo-2,6-dichloro-1-methoxybenzene $C_7H_5BrCl_2O$ (4-bromo-2,6-dichloroanisole) [19240-91-6] OAYSFAKCFYRCRU-UHFFFAOYSA-N	1.2×10^{-2}	4900	Diaz et al. (2005)	M	
	1.2×10^{-2}		Pfeifer et al. (2001)	M	731
4-bromo-3,5-dichloro-1-methoxybenzene $C_7H_5BrCl_2O$ (4-bromo-3,5-dichloroanisole) [174913-20-3] SVEZPKVUIXAEQX-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	731



Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-bromo-2,4-dichloro-1-methoxybenzene $C_7H_5BrCl_2O$ (3-bromo-2,4-dichloroanisole) [174913-16-7] OXINPOQPENRUHL-UHFFFAOYSA-N	1.2×10^{-2}		Ebert et al. (2023)	?	789
3-bromo-2,6-dichloro-1-methoxybenzene $C_7H_5BrCl_2O$ (3-bromo-2,6-dichloroanisole) [174913-18-9] ANLVZYYGYBXMIX-UHFFFAOYSA-N	1.1×10^{-2}	2700	Diaz et al. (2005)	M	790
5-bromo-2,4-dichloro-1-methoxybenzene $C_7H_5BrCl_2O$ (5-bromo-2,4-dichloroanisole) [174913-22-5] SJIIIFORJBWPNPM-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	731
6-bromo-2,3-dichloro-1-methoxybenzene $C_7H_5BrCl_2O$ (6-bromo-2,3-dichloroanisole) [174913-23-6] PNLDDSLZYVNPQW-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	731
6-bromo-2,5-dichloro-1-methoxybenzene $C_7H_5BrCl_2O$ (6-bromo-2,5-dichloroanisole) [174913-14-5] BVSOPUWHJWGEP-UHFFFAOYSA-N	7.7×10^{-3}	3000	Diaz et al. (2005)	M	
2-bromo-3,4,5-trichloro-1-methoxybenzene $C_7H_4BrCl_3O$ (2-bromo-3,4,5-trichloroanisole) JIVCPRHFVZQL-UHFFFAOYSA-N	9.8×10^{-3}		Pfeifer et al. (2001)	M	731
3-bromo-2,4,6-trichloro-1-methoxybenzene $C_7H_4BrCl_3O$ (3-bromo-2,4,6-trichloroanisole) [174913-28-1] OIHHRLYOSUNYTC-UHFFFAOYSA-N	1.0×10^{-2}		Pfeifer et al. (2001)	M	731



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Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-bromo-2,5,6-trichloro-1-methoxybenzene $C_7H_4BrCl_3O$ (3-bromo-2,5,6-trichloroanisole) [78647-93-5] ZUXVGCIQOSXRJN-UHFFFAOYSA-N	1.0×10^{-2}		Pfeifer et al. (2001)	M	731
4-bromo-2,3,6-trichloro-1-methoxybenzene $C_7H_4BrCl_3O$ (4-bromo-2,3,6-trichloroanisole) [78647-87-7] VZRSUQWPXPWCS-UHFFFAOYSA-N	1.0×10^{-2}		Pfeifer et al. (2001)	M	731
6-bromo-2,3,4-trichloro-1-methoxybenzene $C_7H_4BrCl_3O$ (6-bromo-2,3,4-trichloroanisole) GVDCDZPXMGMNTR-UHFFFAOYSA-N	1.1×10^{-2}		Pfeifer et al. (2001)	M	731
4-bromo-2,3,5,6-tetrachloro-1-methoxybenzene $C_7H_3BrCl_4O$ (4-bromo-2,3,5,6-tetrachloroanisole) [174913-33-8] YSVAURKXNCNUNS-UHFFFAOYSA-N	9.2×10^{-3}		Pfeifer et al. (2001)	M	731
2,4-dibromo-3-chloro-1-methoxybenzene $C_7H_5Br_2ClO$ (2,4-dibromo-3-chloroanisole) YXYRJAVLYNRCE-UHFFFAOYSA-N	1.0×10^{-2}		Ebert et al. (2023)	?	789
2,4-dibromo-5-chloro-1-methoxybenzene $C_7H_5Br_2ClO$ (2,4-dibromo-5-chloroanisole) [174913-38-3] OTZRCEAVEJYZQS-UHFFFAOYSA-N	1.0×10^{-2}		Ebert et al. (2023)	?	789
2,6-dibromo-3-chloro-1-methoxybenzene $C_7H_5Br_2ClO$ (2,6-dibromo-3-chloroanisole) AHBGIHFKTBTQJP-UHFFFAOYSA-N	7.4×10^{-3}	770	Diaz et al. (2005)	M	790



Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,6-dibromo-4-chloro-1-methoxybenzene $C_7H_5Br_2ClO$ (2,6-dibromo-4-chloroanisole) [174913-44-1] WHRDPXDGMJNGH-UHFFFAOYSA-N	2.0×10^{-2}	6700	Diaz et al. (2005)	M	
	1.1×10^{-2}		Pfeifer et al. (2001)	M	731
2,4-dibromo-3,5-dichloro-1-methoxybenzene $C_7H_4Br_2Cl_2O$ (2,4-dibromo-3,5-dichloroanisole) [174913-52-1] YZMXEWDTXSTFIJ-UHFFFAOYSA-N	9.1×10^{-3}		Pfeifer et al. (2001)	M	731
2,4-dibromo-5,6-dichloro-1-methoxybenzene $C_7H_4Br_2Cl_2O$ (2,4-dibromo-5,6-dichloroanisole) MUUDTVDSRYEMBU-UHFFFAOYSA-N	9.8×10^{-3}		Pfeifer et al. (2001)	M	731
2,3-dibromo-5,6-dichloro-1-methoxybenzene $C_7H_4Br_2Cl_2O$ (2,3-dibromo-5,6-dichloroanisole) WDRCOFFEZVLCLX-UHFFFAOYSA-N	9.1×10^{-3}		Pfeifer et al. (2001)	M	731
2,6-dibromo-3,4,5-trichloro-1-methoxybenzene $C_7H_3Br_2Cl_3O$ (2,6-dibromo-3,4,5-trichloroanisole) RFUGYJHXLQAXOX-UHFFFAOYSA-N	8.6×10^{-3}		Pfeifer et al. (2001)	M	731
2,4,6-tribromo-3-chloro-1-methoxybenzene $C_7H_4Br_3ClO$ (2,4,6-tribromo-3-chloroanisole) [174913-78-1] FWKUBDOTUFVPBX-UHFFFAOYSA-N	9.1×10^{-3}		Pfeifer et al. (2001)	M	731
2,3-dibromo-7,8-dichlorodibenzo- <i>p</i> -dioxin $C_{12}H_4Br_2Cl_2O_2$ [50585-40-5] SBSJXPIUKNBZND-UHFFFAOYSA-N	3.2		Ebert et al. (2023)	?	318



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Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2',4',5',7'-tetrabromo-3,4,5,6-tetrachlorofluorescein $C_{20}H_4Br_4Cl_4O_5$ [13473-26-2] ZYIBVBKZZZDFOY-UHFFFAOYSA-N	1.5×10^{13}		Zhang et al. (2010)	Q	287, 288
bromochloroacetonitrile $C_2HBrClN$ [83463-62-1] BMWPPNAUMLRKML-UHFFFAOYSA-N	8.2		HSDB (2015)	Q	99
N,N'-dimethyl-3,3',4-tribromo-4,5,5'-trichloro-2,2'-bipyrrole $C_{10}H_6Br_3Cl_3N_2$ (DBP-Br3Cl3a) [400766-93-0] JSQYFPHYSOZLPT-UHFFFAOYSA-N	7.1		Tittlemier et al. (2004)	V	
	9.5		Hilal et al. (2008)	Q	
N,N'-dimethyl-3,4,4'-tribromo-3',5,5'-trichloro-2,2'-bipyrrole $C_{10}H_6Br_3Cl_3N_2$ (DBP-Br3Cl3b) [666856-68-4] GUWAXPTVCYBOMV-UHFFFAOYSA-N	3.3×10^1		Tittlemier et al. (2004)	V	
	9.5		Hilal et al. (2008)	Q	
N,N'-dimethyl-3,3',4,4'-tetrabromo-5,5'-dichloro-2,2'-bipyrrole $C_{10}H_6Br_4Cl_2N_2$ (DBP-Br4Cl2) [253798-64-0] FQGSQKFVAAJWFY-UHFFFAOYSA-N	2.8×10^1		Tittlemier et al. (2004)	V	
	1.8×10^1		Hilal et al. (2008)	Q	
N,N'-dimethyl-3,3',4,4',5-pentabromo-5'-chloro-2,2'-bipyrrole $C_{10}H_6Br_5ClN_2$ (DBP-Br5Cl) [400767-00-2] LIYSVIAQQEQBT-UHFFFAOYSA-N	1.5×10^2		Tittlemier et al. (2004)	V	
	3.0×10^1		Hilal et al. (2008)	Q	
1-bromo-3-chloro-5,5-dimethylhydantoin $C_5H_6BrClN_2O_2$ [16079-88-2] PIEXCQIOSMOEOLU-UHFFFAOYSA-N	1.2×10^1		HSDB (2015)	Q	99



Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-(4-bromo-3-chlorophenyl)-1-methoxy-1-methylurea $\text{C}_9\text{H}_{10}\text{BrClN}_2\text{O}_2$ (chlorbromuron) [13360-45-7] NLYNUTMZTCLNOO-UHFFFAOYSA-N	2.2×10^3		HSDB (2015)	V	
	3.2×10^3		Mackay et al. (2006d)	V	
	2.5×10^3		MacBean (2012a)	?	
N-(4-bromo-2,6-dichloro-3-methylphenyl)acetamide $\text{C}_9\text{H}_8\text{BrCl}_2\text{NO}$ [68399-95-1] MRPNWLPYJSSISQ-UHFFFAOYSA-N	6.7×10^3		Zhang et al. (2010)	Q	287, 288
	6.2×10^2		Zhang et al. (2010)	Q	287, 289
	2.1×10^4		Zhang et al. (2010)	Q	287, 290
	6.5×10^3		Zhang et al. (2010)	Q	287, 291
halacrinate $\text{C}_{12}\text{H}_7\text{NO}_2\text{BrCl}$ [34462-96-9] YDNLKBDXQGHOTH-UHFFFAOYSA-N	2.4×10^2		MacBean (2012a)	?	
bromuconazole $\text{C}_{13}\text{H}_{12}\text{BrCl}_2\text{N}_3\text{O}$ [116255-48-2] HJJVPARKXDDIQD-UHFFFAOYSA-N	3.3×10^4		Duchowicz et al. (2020)	V	186
	1.2×10^5		HSDB (2015)	V	
	1.4×10^2		Duchowicz et al. (2020)	Q	
	1.1×10^5		Maniere et al. (2011)	?	12, 165
(±)-(2 <i>R</i> *,4 <i>S</i> *)-bromuconazole $\text{C}_{13}\text{H}_{12}\text{BrCl}_2\text{N}_3\text{O}$ [114544-80-8]	6.4×10^4		Ebert et al. (2023)	?	365
(±)-(2 <i>R</i> *,4 <i>R</i> *)-bromuconazole $\text{C}_{13}\text{H}_{12}\text{BrCl}_2\text{N}_3\text{O}$ [114544-81-9]	9.5×10^4		Ebert et al. (2023)	?	365
5,7-dibromo-2-(5-bromo-7-chloro-1,3-dihydro-3-oxo-2 <i>H</i> -indol-2-ylidene)-1,2-dihydro-3 <i>H</i> -indol-3-one $\text{C}_{16}\text{H}_6\text{Br}_3\text{ClN}_2\text{O}_2$ [85702-64-3] UOWUGDPSFZLTZM-BUHFOSPRSA-N	4.2×10^9		Zhang et al. (2010)	Q	287, 288
	3.3×10^{15}		Zhang et al. (2010)	Q	287, 289
	2.4×10^5		Zhang et al. (2010)	Q	287, 290
	8.8×10^9		Zhang et al. (2010)	Q	287, 291
chlorantraniliprole $\text{C}_{18}\text{H}_{14}\text{BrCl}_2\text{N}_5\text{O}_2$ [500008-45-7] IZCBNTYXTMZSDP-UHFFFAOYSA-N	7.0×10^{15}		HSDB (2015)	Q	99
	3.1×10^8		Maniere et al. (2011)	?	241, 165
cyantraniliprole $\text{C}_{19}\text{H}_{14}\text{BrClN}_6\text{O}_2$ [736994-63-1] DVBUIBGJRQBEDP-UHFFFAOYSA-N	5.9×10^{12}		Maniere et al. (2011)	?	241, 165



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Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tribromofluoromethane CBr ₃ F [353-54-8] IHZAEIHJPNRTART-UHFFFAOYSA-N	1.5×10^{-3}		Fogg and Sangster (2003)	V	
bromochlorodifluoromethane CBrClF ₂ [353-59-3] MEXUFEQDCXZEON-UHFFFAOYSA-N	6.1×10^{-5}		Yaws (2003)	X	237, 153
	1.0×10^{-4}		HSDB (2015)	Q	99
	2.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	6.4×10^{-5}		Gharagheizi et al. (2010)	Q	246
	8.6×10^{-5}		Hilal et al. (2008)	Q	
	6.0×10^{-5}		Yaws (1999)	?	21, 153
1-bromo-1-chloro-2,2,2-trifluoroethane C ₂ HBrClF ₃ (halothane) [151-67-7] BCQZXOMGPXTTIC-UHFFFAOYSA-N	5.6×10^{-4}	4700	Fogg and Sangster (2003)	L	
	3.1×10^{-4}		Steward et al. (1973)	L	14
	5.3×10^{-4}	4200	Allott et al. (1973)	L	
	2.8×10^{-4}		Guitart et al. (1989)	M	14
	3.3×10^{-4}		Lerman et al. (1983)	M	14
	5.3×10^{-4}	5000	Smith et al. (1981b)	M	
	3.2×10^{-4}		Stoelting and Longshore (1972)	M	14
	3.4×10^{-4}		Saidman et al. (1966)	M	14
	4.9×10^{-4}		Yaws (2003)	X	237, 79
	4.2×10^{-4}		Keshavarz et al. (2022)	Q	
	2.7×10^{-3}		Duchowicz et al. (2020)	Q	184
	4.8×10^{-4}		Gharagheizi et al. (2010)	Q	246
	8.8×10^{-4}		Hilal et al. (2008)	Q	
	1.7×10^{-4}		Modarresi et al. (2007)	Q	67
			4100	Kühne et al. (2005)	Q
	1.0×10^{-3}		English and Carroll (2001)	Q	230, 231
	4.9×10^{-4}		Duchowicz et al. (2020)	?	185, 21
	4.9×10^{-4}		HSDB (2015)	?	419
		5000	Kühne et al. (2005)	?	
	4.7×10^{-4}		Yaws (1999)	?	21, 79
	3.4×10^{-4}		Abraham and Weathersby (1994)	?	21
	4.8×10^{-4}		Abraham et al. (1990)	?	
tralopyril C ₁₂ H ₅ BrClF ₃ N ₂ [122454-29-9] XNFIRYKTXAHAC-UHFFFAOYSA-N	4.5×10^3		Ebert et al. (2023)	?	316
chlorfenapyr C ₁₅ H ₁₁ BrClF ₃ N ₂ O [122453-73-0] CWFQCCVIPCEQCK-UHFFFAOYSA-N	1.7×10^3		HSDB (2015)	Q	99



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Table A7.3: Bromine, chlorine and fluorine (C, H, N, O, F, Cl, Br) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fluazolate $\text{C}_{15}\text{H}_{12}\text{N}_2\text{O}_2\text{BrClF}_4$ [174514-07-9] FKLQIONHGSFYJY-UHFFFAOYSA-N	1.3×10^1		MacBean (2012a)		?



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A8 Organic species with iodine (I)

A8.1 Iodocarbons (C, H, O, Cl, I)

Table A8.1: Iodocarbons (C, H, O, Cl, I)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
iodomethane	2.0×10^{-3}	3200	Burkholder et al. (2019)	L	1
CH ₃ I	1.5×10^{-3}	3900	Burkholder et al. (2019)	L	70
(methyl iodide)	2.0×10^{-3}	3600	Burkholder et al. (2015)	L	
[74-88-4]	1.5×10^{-3}	3900	Burkholder et al. (2015)	L	70
INQOMBQAUSQDDDS-UHFFFAOYSA-N	2.0×10^{-3}	3100	Brockbank (2013)	L	1
	2.0×10^{-3}	3600	Sander et al. (2011)	L	
	2.0×10^{-3}	3600	Sander et al. (2006)	L	
	2.0×10^{-3}	3600	Staudinger and Roberts (2001)	L	
	1.8×10^{-3}	3200	Hiatt (2013)	M	
	1.4×10^{-3}	3900	Ooki and Yokouchi (2011)	M	70
	1.9×10^{-3}		Gan and Yates (1996)	M	294
	1.4×10^{-3}	4100	Moore et al. (1995)	M	794, 70
	2.0×10^{-3}	3700	Elliott and Rowland (1993)	M	
	1.9×10^{-3}	3800	Hunter-Smith et al. (1983)	M	658
	2.0×10^{-3}	3100	Balls (1980)	M	
	1.8×10^{-3}	3000	Swain and Thornton (1962)	M	
	1.9×10^{-3}	3000	Glew and Moelwyn-Hughes (1953)	M	795
	1.9×10^{-3}	3700	Rex (1906)	M	
	1.8×10^{-3}		Mackay et al. (2006b)	V	
	1.9×10^{-3}	3600	Fogg and Sangster (2003)	V	
	1.8×10^{-3}		Mackay et al. (1993)	V	
	1.8×10^{-3}		Abraham (1984)	V	
	1.8×10^{-3}		Hine and Mookerjee (1975)	V	
	3.5×10^{-3}		Yaws (2003)	X	237
	1.7×10^{-3}		Liss and Slater (1974)	C	
	8.8×10^{-3}		Keshavarz et al. (2022)	Q	
	3.7×10^{-3}		Duchowicz et al. (2020)	Q	
	7.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.6×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	2.0×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	3.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.1×10^{-3}		Hilal et al. (2008)	Q	
	6.8×10^{-4}		Modarresi et al. (2007)	Q	67
		3800	Kühne et al. (2005)	Q	
	1.9×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	2.1×10^{-4}		English and Carroll (2001)	Q	230, 231
	8.8×10^{-4}		Katritzky et al. (1998)	Q	
	1.8×10^{-3}		Suzuki et al. (1992)	Q	232
	3.6×10^{-3}		Nirmalakhandan and Speece (1988)	Q	
	1.9×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	1.8×10^{-3}		Mackay et al. (2006b)	?	
		3700	Kühne et al. (2005)	?	



Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.5×10^{-3}		Yaws (1999)	?	21
	1.8×10^{-3}		Mackay et al. (1993)	?	
	3.5×10^{-3}		Yaws and Yang (1992)	?	21
diiodomethane CH_2I_2 [75-11-6] NZZFYRREKKOMAT-UHFFFAOYSA-N	2.3×10^{-2}	5300	Burkholder et al. (2019)	L	70
	2.3×10^{-2}	5300	Burkholder et al. (2015)	L	70
	2.4×10^{-2}	4700	Moore et al. (1995)	M	796, 70
	3.2×10^{-2}		Mackay et al. (1993)	V	
	9.9×10^{-3}		Raventos-Duran et al. (2010)	Q	271, 243
	6.2×10^{-2}		Raventos-Duran et al. (2010)	Q	244
	2.5×10^{-2}		Raventos-Duran et al. (2010)	Q	245
	7.3×10^{-2}		Hilal et al. (2008)	Q	
	1.3×10^{-3}		Modarresi et al. (2007)	Q	67
	2.7×10^{-2}		Yao et al. (2002)	Q	229
	3.1×10^{-2}		Katritzky et al. (1998)	Q	
	2.9×10^{-2}		Yaws (1999)	?	21
	2.8×10^{-2}		Yaws and Yang (1992)	?	21
	2.8×10^{-2}		Abraham et al. (1990)	?	
triiodomethane CHI_3 (iodoform) [75-47-8] OKJPEAGHQZHRQV-UHFFFAOYSA-N	6.2×10^{-3}		Fogg and Sangster (2003)	V	
	4.3×10^{-3}		Yaws (2003)	X	237
	3.2×10^{-6}		HSDB (2015)	Q	99
	4.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.3×10^{-3}		Hilal et al. (2008)	Q	
	3.4×10^{-3}		Yaws and Yang (1992)	?	21
iodoethane $\text{C}_2\text{H}_5\text{I}$ [75-03-6] HVTICUPFWKNHNG-UHFFFAOYSA-N	1.4×10^{-3}	4800	Burkholder et al. (2019)	L	70
	1.4×10^{-3}	4800	Burkholder et al. (2015)	L	70
	1.5×10^{-3}	3600	Brockbank (2013)	L	1
	1.5×10^{-3}	4200	Fogg and Sangster (2003)	L	797
	1.4×10^{-3}	4800	Ooki and Yokouchi (2011)	M	70
	1.4×10^{-3}		Li et al. (1993)	M	
	1.5×10^{-3}	4000	Rex (1906)	M	
	1.4×10^{-3}		Duchowicz et al. (2020)	V	186
	1.4×10^{-3}		Mackay et al. (2006b)	V	
	1.9×10^{-3}		Mackay et al. (1993)	V	
	1.4×10^{-3}		Abraham (1984)	V	
	1.4×10^{-3}		Hine and Mookerjee (1975)	V	
	1.7×10^{-3}		Yaws (2003)	X	237, 12
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	242, 243
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	244
	1.2×10^{-3}		Raventos-Duran et al. (2010)	Q	245
	1.7×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-3}		Hilal et al. (2008)	Q	
		4200	Kühne et al. (2005)	Q	
	1.1×10^{-3}		Yaffe et al. (2003)	Q	248, 272
	4.2×10^{-3}		Yao et al. (2002)	Q	229, 267
	2.2×10^{-4}		English and Carroll (2001)	Q	230, 231



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Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-3}		Katritzky et al. (1998)	Q	
	1.3×10^{-3}		Suzuki et al. (1992)	Q	232
	1.2×10^{-3}	4100	Nirmalakhandan and Speece (1988)	Q	
			Kühne et al. (2005)	?	
	1.4×10^{-3}		Yaws (1999)	?	21, 12
	1.1×10^{-3}		Abraham and Weathersby (1994)	?	21
	1.8×10^{-3}		Yaws and Yang (1992)	?	21, 12
	1.4×10^{-3}		Abraham et al. (1990)	?	
(<i>E</i>)-1,2-diiodoethene $C_2H_2I_2$ [590-27-2] CVOGMKGEVNGRSK-OWOJBTEDSA-N	3.5×10^{-3}		Duchowicz et al. (2020)	V	186
	5.9×10^{-3}		Duchowicz et al. (2020)	Q	
1-iodopropane C_3H_7I (propyl iodide) [107-08-4] PVWIOHVRPOBWI-UHFFFAOYSA-N	1.1×10^{-3}	4500	Brockbank (2013)	L	1
	1.1×10^{-3}		Li et al. (1993)	M	
	1.0×10^{-3}	4600	Rex (1906)	M	
	1.1×10^{-3}		Duchowicz et al. (2020)	V	186
	1.1×10^{-3}		Mackay et al. (2006b)	V	
	1.1×10^{-3}		Mackay et al. (1993)	V	
	9.9×10^{-4}		Abraham (1984)	V	
	1.1×10^{-3}		Hine and Mookerjee (1975)	V	
	1.2×10^{-3}		Yaws (2003)	X	237, 79
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	2.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	271, 243
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.6×10^{-3}		Hilal et al. (2008)	Q	
	2.4×10^{-4}	4500	Modarresi et al. (2007)	Q	67
			Kühne et al. (2005)	Q	
	1.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.9×10^{-3}		Yao et al. (2002)	Q	229
	1.1×10^{-3}		English and Carroll (2001)	Q	230, 231
	1.1×10^{-3}		Katritzky et al. (1998)	Q	
	9.9×10^{-4}		Suzuki et al. (1992)	Q	232
	9.5×10^{-4}	4500	Nirmalakhandan and Speece (1988)	Q	
			Kühne et al. (2005)	?	
	1.1×10^{-3}		Yaws (1999)	?	21, 79
	1.2×10^{-3}		Yaws and Yang (1992)	?	21, 79
	9.9×10^{-4}		Abraham et al. (1990)	?	



Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-iodopropane C_3H_7I (isopropyl iodide) [75-30-9] FMKQJHQHASLBPH-UHFFFAOYSA-N	8.5×10^{-4}	4700	Brockbank (2013)	L	1
	8.5×10^{-4}	4500	Rex (1906)	M	
	1.4×10^{-3}		Duchowicz et al. (2020)	V	186
	8.8×10^{-4}		Hine and Mookerjee (1975)	V	
	1.1×10^{-3}		Yaws (2003)	X	237, 12
	5.7×10^{-4}		Duchowicz et al. (2020)	Q	
	6.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	9.9×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
	7.9×10^{-4}		Hilal et al. (2008)	Q	
	1.7×10^{-4}		Modarresi et al. (2007)	Q	67
		4500	Kühne et al. (2005)	Q	
	1.5×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.8×10^{-3}		Yao et al. (2002)	Q	229
	7.9×10^{-4}		English and Carroll (2001)	Q	230, 231
9.7×10^{-4}		Katritzky et al. (1998)	Q		
8.6×10^{-4}		Suzuki et al. (1992)	Q	232	
5.4×10^{-4}		Nirmalakhandan and Speece (1988)	Q		
	4700	Kühne et al. (2005)	?		
		Yaws (1999)	?	21, 12	
		Yaws and Yang (1992)	?	21, 12	
1-iodobutane C_4H_9I [542-69-8] KMGBZBJJOKUPIA-UHFFFAOYSA-N	6.9×10^{-4}		Brockbank (2013)	L	
	5.9×10^{-4}		Duchowicz et al. (2020)	V	186
	5.4×10^{-4}		Mackay et al. (2006b)	V	
	5.4×10^{-4}		Mackay et al. (1993)	V	
	6.1×10^{-4}		Abraham (1984)	V	
	6.2×10^{-4}		Hine and Mookerjee (1975)	V	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	1.2×10^{-3}		Hilal et al. (2008)	Q	
	1.8×10^{-4}		Modarresi et al. (2007)	Q	67
	6.7×10^{-4}		Yaffe et al. (2003)	Q	248, 249
	7.9×10^{-4}		English and Carroll (2001)	Q	230, 231
	1.1×10^{-3}		Katritzky et al. (1998)	Q	
7.5×10^{-4}		Suzuki et al. (1992)	Q	232	
7.5×10^{-4}		Nirmalakhandan and Speece (1988)	Q		
6.1×10^{-4}		Abraham et al. (1990)	?		



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Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-iodobutane C_4H_9I [513-48-4] IQRUSQUYPCHEKN-UHFFFAOYSA-N	5.0×10^{-4}		Duchowicz et al. (2020)	V	186
	5.7×10^{-4}		Duchowicz et al. (2020)	Q	
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	7.8×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	7.0×10^{-4}		Hilal et al. (2008)	Q	
1-iodopentane $C_5H_{11}I$ [628-17-1] BLXSFCHWMBESKV-UHFFFAOYSA-N	5.9×10^{-4}		Keshavarz et al. (2022)	Q	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	184
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	4.9×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	6.2×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	9.9×10^{-4}		Hilal et al. (2008)	Q	
	1.4×10^{-4}		Modarresi et al. (2007)	Q	67
	5.8×10^{-4}		English and Carroll (2001)	Q	230, 231
	5.7×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	5.1×10^{-4}		Duchowicz et al. (2020)	?	185, 21
	5.1×10^{-4}		Abraham et al. (1990)	?	
1-iodohexane $C_6H_{13}I$ [638-45-9] ANOOTOPTCJRUPK-UHFFFAOYSA-N	3.4×10^{-4}		Brockbank (2013)	L	
	8.0×10^{-4}		Keshavarz et al. (2022)	Q	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	
	8.2×10^{-4}		Hilal et al. (2008)	Q	
	1.2×10^{-4}		Modarresi et al. (2007)	Q	67
	4.2×10^{-4}		English and Carroll (2001)	Q	230, 260
	4.5×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	3.5×10^{-4}		Duchowicz et al. (2020)	?	185, 21
	3.5×10^{-4}		Abraham et al. (1990)	?	
1-iodoheptane $C_7H_{15}I$ [4282-40-0] LMHCYRULPLGEEZ-UHFFFAOYSA-N	2.6×10^{-4}		Abraham (1984)	V	
	1.1×10^{-3}		Keshavarz et al. (2022)	Q	
	1.2×10^{-3}		Duchowicz et al. (2020)	Q	184
	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	242, 243
	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	244
	3.1×10^{-4}		Raventos-Duran et al. (2010)	Q	245
	6.7×10^{-4}		Hilal et al. (2008)	Q	
	9.7×10^{-5}		Modarresi et al. (2007)	Q	67
	3.1×10^{-4}		English and Carroll (2001)	Q	230, 231
	3.5×10^{-4}		Nirmalakhandan et al. (1997)	Q	
	2.5×10^{-4}		Duchowicz et al. (2020)	?	185, 21
	2.5×10^{-4}		Abraham et al. (1990)	?	
iodocyclohexane $C_6H_{11}I$ [626-62-0] FUCOMWZKWIEKRK-UHFFFAOYSA-N	3.9×10^{-3}		Hilal et al. (2008)	Q	



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Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-iodophenol C_6H_5IO [626-02-8] FXTKWBFZFNQHAHO-UHFFFAOYSA-N	7.0×10^1		Hilal et al. (2008)	Q	
4-iodophenol C_6H_5IO [540-38-5] VSMIDNRNYEDRN-UHFFFAOYSA-N	4.6×10^1		Hilal et al. (2008)	Q	
erythrosine $C_{20}H_{18}I_4O_5$ [16423-68-0] OALHHHQOFIMEF-UHFFFAOYSA-N	3.9×10^{13} 2.3×10^8 8.6×10^{10} 5.1×10^9		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4-hydroxy-3,5-diiodo-benzonitrile $C_7H_3I_2NO$ (ioxynil) [1689-83-4] NRXQIUSYPAHGNN-UHFFFAOYSA-N	1.3×10^2 1.8×10^4		Mackay et al. (2006d) HSDB (2015)	V Q	 99
3-iodo-2-propynyl butylcarbamate $C_8H_{12}INO_2$ [55406-53-6] WYVVKGNFXHOCQV-UHFFFAOYSA-N	8.2×10^1		HSDB (2015)	V	
diatrizoic acid $C_{11}H_9I_3N_2O_4$ [117-96-4] YVPYQUNUQOZFHG-UHFFFAOYSA-N	3.5×10^{12} 5.4×10^8 1.2×10^{17} 3.3×10^{16}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
iothalamic acid $C_{11}H_9I_3N_2O_4$ [2276-90-6] UXIGWFXRQKWHHA-UHFFFAOYSA-N	4.4×10^{12} 4.8×10^9 4.2×10^{16} 1.9×10^{16}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
benodanil $C_{13}H_{10}INO$ [15310-01-7] LJOZMWRYMKECFU-UHFFFAOYSA-N	6.2×10^5 $> 2.3 \times 10^{10}$		Mackay et al. (2006d) MacBean (2012a)	V ?	
proquinazid $C_{14}H_{17}IN_2O_2$ [189278-12-4] FLVBXVXXMLMOX-UHFFFAOYSA-N	3.3×10^1		Maniere et al. (2011)	?	165
iopamidol $C_{17}H_{22}I_3N_3O_8$ [60166-93-0] XQZXYNRDCRIARQ-LURJTMIESA-N	9.0×10^{19}		HSDB (2015)	Q	99



Table A8.1: Iodocarbons (C, H, O, Cl, I) (...continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ioxaglic acid $C_{24}H_{21}I_6N_5O_8$ [59017-64-0] TYYBFXNZMFNZJT-UHFFFAOYSA-N	2.7×10^{35} 1.4×10^{27} 2.0×10^{29} 7.2×10^{38}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
perfluorohexyl iodide $C_6F_{13}I$ [355-43-1] BULLJMKUVKYZDJ-UHFFFAOYSA-N	4.6×10^{-4}	8200	Abusallout et al. (2022)	M	
1,1,1,2,2,3,3-heptafluoro-5-iodopentane $C_5H_4F_7I$ [68188-12-5] TZNRNRKRZXHADL-UHFFFAOYSA-N	4.6×10^{-6} 1.2×10^{-4} 3.8×10^{-4} 5.0×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1-fluoro-4-iodobenzene C_6H_4FI [352-34-1] KGNQDBQYEBMPFZ-UHFFFAOYSA-N	4.5×10^{-3}		Ebert et al. (2023)	?	316
5-diethylamiloride $C_6H_4F_9I$ [2043-55-2] CXHFIVFPHDGZIS-UHFFFAOYSA-N	8.8×10^{-7} 5.6×10^{-5} 1.9×10^{-4} 1.0×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-8-iodooctane $C_8H_4F_{13}I$ [2043-57-4] NVVZEKTVIXIUKW-UHFFFAOYSA-N	1.3×10^{-3} 3.2×10^{-8} 3.4×10^{-6} 5.4×10^{-5} 4.3×10^{-8}		Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M Q Q Q Q	 287, 288 287, 289 287, 290 287, 291
1H,2H-perfluoro-1-iodooct-1-ene $C_8H_2F_{13}I$ [150223-14-6] WDWNMBWVPZJNK-OWOJBTEDSA-N	8.4×10^{-4}		Abusallout et al. (2022)	M	
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-10-iodododecane $C_{10}H_4F_{17}I$ [2043-53-0] XVKJSLBVVRCOIT-UHFFFAOYSA-N	1.2×10^{-9} 7.7×10^{-8} 2.0×10^{-5} 2.3×10^{-9}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
chloriodomethane CH_2CI [593-71-5] PJGJQVRXEUVAFT-UHFFFAOYSA-N	8.4×10^{-3} 8.4×10^{-3} 8.3×10^{-3} 9.1×10^{-3} 4.9×10^{-3} 2.5×10^{-2} 4.9×10^{-3}	5100 5100 6200 4100	Burkholder et al. (2019) Burkholder et al. (2015) Ooki and Yokouchi (2011) Moore et al. (1995) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010) Raventos-Duran et al. (2010)	L L M M Q Q Q	70 70 70 799, 70 271, 243 244 245



Rolf Sander: Compilation of Henry's law constants

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Table A8.1: Iodocarbons (C, H, O, Cl, I) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.0×10^{-2}		Hilal et al. (2008)	Q	
	5.0×10^{-4}		Modarresi et al. (2007)	Q	67
1-chloro-4-iodobenzene $\text{C}_6\text{H}_4\text{ClI}$ [637-87-6] GWQSENYKCGJTRI-UHFFFAOYSA-N	6.9×10^{-3}		Ebert et al. (2023)	?	316
bromiodomethane CH_2BrI [557-68-6] TUDWMIUPYRKEFN-UHFFFAOYSA-N	2.0×10^{-2}		Karagodin-Doyennel et al. (2021)	E	800
1-bromo-4-iodobenzene $\text{C}_6\text{H}_4\text{BrI}$ [589-87-7] UCCUXODGPMARHL-UHFFFAOYSA-N	1.5×10^{-2}		Ebert et al. (2023)	?	316



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Rolf Sander: Compilation of Henry's law constants

A9 Organic species with sulfur (S)

A9.1 Sulfur (C, H, O, N, Cl, S)

Table A9.1: Sulfur (C, H, O, N, Cl, S)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
methanethiol	3.8×10^{-3}	3400	Burkholder et al. (2019)	L	
CH ₃ SH	3.8×10^{-3}	3400	Burkholder et al. (2015)	L	
(methyl mercaptan)	3.8×10^{-3}	3400	Sander et al. (2011)	L	
[74-93-1]	3.8×10^{-3}	3400	Sander et al. (2006)	L	
LSDPWZHWYPCBBB-UHFFFAOYSA-N	2.8×10^{-3}	2900	Plyasunova et al. (2004)	L	
	2.8×10^{-3}	3100	Staudinger and Roberts (2001)	L	
	2.0×10^{-3}	2800	De Bruyn et al. (1995b)	M	
	2.3×10^{-3}	2700	Tsuji et al. (1990)	M	62
	3.9×10^{-3}	3400	Przyjazny et al. (1983)	M	
	3.3×10^{-3}		Hine and Weimar (1965)	M	
	3.2×10^{-3}		Duchowicz et al. (2020)	V	186
	3.2×10^{-3}		HSDB (2015)	V	
	3.3×10^{-3}		Hine and Mookerjee (1975)	V	
	2.4×10^{-3}		Yaws (2003)	X	237
	2.6×10^{-3}	1600	Goldstein (1982)	X	298
	1.4×10^{-1}		Duchowicz et al. (2020)	Q	
	2.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.5×10^{-3}		Hilal et al. (2008)	Q	
		3300	Kühne et al. (2005)	Q	
	4.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.0×10^{-2}		Yao et al. (2002)	Q	229
	2.1×10^{-3}		Katritzky et al. (1998)	Q	
	2.9×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	7.0×10^{-3}		Russell et al. (1992)	Q	279
	4.0×10^{-3}		Suzuki et al. (1992)	Q	232
		3400	Kühne et al. (2005)	?	
	2.4×10^{-3}		Yaws et al. (2003)	?	21
	5.1×10^{-3}		Yaws (1999)	?	21, 80
	4.0×10^{-3}		Abraham et al. (1990)	?	
ethanethiol	2.8×10^{-3}	3700	Burkholder et al. (2019)	L	
C ₂ H ₅ SH	2.8×10^{-3}	3700	Burkholder et al. (2015)	L	
(ethyl mercaptan)	2.8×10^{-3}	3700	Sander et al. (2011)	L	
[75-08-1]	2.8×10^{-3}	3700	Sander et al. (2006)	L	
DNJIEGIFACGWOD-UHFFFAOYSA-N	2.3×10^{-3}	3500	Plyasunova et al. (2004)	L	
	2.4×10^{-3}	2800	Jou et al. (2021)	M	
	2.8×10^{-3}	3700	Przyjazny et al. (1983)	M	
	2.2×10^{-3}		Vitenberg et al. (1975)	M	
	3.4×10^{-3}		Mackay et al. (2006d)	V	
	3.4×10^{-3}		Mackay et al. (1995)	V	
	3.4×10^{-3}		Hwang et al. (1992)	V	
	3.6×10^{-3}		Hine and Mookerjee (1975)	V	



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	3.4×10^{-3}		Yaws (2003)	X	237
	1.8×10^{-3}		Hayer et al. (2022)	Q	20
	1.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.9×10^{-3}		Hilal et al. (2008)	Q	
	5.6×10^{-3}		Modarresi et al. (2007)	Q	67
		3600	Kühne et al. (2005)	Q	
	2.2×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	5.8×10^{-3}		Yao et al. (2002)	Q	229
	3.6×10^{-3}		English and Carroll (2001)	Q	230, 231
	2.9×10^{-3}		Katritzky et al. (1998)	Q	
	1.9×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	1.0×10^{-2}		Russell et al. (1992)	Q	279
	2.9×10^{-3}		Suzuki et al. (1992)	Q	232
		3700	Kühne et al. (2005)	?	
	3.4×10^{-3}		Yaws et al. (2003)	?	21
	3.4×10^{-3}		Yaws (1999)	?	21
	3.4×10^{-3}		Yaws and Yang (1992)	?	21
	2.8×10^{-3}		Abraham et al. (1990)	?	
1,2-ethanedithiol $C_2H_6S_2$ [540-63-6] VYMPLPIFKRHAAC-UHFFFAOYSA-N	8.2×10^{-2}		HSDB (2015)	Q	99
thiirane C_2H_4S (ethylene sulfide) [420-12-2] VOUARRWDCVURC-UHFFFAOYSA-N	2.8×10^{-2}		HSDB (2015)	Q	99
1-propanethiol C_3H_7SH (propyl mercaptan) [107-03-9] SUVIGLJNEAMWEG-UHFFFAOYSA-N	1.7×10^{-3}	3600	Plyasunova et al. (2004)	L	
	1.8×10^{-3}	4100	Haimi et al. (2006)	M	801
	1.7×10^{-3}	3100	Coquelet and Richon (2005)	M	
	2.4×10^{-3}	3900	Przyjazny et al. (1983)	M	
	9.0×10^{-4}		Mazza (1980)	M	
	2.4×10^{-3}		Yaws et al. (2003)	V	802
	2.4×10^{-3}		Yaws (2003)	X	237
	1.6×10^{-2}		Keshavarz et al. (2022)	Q	
	4.7×10^{-2}		Duchowicz et al. (2020)	Q	299
	8.2×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-3}		Hilal et al. (2008)	Q	
		4000	Kühne et al. (2005)	Q	
	3.9×10^{-3}		Yao et al. (2002)	Q	229, 267
	2.9×10^{-3}		English and Carroll (2001)	Q	230, 260
	1.5×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	2.4×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		3800	Kühne et al. (2005)	?	



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-3}		Yaws (1999)	?	21
	2.4×10^{-3}		Abraham et al. (1990)	?	
2-propanethiol $\text{C}_3\text{H}_8\text{S}$ (isopropyl mercaptan) [75-33-2] KJRCEJOSASVSRA-UHFFFAOYSA-N	1.3×10^{-3}	3700	Brockbank (2013)	L	1
	1.6×10^{-3}	4300	Zin et al. (2016)	M	803
	1.3×10^{-3}	3800	Haimi et al. (2006)	M	804
	2.2×10^{-3}		Yaws et al. (2003)	V	802
	2.2×10^{-3}		Yaws (2003)	X	237
	2.1×10^{-3}		HSDB (2015)	Q	99
	1.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.1×10^{-3}		Hilal et al. (2008)	Q	
	2.9×10^{-3}		Yao et al. (2002)	Q	229
	2.4×10^{-3}		Yaws (1999)	?	21
1-butanethiol $\text{C}_4\text{H}_9\text{SH}$ (butyl mercaptan) [109-79-5] WQAQPCDUOCURKW-UHFFFAOYSA-N	1.5×10^{-3}	4300	Brockbank (2013)	L	1
	1.4×10^{-3}	4400	Plyasunova et al. (2004)	L	
	1.5×10^{-3}	4300	Haimi et al. (2006)	M	805
	1.5×10^{-3}	3600	Coquelet and Richon (2005)	M	
	2.2×10^{-3}	4100	Przyjazny et al. (1983)	M	
	1.1×10^{-3}		Mackay et al. (2006d)	V	
	1.1×10^{-3}		Mackay et al. (1995)	V	
	1.4×10^{-3}		Hwang et al. (1992)	V	
	1.1×10^{-3}		Yaws (2003)	X	258
	1.1×10^{-3}		Yaws (2003)	X	237
	1.8×10^{-3}		Dupeux et al. (2022)	Q	259
	2.2×10^{-2}		Keshavarz et al. (2022)	Q	
	4.8×10^{-2}		Duchowicz et al. (2020)	Q	299
	6.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	1.7×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.7×10^{-3}		Hilal et al. (2008)	Q	
	3.4×10^{-3}		Modarresi et al. (2007)	Q	67
		4300	Kühne et al. (2005)	Q	
	2.2×10^{-3}		Yaffe et al. (2003)	Q	248, 272
	3.2×10^{-3}		Yao et al. (2002)	Q	229
	2.3×10^{-3}		English and Carroll (2001)	Q	230, 231
	2.5×10^{-3}		Katritzky et al. (1998)	Q	
	1.2×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	2.2×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	1.1×10^{-3}		Bartelt-Hunt et al. (2008)	?	21
		4200	Kühne et al. (2005)	?	
	1.1×10^{-3}		Yaws et al. (2003)	?	21
	1.1×10^{-3}		Yaws (1999)	?	21
	1.1×10^{-3}		Yaws and Yang (1992)	?	21
	2.2×10^{-3}		Abraham et al. (1990)	?	



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-butanethiol $C_4H_{10}S$ (<i>sec</i> -butyl mercaptan) [513-53-1] LOCHFZBWPLPAN-UHFFFAOYSA-N	1.3×10^{-3} 1.4×10^{-3} 1.4×10^{-3} 1.9×10^{-3} 1.9×10^{-3} 1.9×10^{-2} 9.4×10^{-4} 1.8×10^{-3} 1.7×10^{-3} 2.0×10^{-3} 1.5×10^{-3}		Plyasunova et al. (2004) Duchowicz et al. (2020) HSDB (2015) Yaws et al. (2003) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Modarresi et al. (2007) Yao et al. (2002) Yaws (1999)	L V V V X Q Q Q Q Q ?	186 802 237 246 67 229 21
2-methyl-1-propanethiol $C_4H_{10}S$ (isobutyl mercaptan) [513-44-0] BDFAOUQQXJIZDG-UHFFFAOYSA-N	1.0×10^{-3} 1.9×10^{-3} 1.9×10^{-3} 3.3×10^{-4} 2.1×10^{-3} 2.4×10^{-3} 2.0×10^{-3} 1.4×10^{-3}	3600	Zin et al. (2016) Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	M V X Q Q Q Q ?	806 802 237 246 229, 267 21
2-methyl-2-propanethiol $C_4H_{10}S$ (<i>tert</i> -butyl mercaptan) [75-66-1] WMXCDAVJEZZYL-UHFFFAOYSA-N	4.5×10^{-4} 1.9×10^{-3} 1.9×10^{-3} 1.6×10^{-3} 1.6×10^{-3} 1.9×10^{-3} 6.1×10^{-4} 1.1×10^{-3} 1.8×10^{-3}		Plyasunova et al. (2004) Yaws et al. (2003) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	L V X Q Q Q Q Q ?	802 237 99 246 229 21
1,4-dithiane $C_4H_8S_2$ [505-29-3] LOZWAPSEEHRYPG-UHFFFAOYSA-N	2.4×10^{-1} 2.3×10^{-1} 6.9		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
1-pentanethiol $C_5H_{11}SH$ (pentyl mercaptan) [110-66-7] ZRKMQLGEOPLNS-UHFFFAOYSA-N	8.7×10^{-4} 8.2×10^{-4} 8.2×10^{-4} 1.4×10^{-3} 7.3×10^{-4} 1.4×10^{-3} 4.8×10^{-2} 4.6×10^{-4} 1.3×10^{-3} 2.3×10^{-3} 2.5×10^{-3} 1.6×10^{-3} 7.1×10^{-4}		Plyasunova et al. (2004) Duchowicz et al. (2020) HSDB (2015) Yaws et al. (2003) Amoore and Buttery (1978) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Yao et al. (2002) Yaws (1999)	L V V V V X Q Q Q Q Q Q Q ?	186 802 237 246 67 229, 267 21



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,2-dimethyl-1-propanethiol $\text{C}_5\text{H}_{12}\text{S}$ [1679-08-9] LSUXMVNBVPWMF-UHFFFAOYSA-N	1.5×10^{-3} 1.5×10^{-3} 1.1×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
2-methyl-1-butanethiol $\text{C}_5\text{H}_{12}\text{S}$ [1878-18-8] WGQKBCSACFQGQY-UHFFFAOYSA-N	1.5×10^{-3} 1.5×10^{-3} 2.6×10^{-4} 1.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
2-methyl-2-butanethiol $\text{C}_5\text{H}_{12}\text{S}$ [1679-09-0] IQIBYAHJXQVQGB-UHFFFAOYSA-N	1.5×10^{-3} 1.5×10^{-3} 8.6×10^{-4} 1.5×10^{-3} 8.9×10^{-4} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	V X Q Q Q ?	802 237 246 229, 807 21
2-pentanethiol $\text{C}_5\text{H}_{12}\text{S}$ [2084-19-7] QUSTYFNPKBDELJ-UHFFFAOYSA-N	1.5×10^{-3} 1.5×10^{-3} 1.5×10^{-3} 1.0×10^{-3} 6.3×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X X Q Q Q	802 258 237 259 246
3-pentanethiol $\text{C}_5\text{H}_{12}\text{S}$ [616-31-9] WICKAMSPKJXSGN-UHFFFAOYSA-N	1.5×10^{-3} 1.5×10^{-3} 4.5×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
3-methyl-1-butanethiol $\text{C}_5\text{H}_{12}\text{S}$ [541-31-1] GIJGXNFNUUFEFGH-UHFFFAOYSA-N	9.5×10^{-4} 1.5×10^{-3} 1.5×10^{-3} 3.7×10^{-4} 1.4×10^{-3}		Plyasunova et al. (2004) Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	L V X Q Q	 802 237 246
3-methyl-2-butanethiol $\text{C}_5\text{H}_{12}\text{S}$ [2084-18-6] BFLXFRNPMTAA-UHFFFAOYSA-N	1.5×10^{-3} 1.5×10^{-3} 4.0×10^{-4} 1.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
1-hexanethiol $\text{C}_6\text{H}_{14}\text{S}$ (hexyl mercaptan) [111-31-9] PMBXCGGQNSVESQ-UHFFFAOYSA-N	5.2×10^{-4} 1.1×10^{-3} 1.1×10^{-3} 3.5×10^{-4} 1.0×10^{-3} 1.9×10^{-3} 1.4×10^{-3} 4.5×10^{-4}		Plyasunova et al. (2004) Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	L V X Q Q Q Q ?	 802 237 246 246 229 21



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-hexanethiol $C_6H_{14}S$ [1679-06-7] ABNFPJVOPTXYSQW-UHFFFAOYSA-N	1.2×10^{-3} 1.2×10^{-3} 4.9×10^{-4} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
1-heptanethiol $C_7H_{16}S$ (heptyl mercaptan) [1639-09-4] VPIAKHNXCOTPAY-UHFFFAOYSA-N	4.2×10^{-4} 4.0×10^{-4} 9.5×10^{-4} 8.2×10^{-4} 4.8×10^{-2} 2.7×10^{-4} 8.4×10^{-4} 2.7×10^{-3} 1.2×10^{-3} 3.3×10^{-4}		Plyasunova et al. (2004) Duchowicz et al. (2020) Yaws et al. (2003) Yaws (2003) Duchowicz et al. (2020) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	L V V X Q Q Q Q Q ?	 186 802 237 246 229, 267 21
2-heptanethiol $C_7H_{16}S$ [628-00-2] DAZNOIJVKASGS-UHFFFAOYSA-N	1.3×10^{-3} 8.2×10^{-4} 4.1×10^{-4} 8.3×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
1-octanethiol $C_8H_{18}S$ (octyl mercaptan) [111-88-6] KZCOBXFFBQJQHH-UHFFFAOYSA-N	7.1×10^{-4} 6.9×10^{-4} 4.3×10^{-4} 2.0×10^{-4} 7.4×10^{-4} 1.3×10^{-3} 1.1×10^{-3} 3.0×10^{-4}		Yaws et al. (2003) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	V X Q Q Q Q Q ?	802 237 99 246 229 21
tert-octanethiol $C_8H_{18}S$ (tert-octyl mercaptan) [141-59-3] QZLAEIZEPJAELS-UHFFFAOYSA-N	2.0×10^{-3} 6.2×10^{-4} 5.2×10^{-4} 2.8×10^{-4} 6.6×10^{-4} 4.2×10^{-4} 2.6×10^{-4}		Yaws et al. (2003) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	V X Q Q Q Q ?	802 237 99 246 229 21
2-octanethiol $C_8H_{18}S$ [3001-66-9] BZXFEMZFRXLXGCV-UHFFFAOYSA-N	9.9×10^{-4} 6.6×10^{-4} 3.0×10^{-4} 6.9×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
1-nonanethiol $C_9H_{20}S$ (nonyl mercaptan) [1455-21-6] ZVEZMVFMBMOOHAT-UHFFFAOYSA-N	5.7×10^{-4} 6.7×10^{-4} 1.5×10^{-4} 7.1×10^{-4} 1.2×10^{-3} 8.9×10^{-4} 3.7×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	V X Q Q Q Q ?	802 237 246 229, 267 21



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-nonanethiol $C_9H_{20}S$ [13281-11-3] UOMSUBPWUZCGQU-UHFFFAOYSA-N	7.7×10^{-4} 5.1×10^{-4} 2.3×10^{-4} 6.1×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
1-decanethiol $C_{10}H_{22}S$ (decyl mercaptan) [143-10-2] VTXVGVNLYGSIAR-UHFFFAOYSA-N	5.0×10^{-4} 8.1×10^{-4} 1.6×10^{-4} 7.7×10^{-4} 9.9×10^{-4} 8.2×10^{-4} 6.5×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Hilal et al. (2008) Yao et al. (2002) Yaws (1999)	V X Q Q Q Q ?	802 237 246 229 21
2-decanethiol $C_{10}H_{22}S$ [13402-60-3] NWKXKAHQAWFQP-UHFFFAOYSA-N	6.5×10^{-4} 4.4×10^{-4} 2.5×10^{-4} 5.8×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
1-undecanethiol $C_{11}H_{24}S$ (undecyl mercaptan) [5332-52-5] CCIDWXHLGNEQSL-UHFFFAOYSA-N	4.9×10^{-4} 2.6×10^{-3} 9.3×10^{-4} 6.7×10^{-4} 3.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	V X Q Q ?	802 237 246 229 21
2-undecanethiol $C_{11}H_{24}S$ [62155-02-6] KRMLVHZORKTOLI-UHFFFAOYSA-N	6.1×10^{-4} 6.6×10^{-4} 2.9×10^{-4} 6.0×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
1-dodecanethiol $C_{12}H_{26}S$ (dodecyl mercaptan) [112-55-0] WNAHIZMDSQCWRP-UHFFFAOYSA-N	5.3×10^{-4} 5.8×10^{-4} 1.7×10^{-4} 1.9×10^{-4} 1.3×10^{-3} 5.3×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) HSDB (2015) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	V X Q Q Q Q ?	802 237 99 246 229 21
2-dodecanethiol $C_{12}H_{26}S$ [14402-50-7] UROXMPKAGAWKPP-UHFFFAOYSA-N	6.3×10^{-4} 7.2×10^{-4} 3.0×10^{-4} 6.9×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
5-propyl-5-nonanethiol $C_{12}H_{26}S$ BGQHJKADBZPYGJ-UHFFFAOYSA-N	1.7×10^{-4} 5.8×10^{-4} 2.4×10^{-3} 9.7×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	4.2×10^{-3}		Mackay et al. (2006d)	V	558
	1.3×10^{-1}		Marin et al. (1999)	V	
	5.4×10^{-3}		Mackay et al. (1995)	V	
	5.5×10^{-3}		Hine and Mookerjee (1975)	V	
	7.0×10^{-3}		Hine and Weimar (1965)	V	
	6.0×10^{-3}	3700	Vitenberg et al. (1975)	R	12
	5.5×10^{-3}		Bagno et al. (1991)	T	473
	6.1×10^{-3}		Yaws (2003)	X	237
	4.4×10^{-3}		Gaffney and Senum (1984)	X	389
	2.3×10^{-3}		Cline and Bates (1983)	C	70
	1.7×10^{-1}		Keshavarz et al. (2022)	Q	
	1.7×10^{-3}		Duchowicz et al. (2020)	Q	184
	1.7×10^{-2}		Wang et al. (2017)	Q	80, 238
	4.9×10^{-3}		Wang et al. (2017)	Q	80, 239
	1.9×10^{-3}		Wang et al. (2017)	Q	80, 240
	8.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.2×10^{-2}		Gharagheizi et al. (2010)	Q	246
	3.3×10^{-3}		Hilal et al. (2008)	Q	
	7.2×10^{-3}		Modarresi et al. (2007)	Q	67
	6.2×10^{-3}	3100	Hertel et al. (2007)	Q	467
	4.8×10^{-3}		Kühne et al. (2005)	Q	
	5.0×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	3.1×10^{-3}		English and Carroll (2001)	Q	230, 231
	6.5×10^{-3}		Marin et al. (1999)	Q	
	7.9×10^{-4}		Katritzky et al. (1998)	Q	
	6.4×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	6.1×10^{-3}		Russell et al. (1992)	Q	279
	5.5×10^{-3}	3500	Suzuki et al. (1992)	Q	232
	4.9×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	1.7×10^{-3}		Kühne et al. (2005)	?	
	1.7×10^{-3}		Yaws et al. (2003)	?	21
	1.7×10^{-3}		Yaws (1999)	?	21
	1.7×10^{-3}		Abraham et al. (1990)	?	
ethyl methyl sulfide	4.2×10^{-3}		Burkholder et al. (2019)	L	
$\text{C}_2\text{H}_5\text{SCH}_3$	4.2×10^{-3}		Burkholder et al. (2015)	L	
[624-89-5]	4.2×10^{-3}		Schuhfried et al. (2011)	M	
WXEHBUMAEPQYK-UHFFFAOYSA-N	5.4×10^{-3}		Yaws et al. (2003)	V	802
	5.1×10^{-3}		Bagno et al. (1991)	T	473
	5.4×10^{-3}		Yaws (2003)	X	237
	2.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	5.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	8.6×10^{-3}		Hilal et al. (2008)	Q	
	5.1×10^{-3}		Yao et al. (2002)	Q	229
	3.5×10^{-3}		English and Carroll (2001)	Q	230, 231
	4.4×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	5.0×10^{-3}		Yaws (1999)	?	21



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
diethyl sulfide $C_2H_5SC_2H_5$ [352-93-2] LJSQFQKUNVCTIA-UHFFFAOYSA-N	3.5×10^{-3}		Burkholder et al. (2019)	L	
	3.5×10^{-3}		Burkholder et al. (2015)	L	
	4.7×10^{-3}	4800	Plyasunova et al. (2004)	L	
	3.5×10^{-3}		Schuhfried et al. (2011)	M	
	5.4×10^{-3}	4900	Przyjazny et al. (1983)	M	
	5.1×10^{-1}		Mackay et al. (2006d)	V	
	4.5×10^{-3}		Hine and Mookerjee (1975)	V	
	4.5×10^{-3}		Yaws (2003)	X	237
	4.3×10^{-3}		Keshavarz et al. (2022)	Q	
	2.0×10^{-2}		Duchowicz et al. (2020)	Q	184
	3.4×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.7×10^{-3}		Gharagheizi et al. (2010)	Q	246
	6.0×10^{-3}		Hilal et al. (2008)	Q	
	3.6×10^{-3}		Modarresi et al. (2007)	Q	67
	4.8×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	4.0×10^{-3}		Yao et al. (2002)	Q	229
4.6×10^{-3}		English and Carroll (2001)	Q	230, 274	
2.6×10^{-3}		Katritzky et al. (1998)	Q		
2.9×10^{-3}		Nirmalakhandan et al. (1997)	Q		
1.5×10^{-3}		Russell et al. (1992)	Q	279	
3.9×10^{-3}		Suzuki et al. (1992)	Q	232	
5.9×10^{-3}		Duchowicz et al. (2020)	?	185, 21	
1.1×10^{-2}		Yaws et al. (2003)	?	21	
4.4×10^{-3}		Yaws (1999)	?	21, 12	
5.7×10^{-3}		Yaws and Yang (1992)	?	21, 12	
4.7×10^{-3}		Abraham et al. (1990)	?		
methyl isopropyl sulfide $C_4H_{10}S$ [1551-21-9] ROSSIHMZZJOVOU-UHFFFAOYSA-N	4.5×10^{-3}		Yaws et al. (2003)	V	802
	4.5×10^{-3}		Yaws (2003)	X	237
	2.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.6×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.6×10^{-3}		Yao et al. (2002)	Q	229
3.5×10^{-3}		Yaws (1999)	?	21	
methyl propyl sulfide $C_4H_{10}S$ [3877-15-4] ZOASGOXWEHUTKZ-UHFFFAOYSA-N	4.3×10^{-3}		Plyasunova et al. (2004)	L	
	4.3×10^{-3}		Mazza (1980)	M	
	4.5×10^{-3}		Yaws et al. (2003)	V	802
	4.5×10^{-3}		Yaws (2003)	X	237
	1.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	4.2×10^{-3}		Gharagheizi et al. (2010)	Q	246
4.1×10^{-3}		Yao et al. (2002)	Q	229	
3.1×10^{-3}		Yaws (1999)	?	21	
tetrahydrothiophene C_4H_8S [110-01-0] RAOIDOHSFRTOEL-UHFFFAOYSA-N	2.2×10^{-3}		Yaws et al. (2003)	V	802
	1.7×10^{-2}		Gharagheizi et al. (2012)	Q	



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-methyl-3-thiapentane $C_5H_{12}S$ [5145-99-3] NZUQQADVSWVNW-UHFFFAOYSA-N	3.7×10^{-3}		Yaws et al. (2003)	V	802
	3.7×10^{-3}		Yaws (2003)	X	237
	3.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
3,3-dimethyl-2-thiabutane $C_5H_{12}S$ [6163-64-0] CJFVCTVYZFTORU-UHFFFAOYSA-N	3.6×10^{-3}		Yaws et al. (2003)	V	802
	3.6×10^{-3}		Yaws (2003)	X	237
	2.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
3-methyl-2-thiapentane $C_5H_{12}S$ [10359-64-5] IJRCRFQMYAJPPU-UHFFFAOYSA-N	3.6×10^{-3}		Yaws et al. (2003)	V	802
	3.5×10^{-3}		Yaws (2003)	X	237
	1.3×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.6×10^{-3}		Gharagheizi et al. (2010)	Q	246
4-methyl-2-thiapentane $C_5H_{12}S$ [5008-69-5] UYVGFIKOUAFDOZ-UHFFFAOYSA-N	3.5×10^{-3}		Yaws et al. (2003)	V	802
	3.5×10^{-3}		Yaws (2003)	X	237
	4.3×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.2×10^{-3}		Gharagheizi et al. (2010)	Q	246
ethyl propyl sulfide $C_5H_{12}S$ [4110-50-3] ZDDDFDQTSXYSE-UHFFFAOYSA-N	3.5×10^{-3}		Yaws et al. (2003)	V	802
	3.5×10^{-3}		Yaws (2003)	X	237
	1.6×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.1×10^{-3}		Yao et al. (2002)	Q	229
	1.9×10^{-3}		Yaws (1999)	?	21
methyl butyl sulfide $C_5H_{12}S$ [628-29-5] WCXXISMIJBRDQK-UHFFFAOYSA-N	3.4×10^{-3}		Yaws et al. (2003)	V	802
	3.4×10^{-3}		Yaws (2003)	X	237
	8.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
	2.2×10^{-3}		Yao et al. (2002)	Q	229
	1.8×10^{-3}		Yaws (1999)	?	21
dipropyl sulfide $C_3H_7SC_3H_7$ [111-47-7] ZERULLAPCVRMCO-UHFFFAOYSA-N	3.3×10^{-3}	5700	Plyasunova et al. (2004)	L	
	3.3×10^{-3}	4500	Przyjazny et al. (1983)	M	
	2.7×10^{-3}		Yaws et al. (2003)	V	802
	2.7×10^{-3}		Yaws (2003)	X	237
	7.8×10^{-3}		Keshavarz et al. (2022)	Q	
	2.0×10^{-2}		Duchowicz et al. (2020)	Q	299
	8.9×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.3×10^{-3}		Gharagheizi et al. (2010)	Q	246
	3.4×10^{-3}		Hilal et al. (2008)	Q	
		4500	Kühne et al. (2005)	Q	
	4.8×10^{-3}		Yaffe et al. (2003)	Q	248, 272
	1.9×10^{-3}		Yao et al. (2002)	Q	229
	3.1×10^{-3}		English and Carroll (2001)	Q	230, 231
	1.8×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	3.0×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	4500	Kühne et al. (2005)	?		



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.2×10^{-3}		Yaws (1999)	?	21
	3.5×10^{-3}		Abraham et al. (1990)	?	
di-(2-propyl)-sulfide (C_3H_7) ₂ S (diisopropyl sulfide) [625-80-9] XYWDPYKBIRQXS-UHFFFAOYSA-N	2.8×10^{-3}	4900	Brockbank (2013)	L	1
	3.0×10^{-3}		Plyasunova et al. (2004)	L	
	3.0×10^{-3}	5000	Przyjazny et al. (1983)	M	
	2.9×10^{-3}		Yaws et al. (2003)	V	802
	2.9×10^{-3}		Yaws (2003)	X	237
	7.8×10^{-3}		Keshavarz et al. (2022)	Q	
	3.1×10^{-3}		Duchowicz et al. (2020)	Q	
	4.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.2×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.6×10^{-3}		Hilal et al. (2008)	Q	
		4500	Kühne et al. (2005)	Q	
	3.1×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	1.1×10^{-3}		Yao et al. (2002)	Q	229
	1.2×10^{-3}		Nirmalakhandan et al. (1997)	Q	
	3.0×10^{-3}		Duchowicz et al. (2020)	?	185, 21
		4200	Kühne et al. (2005)	?	
	1.5×10^{-3}		Yaws (1999)	?	21
	3.1×10^{-3}		Abraham et al. (1990)	?	
2,2-dimethyl-3-thiapentane $C_6H_{14}S$ [14290-92-7] GZJUDUMQICJSFJ-UHFFFAOYSA-N	2.8×10^{-3}		Yaws et al. (2003)	V	802
	2.8×10^{-3}		Yaws (2003)	X	237
	4.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.8×10^{-3}		Gharagheizi et al. (2010)	Q	246
2-methyl-3-thiahexane $C_6H_{14}S$ [5008-73-1] BDFDQOJJDDORSR-UHFFFAOYSA-N	2.8×10^{-3}		Yaws et al. (2003)	V	802
	2.7×10^{-3}		Yaws (2003)	X	237
	2.1×10^{-3}		Gharagheizi et al. (2012)	Q	
	2.6×10^{-3}		Gharagheizi et al. (2010)	Q	246
3,3-dimethyl-2-thiapentane $C_6H_{14}S$ [13286-92-5] SJOHDSPLOVBXOF-UHFFFAOYSA-N	2.7×10^{-3}		Yaws et al. (2003)	V	802
	2.7×10^{-3}		Yaws (2003)	X	237
	1.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.0×10^{-3}		Gharagheizi et al. (2010)	Q	246
3,4-dimethyl-2-thiapentane $C_6H_{14}S$ [53897-51-1] AUNQXXJGFDKEMS-UHFFFAOYSA-N	2.9×10^{-3}		Yaws et al. (2003)	V	802
	2.9×10^{-3}		Yaws (2003)	X	237
	6.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	3.2×10^{-3}		Gharagheizi et al. (2010)	Q	246
3-ethyl-2-thiapentane $C_6H_{14}S$ [57093-84-2] ZQOHJVSSVAWXQZ-UHFFFAOYSA-N	3.0×10^{-3}		Yaws et al. (2003)	V	802
	3.0×10^{-3}		Yaws (2003)	X	237
	6.6×10^{-4}		Gharagheizi et al. (2012)	Q	
	2.8×10^{-3}		Gharagheizi et al. (2010)	Q	246



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-methyl-2-thiahexane $C_6H_{14}S$ [13286-91-4] WGBHWWSSUGCSCP-UHFFFAOYSA-N	2.8×10^{-3} 2.7×10^{-3} 1.2×10^{-3} 2.6×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
4,4-dimethyl-2-thiapentane $C_6H_{14}S$ [6079-57-8] YUFAJXXIXSYTMS-UHFFFAOYSA-N	2.7×10^{-3} 2.7×10^{-3} 3.1×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2010)	V X Q	802 237 246
4-methyl-2-thiahexane $C_6H_{14}S$ [15013-37-3] XMOUDDXUCXDTJ-UHFFFAOYSA-N	2.7×10^{-3} 2.7×10^{-3} 3.9×10^{-4} 2.9×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
4-methyl-3-thiahexane $C_6H_{14}S$ [5008-72-0] JFNGZXUPUVUYST-UHFFFAOYSA-N	2.7×10^{-3} 2.7×10^{-3} 2.2×10^{-3} 2.6×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
5-methyl-2-thiahexane $C_6H_{14}S$ [13286-90-3] ABIKQXWLJOURPN-UHFFFAOYSA-N	2.8×10^{-3} 2.8×10^{-3} 5.4×10^{-4} 2.7×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
5-methyl-3-thiahexane $C_6H_{14}S$ [1613-45-2] OIRKGXWQBSPXLQ-UHFFFAOYSA-N	2.7×10^{-3} 2.7×10^{-3} 7.1×10^{-4} 2.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
ethyl butyl sulfide $C_6H_{14}S$ [638-46-0] XJIRSLHMKBUGMR-UHFFFAOYSA-N	2.6×10^{-3} 2.6×10^{-3} 1.2×10^{-3} 2.2×10^{-3} 1.9×10^{-3} 1.2×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010) Yao et al. (2002) Yaws (1999)	V X Q Q Q ?	802 237 246 229 21
methyl pentyl sulfide $C_6H_{14}S$ [1741-83-9] FOJGPFUFFHWGFQ-UHFFFAOYSA-N	3.8×10^{-3} 3.8×10^{-3} 2.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2010)	V X Q	802 237 246
ethyl pentyl sulfide $C_7H_{16}S$ [26158-99-6] SOGIWWXLDPMMF-UHFFFAOYSA-N	1.0×10^{-3} 9.6×10^{-4} 1.1×10^{-3} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
methyl hexyl sulfide $C_7H_{16}S$ [20291-60-5] LZRQHHKDXOIC-UHFFFAOYSA-N	1.0×10^{-3} 9.6×10^{-4} 5.2×10^{-4} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
propyl butyl sulfide $C_7H_{16}S$ [1613-46-3] ZBRWJPVULTZZCE-UHFFFAOYSA-N	1.0×10^{-3} 9.6×10^{-4} 7.6×10^{-4} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
dibutyl sulfide $C_8H_{18}S$ [544-40-1] HTIRHQRTDBPHNZ-UHFFFAOYSA-N	1.3×10^{-3} 1.3×10^{-3} 3.9×10^{-4} 1.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
ethyl hexyl sulfide $C_8H_{18}S$ [7309-44-6] MGVUJBCOCITTRS-UHFFFAOYSA-N	6.2×10^{-4} 6.2×10^{-4} 8.7×10^{-4} 1.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
methyl heptyl sulfide $C_8H_{18}S$ [20291-61-6] FJDWJQOEZRJDJ-UHFFFAOYSA-N	6.2×10^{-4} 6.2×10^{-4} 4.0×10^{-4} 1.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
propyl pentyl sulfide $C_8H_{18}S$ [42841-80-5] MJRCCWJSYFOGBX-UHFFFAOYSA-N	6.2×10^{-4} 6.2×10^{-4} 5.9×10^{-4} 1.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
butyl pentyl sulfide $C_9H_{20}S$ [24768-42-1] RNEUXBDXTNIASG-UHFFFAOYSA-N	9.8×10^{-4} 9.7×10^{-4} 7.0×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
ethyl heptyl sulfide $C_9H_{20}S$ [24768-44-3] PYPULUCCVMPFP-UHFFFAOYSA-N	9.8×10^{-4} 9.7×10^{-4} 1.0×10^{-3} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
methyl octyl sulfide $C_9H_{20}S$ [3698-95-1] AHCJTMBRROLNHV-UHFFFAOYSA-N	9.8×10^{-4} 9.7×10^{-4} 4.7×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
propyl hexyl sulfide $C_9H_{20}S$ [24768-43-2] ABZLKKGJOVPBBL-UHFFFAOYSA-N	9.8×10^{-4} 9.7×10^{-4} 7.0×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
butyl hexyl sulfide $C_{10}H_{22}S$ [16967-04-7] YZUHMAFUXBPUKH-UHFFFAOYSA-N	1.6×10^{-3} 1.6×10^{-3} 8.1×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dipentyl sulfide $C_{10}H_{22}S$ [872-10-6] JOZDADPMWLVEJK-UHFFFAOYSA-N	1.6×10^{-3} 1.6×10^{-3} 8.1×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
ethyl octyl sulfide $C_{10}H_{22}S$ [3698-94-0] WAITXWGCJQLPGH-UHFFFAOYSA-N	1.6×10^{-3} 1.6×10^{-3} 1.2×10^{-3} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
methyl nonyl sulfide $C_{10}H_{22}S$ [59973-07-8] FCRSULZJMFDBIK-UHFFFAOYSA-N	1.6×10^{-3} 1.6×10^{-3} 3.6×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
propyl heptyl sulfide $C_{10}H_{22}S$ [24768-46-5] PCPVCHFQVNTBH-UHFFFAOYSA-N	1.6×10^{-3} 1.6×10^{-3} 8.1×10^{-4} 1.3×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
butyl heptyl sulfide $C_{11}H_{24}S$ [40813-84-1] HYUPOCGXBZUYFY-UHFFFAOYSA-N	1.7×10^{-3} 1.7×10^{-3} 9.1×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
ethyl nonyl sulfide $C_{11}H_{24}S$ [59973-08-9] LUAABLIRQSWGZ-UHFFFAOYSA-N	1.7×10^{-3} 1.7×10^{-3} 8.8×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
methyl decyl sulfide $C_{11}H_{24}S$ [22438-39-7] HKGUUAACYBIIID-UHFFFAOYSA-N	1.7×10^{-3} 1.7×10^{-3} 4.1×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
propyl octyl sulfide $C_{11}H_{24}S$ [3698-93-9] GPJXRJRGQAKGLH-UHFFFAOYSA-N	1.7×10^{-3} 1.7×10^{-3} 9.1×10^{-4} 1.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
butyl octyl sulfide $C_{12}H_{26}S$ [16900-07-5] UNIAPWPIAGJFDG-UHFFFAOYSA-N	1.6×10^{-3} 1.5×10^{-3} 1.0×10^{-3} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
dihexyl sulfide $C_{12}H_{26}S$ [6294-31-1] LHNRHYOMDJLLM-UHFFFAOYSA-N	1.6×10^{-3} 1.5×10^{-3} 1.0×10^{-3} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethyl decyl sulfide $C_{12}H_{26}S$ [19313-61-2] VSSRSPLFYQIEK-UHFFFAOYSA-N	1.6×10^{-3} 1.5×10^{-3} 9.7×10^{-4} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
methyl undecyl sulfide $C_{12}H_{26}S$ [7289-44-3] HDOADYQJIBYVGE-UHFFFAOYSA-N	1.6×10^{-3} 1.5×10^{-3} 4.5×10^{-4} 1.7×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
propyl nonyl sulfide $C_{12}H_{26}S$ [62103-66-6] AQAOPNMAEGBYHI-UHFFFAOYSA-N	1.6×10^{-3} 1.5×10^{-3} 6.6×10^{-4} 1.8×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
butyl nonyl sulfide $C_{13}H_{28}S$ [66577-32-0] FWRIVMHSSSZAFD-UHFFFAOYSA-N	1.8×10^{-3} 1.8×10^{-3} 7.1×10^{-4} 2.6×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
ethyl undecyl sulfide $C_{13}H_{28}S$ [66577-30-8] OSWITQLVZPPUIR-UHFFFAOYSA-N	1.8×10^{-3} 1.8×10^{-3} 1.0×10^{-3} 2.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
methyl dodecyl sulfide $C_{13}H_{28}S$ [3698-89-3] KJWHJJDGMOQJLGF-UHFFFAOYSA-N	1.8×10^{-3} 1.8×10^{-3} 4.8×10^{-4} 2.5×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
propyl decyl sulfide $C_{13}H_{28}S$ [66577-31-9] HPJCKXDELORROO-UHFFFAOYSA-N	1.8×10^{-3} 1.8×10^{-3} 7.1×10^{-4} 2.6×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
butyl decyl sulfide $C_{14}H_{30}S$ [19313-57-6] CLBLVLKZMJDLDT-UHFFFAOYSA-N	2.6×10^{-3} 2.6×10^{-3} 7.5×10^{-4} 4.7×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
diheptyl sulfide $C_{14}H_{30}S$ [629-65-2] LEMIDOZYVQXGLI-UHFFFAOYSA-N	2.6×10^{-3} 2.6×10^{-3} 1.2×10^{-3} 4.7×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
ethyl dodecyl sulfide $C_{14}H_{30}S$ [2851-83-4] QECBTJWQRXCSCU-UHFFFAOYSA-N	2.6×10^{-3} 2.6×10^{-3} 1.1×10^{-3} 4.4×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl tridecyl sulfide $C_{14}H_{30}S$ [62155-09-3] QVXOOYOFFITGCV-UHFFFAOYSA-N	2.6×10^{-3}		Yaws et al. (2003)	V	802
	2.6×10^{-3}		Yaws (2003)	X	237
	5.1×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.5×10^{-3}		Gharagheizi et al. (2010)	Q	246
propyl undecyl sulfide $C_{14}H_{30}S$ [66826-84-4] ITNOZFAANYXVSG-UHFFFAOYSA-N	2.6×10^{-3}		Yaws et al. (2003)	V	802
	2.6×10^{-3}		Yaws (2003)	X	237
	7.5×10^{-4}		Gharagheizi et al. (2012)	Q	
	4.7×10^{-3}		Gharagheizi et al. (2010)	Q	246
dimethyl disulfide CH_3SSCH_3 [624-92-0] WQOXQRCZOLPYPM-UHFFFAOYSA-N	5.8×10^{-3}		Burkholder et al. (2019)	L	
	5.8×10^{-3}		Burkholder et al. (2015)	L	
	8.3×10^{-3}	3700	Brockbank (2013)	L	1
	7.4×10^{-3}	4200	Plyasunova et al. (2004)	L	
	6.7×10^{-3}	5200	Bruneel et al. (2016)	M	
	5.8×10^{-3}		Schuhfried et al. (2011)	M	
	6.5×10^{-3}	3200	Falabella (2007)	M	11, 338
	9.1×10^{-3}	4100	Iliuta and Larachi (2005b)	M	
	7.8×10^{-3}		Souchon et al. (2004)	M	
	5.9×10^{-3}		Pollien et al. (2003)	M	
	3.6×10^{-3}		McIntosh and Heffron (2000)	M	14
	9.4×10^{-3}	4300	Przyjazny et al. (1983)	M	
	8.6×10^{-3}		Mazza (1980)	M	
	8.3×10^{-3}		Vitenberg et al. (1975)	M	12
	1.7×10^{-2}		Mackay et al. (2006d)	V	
	1.7×10^{-2}		Mackay et al. (1995)	V	
9.0×10^{-3}		Vitenberg et al. (1975)	R	12	
3.0×10^{-2}		Hilal et al. (2008)	Q		
8.7×10^{-2}		Modarresi et al. (2007)	Q	67	
	1700	Kühne et al. (2005)	Q		
4.6×10^{-3}		Nirmalakhandan et al. (1997)	Q		
	1600	Kühne et al. (2005)	?		
9.0×10^{-3}		Abraham et al. (1990)	?		
diethyl disulfide $C_2H_5SSC_2H_5$ [110-81-6] CETBSQOFQKLHHZ-UHFFFAOYSA-N	3.7×10^{-3}		Burkholder et al. (2019)	L	
	3.7×10^{-3}		Burkholder et al. (2015)	L	
	4.0×10^{-3}	4900	Plyasunova et al. (2004)	L	
	3.7×10^{-3}		Schuhfried et al. (2011)	M	
	6.3×10^{-3}	4300	Przyjazny et al. (1983)	M	
	4.7×10^{-3}		Vitenberg et al. (1975)	M	12
	1.2×10^{-2}		Hilal et al. (2008)	Q	
	3.7×10^{-2}		Modarresi et al. (2007)	Q	67
	2.3×10^{-3}		Nirmalakhandan et al. (1997)	Q	
6.4×10^{-3}		Abraham et al. (1990)	?		
dipropyl disulfide $C_3H_7SSC_3H_7$ [629-19-6] ALVPGSHUPROW-UHFFFAOYSA-N	2.2×10^{-3}	5400	Plyasunova et al. (2004)	L	
	2.4×10^{-3}		Schuhfried et al. (2011)	M	
	1.8×10^{-2}		Mazza (1980)	M	



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
carbon disulfide	6.1×10^{-4}	4300	Burkholder et al. (2019)	L	
CS ₂	6.1×10^{-4}	4300	Burkholder et al. (2015)	L	
[75-15-0]	6.1×10^{-4}	3900	Warneck and Williams (2012)	L	
QGJOPFRUJUSHQP-UHFFFAOYSA-N	6.1×10^{-4}	4300	Sander et al. (2011)	L	
	6.1×10^{-4}	4300	Sander et al. (2006)	L	
	5.5×10^{-4}	3700	Plyasunova et al. (2004)	L	
	5.7×10^{-4}	3800	Hiatt (2013)	M	
	5.4×10^{-4}	2800	De Bruyn et al. (1995b)	M	
	6.2×10^{-4}	3800	Elliott (1989)	M	
	5.4×10^{-4}	4300	Rex (1906)	M	
	5.7×10^{-4}		Mackay et al. (2006d)	V	
	5.7×10^{-4}		Mackay et al. (1995)	V	
	8.0×10^{-4}		Hwang et al. (1992)	V	
	4.5×10^{-4}	4100	Winkler (1906)	V	
	5.1×10^{-4}		Yaws (2003)	X	237
	7.5×10^{-4}	1200	Goldstein (1982)	X	298
	5.0×10^{-4}		Hayer et al. (2022)	Q	20
	1.3×10^{-2}		Gharagheizi et al. (2012)	Q	
	5.1×10^{-4}		Gharagheizi et al. (2010)	Q	246
	9.4×10^{-5}		Yaws (1999)	?	21
	3.2×10^{-4}		Abraham and Weathersby (1994)	?	21
	5.1×10^{-4}		Yaws and Yang (1992)	?	21
			Schäfer and Lax (1962)	?	808
			Booth and Jolley (1943)	?	809
			Booth and Jolley (1943)	?	810
2,3,4-trithiapentane	1.2×10^{-2}		Plyasunova et al. (2004)	L	
C ₂ H ₆ S ₃	1.4×10^{-2}		Souchon et al. (2004)	M	
(dimethyl trisulfide)	2.1×10^{-2}		Roberts and Pollien (1997)	M	
[3658-80-8]					
YWHLKYXPLRWGSE-UHFFFAOYSA-N					
dicyclohexyldisulfide	2.5×10^{-3}		HSDB (2015)	Q	99
C ₁₂ H ₂₂ S ₂					
[2550-40-5]					
ODHAQPXNQDBHSH-UHFFFAOYSA-N					
allyl mercaptan	1.2×10^{-2}		Hilal et al. (2008)	Q	
C ₃ H ₆ S					
[870-23-5]					
ULIKDJVNUNQHS-UHFFFAOYSA-N					
3,3'-thiobis-1-propene	4.1×10^{-3}		Lindinger et al. (1998)	M	811
(C ₃ H ₅) ₂ S	7.1×10^{-3}		Mazza (1980)	M	
(diallyl sulfide)	7.6×10^{-3}		HSDB (2015)	Q	99
[592-88-1]	9.9×10^{-3}		Hilal et al. (2008)	Q	
UBJVUCKUDDKUJF-UHFFFAOYSA-N					



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
allyl methyl sulfide <chem>CH2CHCH2SCH3</chem> (2-propenyl methyl sulfide) [10152-76-8] NVLPQIPTCCLBEU-UHFFFAOYSA-N	4.2×10^{-3}		Burkholder et al. (2019)	L	
	4.2×10^{-3}		Burkholder et al. (2015)	L	
	4.2×10^{-3}		Schuhfried et al. (2011)	M	
	5.0×10^{-3}		Mazza (1980)	M	
thiophene <chem>C4H4S</chem> [110-02-1] YTPLMLYBLZKORZ-UHFFFAOYSA-N	4.1×10^{-3}	4300	Haimi et al. (2006)	M	812
	4.4×10^{-3}	4000	Przyjazny et al. (1983)	M	
	3.4×10^{-3}		HSDB (2015)	V	
			Mackay et al. (2006d)	V	558
	4.5×10^{-3}		Mackay et al. (1995)	V	
	3.4×10^{-3}		Yaws (2003)	X	237
	8.2×10^{-3}		Gharagheizi et al. (2012)	Q	
	3.1×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-3}		Hilal et al. (2008)	Q	
	9.8×10^{-3}		Modarresi et al. (2007)	Q	67
		2800	Kühne et al. (2005)	Q	
	3.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249
	9.3×10^{-3}		Yao et al. (2002)	Q	229, 267
	8.8×10^{-3}		English and Carroll (2001)	Q	230, 231
	6.9×10^{-4}		Katritzky et al. (1998)	Q	
	4.5×10^{-3}		Mackay et al. (2006d)	?	
		1900	Kühne et al. (2005)	?	
	3.4×10^{-3}		Yaws et al. (2003)	?	21
	3.4×10^{-3}		Yaws (1999)	?	21
	3.4×10^{-3}		Yaws and Yang (1992)	?	21
	4.4×10^{-3}		Abraham et al. (1990)	?	
2-methylthiophene <chem>CH3C4H3S</chem> [554-14-3] XQQBUAPQHNYRS-UHFFFAOYSA-N	4.1×10^{-3}	4300	Brockbank (2013)	L	1
	4.1×10^{-3}	4300	Przyjazny et al. (1983)	M	
	2.2×10^{-3}		Yaws et al. (2003)	V	802
	1.9×10^{-3}		Yaws (2003)	X	237
	2.9×10^{-2}		Keshavarz et al. (2022)	Q	
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	
	1.1×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.4×10^{-3}		Hilal et al. (2008)	Q	
	8.0×10^{-3}		English and Carroll (2001)	Q	230, 231
	4.1×10^{-3}		Duchowicz et al. (2020)	?	185, 21
	4.1×10^{-3}		Abraham et al. (1990)	?	
3-methylthiophene <chem>CH3C4H3S</chem> [616-44-4] QENGPZGAWFQWCZ-UHFFFAOYSA-N	1.4×10^{-3}		Duchowicz et al. (2020)	V	186
	1.4×10^{-3}		Yaws (2003)	X	237
	2.7×10^{-2}		Duchowicz et al. (2020)	Q	
	4.0×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.9×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.7×10^{-3}		Hilal et al. (2008)	Q	
	8.2×10^{-3}		Modarresi et al. (2007)	Q	67
	1.4×10^{-3}		Yaffe et al. (2003)	Q	248, 249



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.8×10^{-3}		Katritzky et al. (1998)	Q	
	1.4×10^{-3}		Yaws et al. (2003)	?	21
propyl allyl disulfide $C_6H_{12}S_2$ [2179-59-1] FCSSPCOFDUKHPV-UHFFFAOYSA-N	3.5×10^{-3}		HSDB (2015)	Q	99
4,5-dithia-1,7-octadiene $C_6H_{10}S_2$ (diallyl disulfide) [2179-57-9] PFRGXCVKLLPLIP-UHFFFAOYSA-N	7.5×10^{-3}		Mazza (1980)	M	
2,3-dimethylthiophene C_6H_8S [632-16-6] BZYUMXXOAYSFOW-UHFFFAOYSA-N	1.5×10^{-3}		Yaws et al. (2003)	V	802
	1.3×10^{-3}		Yaws (2003)	X	237
	4.8×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
2,4-dimethylthiophene C_6H_8S [638-00-6] CPULIKNSOUFMPL-UHFFFAOYSA-N	1.5×10^{-3}		Yaws et al. (2003)	V	802
	1.3×10^{-3}		Yaws (2003)	X	237
	4.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
2,5-dimethylthiophene C_6H_8S [638-02-8] GWQOQADXMVQEFT-UHFFFAOYSA-N	3.7×10^{-3}		Mazza (1980)	M	
	1.6×10^{-3}		Yaws et al. (2003)	V	802
	1.4×10^{-3}		Yaws (2003)	X	237
	1.3×10^{-2}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
2-ethylthiophene C_6H_8S [872-55-9] JCCGMAAJYSNBPR-UHFFFAOYSA-N	1.4×10^{-3}		Yaws (2003)	X	237
	3.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.5×10^{-3}		Gharagheizi et al. (2010)	Q	246
	1.9×10^{-3}		Yaws et al. (2003)	?	21
3,4-dimethylthiophene C_6H_8S [632-15-5] GPSFYJDZKSRMKZ-UHFFFAOYSA-N	1.5×10^{-3}		Yaws et al. (2003)	V	802
	1.2×10^{-3}		Yaws (2003)	X	237
	1.7×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
3-ethylthiophene C_6H_8S [1795-01-3] SLDBAXYJAIRQMX-UHFFFAOYSA-N	1.6×10^{-3}		Yaws et al. (2003)	V	802
	1.4×10^{-3}		Yaws (2003)	X	237
	1.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.4×10^{-3}		Gharagheizi et al. (2010)	Q	246
2,3,4-trimethylthiophene $C_7H_{10}S$ [1795-04-6] MAVVDCDMBKFUES-UHFFFAOYSA-N	1.3×10^{-3}		Yaws et al. (2003)	V	802
	1.1×10^{-3}		Yaws (2003)	X	237
	2.9×10^{-3}		Gharagheizi et al. (2012)	Q	
	1.0×10^{-3}		Gharagheizi et al. (2010)	Q	246



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2,3,5-trimethylthiophene $C_7H_{10}S$ [1795-05-7] QKZJQIHBRFCFDGQ-UHFFFAOYSA-N	1.1×10^{-3} 9.3×10^{-4} 7.2×10^{-3} 9.7×10^{-4}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
2-isopropylthiophene $C_7H_{10}S$ [4095-22-1] LOXBELRNKUFSDR-UHFFFAOYSA-N	1.3×10^{-3} 1.1×10^{-3} 1.8×10^{-3} 1.1×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
2-methyl-3-ethylthiophene $C_7H_{10}S$ [53119-51-0] RBRAJDCWXUJHIY-UHFFFAOYSA-N	1.2×10^{-3} 1.0×10^{-3} 2.8×10^{-3} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
2-methyl-4-ethylthiophene $C_7H_{10}S$ [13678-54-1] KIWVMUQUYOKTKU-UHFFFAOYSA-N	1.1×10^{-3} 9.6×10^{-4} 3.3×10^{-3} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
2-methyl-5-ethylthiophene $C_7H_{10}S$ [40323-88-4] VOIVNVYBGCJFRW-UHFFFAOYSA-N	1.2×10^{-3} 9.9×10^{-4} 6.6×10^{-3} 1.1×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
2-propylthiophene $C_7H_{10}S$ [1551-27-5] BTXIJTYMLCUHI-UHFFFAOYSA-N	1.2×10^{-3} 1.0×10^{-3} 3.1×10^{-3} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
3-isopropylthiophene $C_7H_{10}S$ [29488-27-5] LJPDBPCGTFUJDE-UHFFFAOYSA-N	1.1×10^{-3} 9.7×10^{-4} 1.4×10^{-3} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
3-methyl-2-ethylthiophene $C_7H_{10}S$ [31805-48-8] VVSCPYPCHXFEKLF-UHFFFAOYSA-N	1.2×10^{-3} 9.8×10^{-4} 2.1×10^{-3} 1.1×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
3-methyl-4-ethylthiophene $C_7H_{10}S$ [66577-03-5] QMHNYDJBWOPGHE-UHFFFAOYSA-N	1.3×10^{-3} 1.1×10^{-3} 8.1×10^{-4} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
3-methyl-5-ethylthiophene $C_7H_{10}S$ (2-ethyl-4-methylthiophene) [66577-04-6] NZOYHPXDWJOCU-UHFFFAOYSA-N	1.3×10^{-3} 1.1×10^{-3} 1.8×10^{-3} 1.1×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3-propylthiophene $C_7H_{10}S$ [1518-75-8] OZNFMRXKQCIPOY-UHFFFAOYSA-N	1.2×10^{-3} 9.9×10^{-4} 1.5×10^{-3} 1.0×10^{-3}		Yaws et al. (2003) Yaws (2003) Gharagheizi et al. (2012) Gharagheizi et al. (2010)	V X Q Q	802 237 246
benzenethiol C_6H_5SH (thiophenol) [108-98-5] RMVRSNDYEFQCLF-UHFFFAOYSA-N	2.9×10^{-2} 2.9×10^{-2} 3.0×10^{-2} 3.0×10^{-2} 3.0×10^{-2} 3.2×10^{-1} 4.1×10^{-2} 2.6×10^{-2} 2.9×10^{-2} 1.6×10^{-2} 1.8×10^{-2} 1.0×10^{-2} 3.0×10^{-2} 3.0×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Hine and Mookerjee (1975) Hine and Weimar (1965) Schüürmann (2000) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Yaffe et al. (2003) English and Carroll (2001) Katritzky et al. (1998) Nirmalakhandan et al. (1997) Suzuki et al. (1992) Abraham et al. (1990)	V V V V C Q Q Q Q Q Q Q Q ?	186 21 67 248, 249 230, 231 232
methyl phenyl sulfide $C_6H_5SCH_3$ (thioanisole) [100-68-5] HNKJADCVZUBCPG-UHFFFAOYSA-N	4.0×10^{-2} 4.1×10^{-2} 5.8×10^{-2} 4.3×10^{-2} 2.3×10^{-2} 4.0×10^{-2}		Hine and Mookerjee (1975) Hine and Weimar (1965) Hilal et al. (2008) Yaffe et al. (2003) Nirmalakhandan et al. (1997) Suzuki et al. (1992)	V V Q Q Q Q	 248, 249 232
2-methylbenzenethiol C_7H_8S (2-thiocresol) [137-06-4] LXUNZSDDXMPKLP-UHFFFAOYSA-N	2.7×10^{-2}		HSDB (2015)	Q	99
3-methylbenzenethiol C_7H_8S (3-thiocresol) [108-40-7] WRXOZRLZDJAYDR-UHFFFAOYSA-N	2.7×10^{-2}		HSDB (2015)	Q	99
4-methylbenzenethiol C_7H_8S (4-thiocresol) [106-45-6] WLHCBQAPPJAUW-UHFFFAOYSA-N	2.7×10^{-2}		HSDB (2015)	Q	99
benzenemethanethiol C_7H_8S [100-53-8] UENWRTRMUIOCKN-UHFFFAOYSA-N	4.7×10^{-2}		HSDB (2015)	Q	99



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
benzo[<i>b</i>]thiophene C_8H_6S [95-15-8] FCEHBMOGCRZNNI-UHFFFAOYSA-N	4.1×10^{-2} 3.6×10^{-2} 3.0×10^{-2}		Mackay et al. (2006d) Mackay et al. (1995) Smith and Bomberger (1980) Yaws (1999)	V V V ?	558 24 21, 12
dibenzothiophene $C_{12}H_8S$ [132-65-0] IYYZUPMFVPLQIF-UHFFFAOYSA-N	2.9×10^{-1} 2.9×10^{-1} 2.3×10^{-2} 2.3×10^{-2} 2.3×10^{-2} 1.2 3.3×10^{-1}		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Mackay et al. (1995) Smith and Bomberger (1980) Duchowicz et al. (2020) Parnis et al. (2015)	V V V V V Q Q	186 24 369
thianthrene $C_{12}H_8S_2$ [92-85-3] GVIJXMXTUZIOD-UHFFFAOYSA-N	4.0		Abraham et al. (2019)	Q	
2-methyldibenzothiophene $C_{13}H_{10}S$ [20928-02-3] VHUXLBLPAMBOJS-UHFFFAOYSA-N	2.7×10^{-1}		Parnis et al. (2015)	Q	369
2,3-dimethyldibenzothiophene $C_{14}H_{12}S$ [31317-17-6] KEIKATUAMBEIQN-UHFFFAOYSA-N	3.1×10^{-1}		Parnis et al. (2015)	Q	369
2,8-dimethyldibenzothiophene $C_{14}H_{12}S$ [1207-15-4] RRYWCJRYULRSJM-UHFFFAOYSA-N	2.4×10^{-1}		Parnis et al. (2015)	Q	369
benzyl sulfide $C_{14}H_{14}S$ [538-74-9] LUFPJNWMYZRQE-UHFFFAOYSA-N	1.9		HSDB (2015)	Q	99
2,3,7-trimethyldibenzothiophene $C_{15}H_{14}S$ HJSMFSZKADBZIO-UHFFFAOYSA-N	2.7×10^{-1}		Parnis et al. (2015)	Q	369
2,3,8-trimethyldibenzothiophene $C_{15}H_{14}S$ QSOGKFSFLARZIE-UHFFFAOYSA-N	2.7×10^{-1}		Parnis et al. (2015)	Q	369
2,4,7-trimethyldibenzothiophene $C_{15}H_{14}S$ [216983-03-8] YDWNRF0OADVGC-UHFFFAOYSA-N	1.9×10^{-1}		Parnis et al. (2015)	Q	369



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4,6-diethyldibenzothiophene $C_{16}H_{16}S$ [132034-91-4] UMQGGSYHJPHWV-UHFFFAOYSA-N	1.3×10^{-1}		Parnis et al. (2015)	Q	369
2-butyldibenzothiophene $C_{16}H_{16}S$ [147792-31-2] BEQMTJNPMZQPKZ-UHFFFAOYSA-N	1.6×10^{-1}		Parnis et al. (2015)	Q	369
carbon oxide sulfide	2.0×10^{-4}	3500	Burkholder et al. (2019)	L	
OCS	2.0×10^{-4}	3500	Burkholder et al. (2015)	L	
(carbonyl sulfide)	2.1×10^{-4}	3300	Warneck and Williams (2012)	L	
[463-58-1]	2.0×10^{-4}	3500	Sander et al. (2011)	L	
JJWKPURADFRFRB-UHFFFAOYSA-N	2.0×10^{-4}	3500	Sander et al. (2006)	L	
	2.1×10^{-4}	3000	Wilhelm et al. (1977)	L	
	2.2×10^{-4}	2100	De Bruyn et al. (1995b)	M	
	1.5×10^{-4}	3800	Johnson and Harrison (1986)	M	70
	1.5×10^{-4}	3500	Hoyt (1982)	M	70
	2.4×10^{-4}		Stock and Kuß (1917)	M	
	2.1×10^{-4}	3300	Winkler (1907)	M	
	2.1×10^{-4}	3300	Winkler (1906)	M	
	3.4×10^{-4}		Hempel (1901)	M	619
	1.6×10^{-5}		Duchowicz et al. (2020)	V	186
	1.6×10^{-5}		HSDB (2015)	V	
	1.9×10^{-4}		Yaws (2003)	X	237
	2.0×10^{-4}		Hayer et al. (2022)	Q	20
	5.4		Duchowicz et al. (2020)	Q	
	2.0×10^{-4}		Gharagheizi et al. (2010)	Q	246
		2900	Kühne et al. (2005)	Q	
		3300	Kühne et al. (2005)	?	
	2.0×10^{-4}		Yaws (1999)	?	21
	2.1×10^{-4}	3000	Yaws et al. (1999)	?	21
	1.9×10^{-4}		Yaws and Yang (1992)	?	21
methanesulfonic acid CH_3SO_3H (MSA) [75-75-2] AFVFQIVMOAPDHO-UHFFFAOYSA-N	7.3×10^3 1.2×10^6 5.0×10^5		Brimblecombe and Clegg (1988) Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	T Q Q Q	813 80, 238 80, 239 80, 240
MCM:CH3SO2OOH	1.9×10^5		Wang et al. (2017)	Q	80, 238
CH_4O_4S	1.0×10^7		Wang et al. (2017)	Q	80, 239
BENVNICSYZXTGE-UHFFFAOYSA-N	1.8×10^4		Wang et al. (2017)	Q	80, 240
MCM:CH3SOOOH	4.3×10^7		Wang et al. (2017)	Q	80, 238
CH_4O_3S	5.6×10^6		Wang et al. (2017)	Q	80, 239
IZTYBZWDPIUSAG-UHFFFAOYSA-N	2.7×10^3		Wang et al. (2017)	Q	80, 240



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methanesulfonic acid, methyl ester $\text{C}_2\text{H}_6\text{O}_3\text{S}$ [66-27-3] MBABOKRGFJTBAE-UHFFFAOYSA-N	2.5		HSDB (2015)	Q	99
MCM:CH3SCH2OOH $\text{C}_2\text{H}_6\text{O}_2\text{S}$ LDZPECMXMDSESRV-UHFFFAOYSA-N	1.1×10^2 1.4×10^2 9.8		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMSO2OOH $\text{C}_2\text{H}_6\text{O}_4\text{S}$ GCLQZLAJAMWHPS-UHFFFAOYSA-N	2.6×10^5 6.5×10^6 6.8×10^5		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH3SCH2OH $\text{C}_2\text{H}_6\text{OS}$ ZSSFPSNLAUYOFG-UHFFFAOYSA-N	4.2 7.6×10^1 1.1×10^1		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:DMSO2OH $\text{C}_2\text{H}_6\text{O}_3\text{S}$ ICHBUPLXTAHKLA-UHFFFAOYSA-N	1.0×10^4 5.6×10^6 5.8×10^6		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH3SCHO $\text{C}_2\text{H}_4\text{OS}$ LFJRGYNYRORDDM-UHFFFAOYSA-N	1.3 1.5×10^{-1} 4.8×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH3SO2CHO $\text{C}_2\text{H}_4\text{O}_3\text{S}$ LUGQISNSRPQOGS-UHFFFAOYSA-N	3.1×10^3 3.6×10^2 2.2×10^2		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
mercaptoacetic acid, methyl ester $\text{C}_3\text{H}_6\text{O}_2\text{S}$ (methyl thioglycolate) [2365-48-2] MKIJJIMOAABWGF-UHFFFAOYSA-N	1.6		HSDB (2015)	Q	99
1,3-propane sultone $\text{C}_3\text{H}_6\text{O}_3\text{S}$ [1120-71-4] FSSPGSAQUIYDCN-UHFFFAOYSA-N	1.6×10^3		Ebert et al. (2023)	?	316
methanesulfonic acid, ethyl ester $\text{C}_3\text{H}_8\text{O}_3\text{S}$ [62-50-0] PLUBXMRUUVWRIT-UHFFFAOYSA-N	3.8×10^1 2.8×10^{-2} 1.8		Duchowicz et al. (2020) Duchowicz et al. (2020) HSDB (2015)	V Q Q	186 99
2,3-dimercapto-1-propanol $\text{C}_3\text{H}_8\text{OS}_2$ [59-52-9] WQABCVAJNWAXTE-UHFFFAOYSA-N	1.1×10^3 4.1×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
divinyl sulfoxide $\text{C}_4\text{H}_6\text{OS}$ (vinyl sulfoxide) [1115-15-7] HQSMEHLVLOGBCK-UHFFFAOYSA-N	2.5×10^1		HSDB (2015)	Q	99
divinyl sulphone $\text{C}_4\text{H}_6\text{O}_2\text{S}$ [77-77-0] AFOSIXZFDONLBT-UHFFFAOYSA-N	2.0×10^{-1}		HSDB (2015)	Q	99
2,5-dihydrothiophene sulfone $\text{C}_4\text{H}_6\text{O}_2\text{S}$ (2,5-dihydrothiophene 1,1-dioxide) [77-79-2] MBDNRMVTZADMQ-UHFFFAOYSA-N	2.3		HSDB (2015)	Q	99
thiodiacetic acid $\text{C}_4\text{H}_6\text{O}_4\text{S}$ [123-93-3] UVZICZIVKIMRNE-UHFFFAOYSA-N	2.2×10^8		HSDB (2015)	Q	99
thiophene, tetrahydro-, 1,1-dioxide $\text{C}_4\text{H}_8\text{O}_2\text{S}$ (sulfolane) [126-33-0] HXJUTPCZVOIRIF-UHFFFAOYSA-N	2.1		HSDB (2015)	Q	99
2-(ethylthio)ethanol $\text{C}_4\text{H}_{10}\text{OS}$ [110-77-0] LNRIEBFNWGMXKP-UHFFFAOYSA-N	1.9×10^2		HSDB (2015)	Q	99
thiodiglycol $\text{C}_4\text{H}_{10}\text{O}_2\text{S}$ [111-48-8] YODZTKMDCQEPHD-UHFFFAOYSA-N	5.2×10^3		HSDB (2015)	Q	99
methanesulfonic acid, 1-methylethyl ester $\text{C}_4\text{H}_{10}\text{O}_3\text{S}$ [926-06-7] SWWWHCQCMVCPLEQ-UHFFFAOYSA-N	1.4		HSDB (2015)	Q	99
diethyl sulfate $\text{C}_4\text{H}_{10}\text{O}_4\text{S}$ [64-67-5] DENRZWYUOJLTMF-UHFFFAOYSA-N	1.6		Ebert et al. (2023)	?	316



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
S-methyl butanethioate $C_5H_{10}OS$ [2432-51-1] GRLJIIJNZJVMGP-UHFFFAOYSA-N	2.6×10^{-2}		Souchon et al. (2004)	M	
4-hydroxybenzenesulfonic acid $C_6H_6O_4S$ [98-67-9] FEPBITJSIHRMRT-UHFFFAOYSA-N	3.8×10^7		HSDB (2015)	Q	99
benzenesulfonic acid $C_6H_6O_3S$ [98-11-3] SRSXLGNVWSONIS-UHFFFAOYSA-N	3.9×10^3		HSDB (2015)	Q	99
dimethipin $C_6H_{10}O_4S_2$ [55290-64-7] PHVNLLCAQHGNKU-UHFFFAOYSA-N	4.3×10^5 7.0×10^5 4.3×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	186
4-methylbenzenesulfonic acid $C_7H_8O_3S$ [104-15-4] JOXIMZWYDAKGHI-UHFFFAOYSA-N	3.6×10^3		HSDB (2015)	Q	99
phenylmethanesulfonic acid $C_7H_8O_3S$ (benzylsulfonic acid) [100-87-8] NIXKBAZVOQAHGC-UHFFFAOYSA-N	9.9×10^3		HSDB (2015)	Q	99
isoprothiolane $C_{12}H_{18}O_4S_2$ [50512-35-1] UFHLMYOGRXOCSL-UHFFFAOYSA-N	9.8×10^{-2} 2.8×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
4,4'-sulfonyldiphenol $C_{12}H_{10}O_4S$ (bisphenol S) [80-09-1] VPWNQTHUCYVMVZ-UHFFFAOYSA-N	3.7×10^9		HSDB (2015)	Q	447
benfuresate $C_{12}H_{16}O_4S$ [68505-69-1] QGQSRQPXXMTJCM-UHFFFAOYSA-N	3.7×10^2		Ebert et al. (2023)	?	318



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
lauryl sulfate $C_{12}H_{26}O_4S$ (dodecyl sulfate) [151-41-7] MOTZDAYCYVMXPC-UHFFFAOYSA-N	5.5×10^1		HSDB (2015)	Q	99
ethofumesate $C_{13}H_{18}O_5S$ [26225-79-6] IRCMYGHKLLGHV-UHFFFAOYSA-N	2.7×10^2 2.7×10^2 4.5×10^1 7.7		Duchowicz et al. (2020) HSDB (2015) Barcelo and Hennion (1997) Duchowicz et al. (2020)	V V X Q	186 567
	1.1×10^2 2.7×10^2		Goodarzi et al. (2010) Maniere et al. (2011)	Q ?	568, 569 165
1,1'-sulfonylbis(4-(1-methylethyl)-benzene $C_{18}H_{22}O_2S$ [57913-35-6] PKQWGBLKCJIMDP-UHFFFAOYSA-N	1.0×10^1 2.9×10^3 6.7×10^4 3.1×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
propargite $C_{19}H_{26}O_4S$ [2312-35-8] ZYHMJXZULPZUED-UHFFFAOYSA-N	1.5×10^1 1.5×10^1 1.0×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
kadethrin $C_{23}H_{24}O_4S$ [58769-20-3] UGWALRUNBSBTGI-QJLCOAGJSA-N	1.2×10^4		HSDB (2015)	Q	99
spironolactone $C_{24}H_{32}O_4S$ [52-01-7] LXMSZDCAJNLERA-PJKOONHHS-A-N	9.0×10^4		HSDB (2015)	Q	99
2,2'-thiobis(4-(1,1,3,3-tetramethylbutyl)phenol) $C_{28}H_{42}O_2S$ [3294-03-9] WQYFETFRIRDUPJ-UHFFFAOYSA-N	4.5×10^5 1.2×10^4 2.2×10^7 1.8×10^5		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
propanoic acid, 3,3'-thiobis-, didodecyl ester $C_{30}H_{58}O_4S$ (dilauryl thiodipropionate) [123-28-4] GHKOFFNLGXMVNJ-UHFFFAOYSA-N	2.5		HSDB (2015)	Q	447
dioctadecyl 3,3'-thiodipropionate $C_{42}H_{82}O_4S$ [693-36-7] PWWSSIVVTQUJQQ-UHFFFAOYSA-N	8.2×10^{-2}		HSDB (2015)	Q	447



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methyl isothiocyanate <chem>CH3NCS</chem> [556-61-6] LGDSHSYDSCRFB-UHFFFAOYSA-N	1.7×10^{-1} 1.7×10^{-1} 1.7×10^{-1} 1.6×10^{-1}		Burkholder et al. (2019) Burkholder et al. (2015) Sander et al. (2011) Worthington and Wade (2007)	L L L M	
	2.2×10^{-1} 2.2×10^{-1} 2.1 1.8×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Modarresi et al. (2007)	V V Q Q	186 67
thiourea <chem>CH4N2S</chem> [62-56-6] UMGDCJDMYOKAJW-UHFFFAOYSA-N	5.0×10^3 4.9×10^3 1.7×10^5		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
hydrazinecarbothioamide <chem>CH5N3S</chem> (1-amino-2-thiourea) [79-19-6] BRWIZMBXBAOCCF-UHFFFAOYSA-N	1.5×10^4		HSDB (2015)	Q	99
thiocyanic acid, methyl ester <chem>C2H3NS</chem> [556-64-9] VYHVQEYOFIYNJP-UHFFFAOYSA-N	2.2×10^{-1}		HSDB (2015)	Q	99
ethanethioamide <chem>C2H5NS</chem> (thioacetamide) [62-55-5] YUKQRDCYNOPGJ-UHFFFAOYSA-N	1.5		HSDB (2015)	Q	99
mercaptamine <chem>C2H7NS</chem> (cysteamine) [60-23-1] UFULAYFCSOUIOV-UHFFFAOYSA-N	2.7×10^1		HSDB (2015)	Q	99
thiocyanic acid, ethyl ester <chem>C3H5NS</chem> [542-90-5] WFCLYEAZTHWNEH-UHFFFAOYSA-N	1.7×10^{-1}		HSDB (2015)	Q	99
2-imidazolidinethione <chem>C3H6N2S</chem> (ethylene thiourea) [96-45-7] PDQAZBWRQCGBEV-UHFFFAOYSA-N	2.9×10^1		HSDB (2015)	Q	99



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Rolf Sander: Compilation of Henry's law constants

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ethylthiourea $\text{C}_3\text{H}_8\text{N}_2\text{S}$ [625-53-6] GMEHFXXZSWDEDB-UHFFFAOYSA-N	4.2×10^2		HSDB (2015)	Q	99
allyl isothiocyanate $\text{C}_4\text{H}_5\text{NS}$ [57-06-7] ZOJBYZNEUISWFT-UHFFFAOYSA-N	2.1×10^{-2} 4.1×10^{-2} 4.1×10^{-2} 2.7 2.3×10^{-1}		Souchon et al. (2004) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Modarresi et al. (2007)	M V V Q Q	186 67
dazomet $\text{C}_5\text{H}_{10}\text{N}_2\text{S}_2$ [533-74-4] QAYICIQNSGETAS-UHFFFAOYSA-N	2.0×10^4 4.6×10^4 3.7×10^4 3.7×10^5 2.0×10^4		Duchowicz et al. (2020) Mackay et al. (2006d) MacBean (2012b) Duchowicz et al. (2020) Maniere et al. (2011)	V V X Q ?	186 350 12, 165
N,N^2 -diethylthiourea $\text{C}_5\text{H}_{12}\text{N}_2\text{S}$ [105-55-5] FLVIGYVXZHLUHP-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	99
tetramethylthiourea $\text{C}_5\text{H}_{12}\text{N}_2\text{S}$ [2782-91-4] MNOILHPDHOHILI-UHFFFAOYSA-N	8.5×10^2		HSDB (2015)	Q	99
thiram $\text{C}_6\text{H}_{12}\text{N}_2\text{S}_4$ [137-26-8] KUAZQDVKQLNFPE-UHFFFAOYSA-N	9.3×10^1 3.0×10^1		Mackay et al. (2006d) MacBean (2012b)	V X	350
bis(dimethylthiocarbamyl) sulfide $\text{C}_6\text{H}_{12}\text{N}_2\text{S}_3$ (bis(dimethylthiocarbamoyl) sulfide) [97-74-5] REQPQFUJGGOFQL-UHFFFAOYSA-N	5.8×10^{-1}		HSDB (2015)	Q	99
benzothiazole $\text{C}_7\text{H}_5\text{NS}$ [95-16-9] IOJUPLGTWVMSFF-UHFFFAOYSA-N	2.7×10^1 2.7×10^1 2.8 1.1×10^1 2.0		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
2-mercaptobenzothiazole $\text{C}_7\text{H}_5\text{NS}_2$ [149-30-4] YXIWHUQXZSMYRE-UHFFFAOYSA-N	2.7×10^2 2.7×10^2 2.8×10^3 2.2×10^2 2.1×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291



Rolf Sander: Compilation of Henry's law constants

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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-benzothiazolamine $C_7H_6N_2S$ [136-95-8] UHGULLIUJBCTEF-UHFFFAOYSA-N	7.6×10^4		HSDB (2015)	Q	99
phenylthiourea $C_7H_8N_2S$ [103-85-5] FULZLIGZKMKIGU-UHFFFAOYSA-N	9.9×10^4		HSDB (2015)	Q	99
aziprotryn $C_7H_{11}N_7S$ [4658-28-0] AFIIBUOYKYSPKB-UHFFFAOYSA-N	4.0×10^2 9.2×10^2		Abraham et al. (2007) MacBean (2012a)	Q ?	
isothiocyanatobenzene C_7H_5NS [103-72-0] QKFJKGMPGYROCL-UHFFFAOYSA-N	3.3×10^{-3} 5.1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
simetryn $C_8H_{15}N_5S$ [1014-70-6] MGLWZSOBALDPEK-UHFFFAOYSA-N	2.2×10^4 2.2×10^4 3.8×10^6 2.9×10^4 1.0×10^4		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) Hilal et al. (2008) Abraham et al. (2007)	V V Q Q Q	186
desmetryn $C_8H_{15}N_5S$ [1014-69-3] HCRWJJJUKUVORR-UHFFFAOYSA-N	2.1×10^4 5.0×10^7 2.2×10^4 2.0×10^4 1.4×10^9 3.9×10^7 2.1×10^4		HSDB (2015) Delgado and Alderete (2003) Hilal et al. (2008) Abraham et al. (2007) Delgado and Alderete (2003) Delgado and Alderete (2003) MacBean (2012a)	V C Q Q Q Q Q ?	
thioquinox $C_9H_4N_2S_3$ [93-75-4] ILERPRJWJPJZDN-UHFFFAOYSA-N	1.3×10^2		HSDB (2015)	Q	99
thiocyanic acid, (2-benzothiazolythio)methyl ester $C_9H_6N_2S_3$ [21564-17-0] TUBQDCKAWGHZPF-UHFFFAOYSA-N	1.5×10^6		HSDB (2015)	Q	99



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Rolf Sander: Compilation of Henry's law constants

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ametryn $C_9H_{17}N_5S$ [834-12-8] RQVYBGQPFYCBGX-UHFFFAOYSA-N	2.1×10^1		Chao et al. (2017)	M	
	4.1×10^3		HSDB (2015)	V	
	8.1×10^3		Mackay et al. (2006d)	V	
	8.3×10^3		Suntio et al. (1988)	V	12
	8.2×10^1		Barcelo and Hennion (1997)	X	567
	4.1×10^3		Delgado and Alderete (2003)	C	
	1.3×10^2		Goodarzi et al. (2010)	Q	568
	1.2×10^4		Hilal et al. (2008)	Q	
	5.1×10^3		Abraham et al. (2007)	Q	
	8.9×10^7		Delgado and Alderete (2003)	Q	
	1.1×10^7		Delgado and Alderete (2003)	Q	
cimetidine $C_{10}H_{16}N_6S$ [51481-61-9] AQIXAKUUQRKLNLD-UHFFFAOYSA-N	1.0×10^{10}		HSDB (2015)	Q	99
prometryn $C_{10}H_{19}N_5S$ [7287-19-6] AAEVYOVXGOFMJO-UHFFFAOYSA-N	8.2×10^2		HSDB (2015)	V	
	2.0×10^3		Mackay et al. (2006d)	V	
	2.0×10^3		Suntio et al. (1988)	V	12
	2.0×10^1		Barcelo and Hennion (1997)	X	567
	2.9×10^6		Delgado and Alderete (2003)	C	
	7.6×10^2		Delgado and Alderete (2003)	C	
	2.5×10^2		Goodarzi et al. (2010)	Q	568
	7.5×10^2		Hilal et al. (2008)	Q	
	2.5×10^3		Abraham et al. (2007)	Q	
	5.1×10^6		Delgado and Alderete (2003)	Q	
	1.4×10^6		Delgado and Alderete (2003)	Q	
terbutryn $C_{10}H_{19}N_5S$ [886-50-0] IROINLKCQGIITA-UHFFFAOYSA-N	4.7×10^2		HSDB (2015)	V	
	7.0×10^2		Mackay et al. (2006d)	V	
	7.7×10^2		Suntio et al. (1988)	V	12
	7.6		Barcelo and Hennion (1997)	X	567
	1.2×10^6		Delgado and Alderete (2003)	C	
	8.7×10^2		Delgado and Alderete (2003)	C	
	1.7×10^2		Goodarzi et al. (2010)	Q	568
	4.5×10^3		Hilal et al. (2008)	Q	
	1.6×10^3		Abraham et al. (2007)	Q	
	5.1×10^6		Delgado and Alderete (2003)	Q	
	1.4×10^6		Delgado and Alderete (2003)	Q	
disulfiram $C_{10}H_{20}N_2S_4$ [97-77-8] AUZONCFQVSMFAP-UHFFFAOYSA-N	1.2×10^{-1}		HSDB (2015)	Q	99



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1-naphthalenylthiourea $C_{11}H_{10}N_2S$ [86-88-4] PIVQQUNOTICCSA-UHFFFAOYSA-N	1.2×10^3		HSDB (2015)	Q	99
4,4'-thiobisbenzenamine $C_{12}H_{12}N_2S$ (bis(4-aminophenyl) sulfide) [139-65-1] ICNFHJVPAJKPHW-UHFFFAOYSA-N	2.5×10^6		HSDB (2015)	Q	99
dipropetryn $C_{11}H_{19}N_5S$ [4147-51-7] NPWMZOGDXOFZIN-UHFFFAOYSA-N	6.0×10^2 1.6×10^3 6.5×10^2		Hilal et al. (2008) Abraham et al. (2007) MacBean (2012a)	Q Q ?	
dimethametryn $C_{11}H_{21}N_5S$ [22936-75-0] IKYICRRUVNIHPP-UHFFFAOYSA-N	8.2×10^3 1.0×10^3		Hilal et al. (2008) Abraham et al. (2007)	Q Q	
phenothiazine $C_{12}H_9NS$ [92-84-2] WJFKNYWRSNBZNX-UHFFFAOYSA-N	1.0×10^2 3.5×10^2 3.5×10^2 6.9×10^2 9.7×10^1 4.3×10^2		Abraham et al. (2019) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
cymiazole $C_{12}H_{14}N_2S$ [61676-87-7] YUAUPYJCVKNAEC-UHFFFAOYSA-N	1.5×10^2		Ebert et al. (2023)	?	318
2,2'-dithiobisbenzothiazole $C_{14}H_8N_2S_4$ (2,2'-dibenzothiazyl disulfide) [120-78-5] AFZSMODLJJCVP-PP-UHFFFAOYSA-N	4.2×10^7		HSDB (2015)	Q	99
methapyrilene $C_{14}H_{19}N_3S$ [91-80-5] HNJXZKZRAWDPF-UHFFFAOYSA-N	3.6×10^1		HSDB (2015)	V	
olanzapine $C_{17}H_{20}N_4S$ [132539-06-1] KVVDHTXUZHCGIO-UHFFFAOYSA-N	1.3×10^9		HSDB (2015)	Q	99



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Rolf Sander: Compilation of Henry's law constants

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide $C_{18}H_{17}N_3S_4$ [3741-80-8] VILGDADBAQFRJE-UHFFFAOYSA-N	2.4×10^8		Zhang et al. (2010)	Q	287, 288
buthiobate $C_{21}H_{28}N_2S_2$ [51308-54-4] ZZVVDIVWGXTRDQ-UHFFFAOYSA-N	3.4×10^1		Ebert et al. (2023)	?	318
MCM:CH3SO4NO2 CH_3NO_6S IMLJWBRSRKRPAQ-UHFFFAOYSA-N	7.8×10^3 1.6×10^4 3.2×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
MCM:CH3SOO2NO2 CH_3NO_5S PGTDFOBGUOOGGZ-UHFFFAOYSA-N	1.7×10^6 3.9×10^8 8.3×10^{-2}		Wang et al. (2017) Wang et al. (2017) Wang et al. (2017)	Q Q Q	80, 238 80, 239 80, 240
taurine $C_2H_7NO_3S$ [107-35-7] XOAAWQZATWQOTB-UHFFFAOYSA-N	5.8×10^6		HSDB (2015)	Q	447
2-amino-5-nitrothiazole $C_3H_3N_3O_2S$ [121-66-4] MIHADVKEHAFNPG-UHFFFAOYSA-N	1.9×10^6		HSDB (2015)	Q	99
N-(aminothioxomethyl)acetamide $C_3H_6N_2OS$ (1-acetyl-2-thiourea) [591-08-2] IPCRBOOJBPEMF-UHFFFAOYSA-N	3.8×10^5		HSDB (2015)	Q	99
acesulfame $C_4H_5NO_4S$ [33665-90-6] YGCFIWQZPHFLU-UHFFFAOYSA-N	1.0×10^3		HSDB (2015)	Q	99
methomyl $C_5H_{10}N_2O_2S$ [16752-77-5] UHXUZOCRWCNSJ-UHFFFAOYSA-N	2.0×10^2 5.0×10^5 5.2×10^5 5.3×10^4 1.5×10^4 1.5×10^2 1.0×10^4 1.3×10^2		Chao et al. (2017) Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010)	M V V V V X Q Q	186 12 567 568, 569



Rolf Sander: Compilation of Henry's law constants

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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note	
4-aminobenzenesulfonic acid $C_6H_7NO_3S$ (sulfanilic acid) [121-57-3] HVBSAKJJOYLTLQU-UHFFFAOYSA-N	1.1×10^7		HSDB (2015)	Q	447	
sulfanilamide $C_6H_8N_2O_2S$ [63-74-1] FDDDEECHVMSUSB-UHFFFAOYSA-N	6.6×10^4		HSDB (2015)	Q	99	
nithiazide $C_6H_8N_4O_3S$ [139-94-6] FQSUTLQHSDDLAN-UHFFFAOYSA-N	6.2×10^9		HSDB (2015)	Q	99	
2-methylbenzenesulfonamide $C_7H_9NO_2S$ (<i>o</i> -toluenesulfonamide) [88-19-7] YCMLQMDWSXFITF-UHFFFAOYSA-N	2.1×10^1		HSDB (2015)	Q	99	
4-methylbenzenesulfonamide $C_7H_9NO_2S$ (<i>p</i> -toluenesulfonamide) [70-55-3] LMYRWZFFENFIFIT-UHFFFAOYSA-N	2.1×10^1		HSDB (2015)	Q	99	
ethidimuron $C_7H_{12}N_4O_3S_2$ [30043-49-3] KCOGSOWTADCKOL-UHFFFAOYSA-N	1.4×10^8		MacBean (2012a)	?		
oxamyl $C_7H_{13}N_3O_3S$ [23135-22-0] KZAUOCCYDRDERY-UITAMQMPSA-N	4.2×10^4		Duchowicz et al. (2020)	V	186	
	4.2×10^4		HSDB (2015)	V		
	4.2×10^4		Mackay et al. (2006d)	V		
	3.8×10^3		Suntio et al. (1988)	V	12	
	3.8×10^1		Barcelo and Hennion (1997)	X	567	
	3.4×10^7		Duchowicz et al. (2020)	Q		
	6.4×10^1		Goodarzi et al. (2010)	Q	568	
	2.0×10^7		Maniere et al. (2011)	?	165	
	aldicarb $C_7H_{14}N_2O_2S$ [116-06-3] OGLZXHRNAYXIBU-WEVVVXLNSA-N	6.9×10^3		Duchowicz et al. (2020)	V	186
		6.6×10^3		HSDB (2015)	V	
7.9×10^3			Mackay et al. (2006d)	V		
3.1×10^3			Suntio et al. (1988)	V	12	
3.1×10^1			Barcelo and Hennion (1997)	X	567	
	1.9		Suntio et al. (1988)	C	12	
	8.0×10^3		Duchowicz et al. (2020)	Q		
	2.6×10^1		Goodarzi et al. (2010)	Q	568, 571	



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
aldicarb sulfoxide $C_7H_{14}N_2O_3S$ [1646-87-3] BXP MAGSOWXBZHS-UHFFFAOYSA-N	1.0×10^4 4.2×10^6		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
aldicarb sulfone $C_7H_{14}N_2O_4S$ [1646-88-4] YRRKLBKDXSTNC-UHFFFAOYSA-N	2.9×10^3 4.4×10^6 3.7×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	186
butocarboxim $C_7H_{14}N_2O_2S$ [34681-10-2] SFNPDDSJBRXLW-UHFFFAOYSA-N	1.7×10^4 1.7×10^4		HSDB (2015) MacBean (2012a)	V ?	
butoxycarboxim $C_7H_{14}N_2O_4S$ [34681-23-7] CTJBHIROCMPUKL-UHFFFAOYSA-N	3.5×10^6		HSDB (2015)	V	
saccharin $C_7H_5NO_3S$ [81-07-2] CVHZOJJKTDOEJC-UHFFFAOYSA-N	8.2×10^3		HSDB (2015)	Q	99
acibenzolar-S-methyl $C_8H_6N_2OS_2$ [135158-54-2] UELITFHSLAHKR-UHFFFAOYSA-N	8.3×10^1 8.2×10^1 1.5×10^6 7.7×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 241, 165
quinomethionate $C_8H_6N_2OS_2$ [2439-01-2] FBQQHUGEACOBND-UHFFFAOYSA-N	1.6×10^2 1.6×10^2		HSDB (2015) MacBean (2012a)	V ?	
nifurthiazole $C_8H_6N_4O_4S$ [3570-75-0] DUWYZHLZDVCZIO-UHFFFAOYSA-N	1.3×10^{12}		HSDB (2015)	Q	99
4-methylbenzenesulfonyl isocyanate $C_8H_7NO_3S$ [4083-64-1] VLJQDHDVZJXNQL-UHFFFAOYSA-N	1.7×10^{-1} 3.2×10^1 6.7 4.0×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
tinidazole $C_8H_{13}N_3O_4S$ [19387-91-8] HJLSLZFTKLNFI-UHFFFAOYSA-N	1.9×10^5		HSDB (2015)	Q	99



Rolf Sander: Compilation of Henry's law constants

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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
metribuzin $C_8H_{14}N_4OS$ [21087-64-9] FOXFZRUHNHCZPX-UHFFFAOYSA-N	8.2×10^4 5.0×10^4		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
tricyclazole $C_9H_7N_3S$ [41814-78-2] DQJCHOQLCLEDLL-UHFFFAOYSA-N	3.2×10^5 3.2×10^5 5.5×10^5		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020)	V V Q	186
benzthiazuron $C_9H_9N_3OS$ [1929-88-0] DTCJYIIKPVRRDD-UHFFFAOYSA-N	1.9×10^6		Ebert et al. (2023)	?	365
thidiazuron $C_9H_8N_4OS$ [51707-55-2] HFCYZXMHUIHAQI-UHFFFAOYSA-N	3.0×10^7		HSDB (2015)	V	
sulfathiazole $C_9H_9N_3O_2S_2$ [72-14-0] JNMRHUJNCSQMMB-UHFFFAOYSA-N	1.7×10^8		HSDB (2015)	Q	99
sulfamethizole $C_9H_{10}N_4O_2S_2$ [144-82-1] VACCAVUAMIDAGB-UHFFFAOYSA-N	3.8×10^8		HSDB (2015)	Q	99
ethiozin $C_9H_{16}N_4OS$ [64529-56-2] ADZSGNDOZREKJK-UHFFFAOYSA-N	2.0×10^2		MacBean (2012a)	?	
tebuthiuron $C_9H_{16}N_4OS$ [34014-18-1] HBPDKDSFLXWOAE-UHFFFAOYSA-N	6.9×10^4 3.2×10^4 8.2×10^4		Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	Q Q ?	185, 21
molinat $C_9H_{17}NOS$ [2212-67-1] DEDOPGXGGQYMW-UHFFFAOYSA-N	7.7 2.2 1.7 6.9 1.1×10^1 1.0×10^1 7.6 7.3 2.3	7300	Watanabe (1993) Sagebiel et al. (1992) Sagebiel et al. (1992) Mackay et al. (2006d) Sagebiel et al. (1992) Woodrow et al. (1990) Armbrust (2000) Hilal et al. (2008) Modarresi et al. (2007)	M M M V V V C Q Q	12 12 67



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Rolf Sander: Compilation of Henry's law constants

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
thiofanox $\text{C}_9\text{H}_{18}\text{N}_2\text{O}_2\text{S}$ [39196-18-4] FZSVSABTBYGOQH-UHFFFAOYSA-N	1.1×10^3 3.4×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
amidosulfuron $\text{C}_9\text{H}_{15}\text{N}_5\text{O}_7\text{S}_2$ [120923-37-7] CTTHWASMBLQOFR-UHFFFAOYSA-N	6.4×10^5 1.9×10^3 1.5×10^5		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ?	12, 493, 165 12, 577, 165 12, 573, 165
S-ethyl dipropylthiocarbamate $\text{C}_9\text{H}_{19}\text{NOS}$ (eptam; EPTC) [759-94-4] GUVLYNGULCJVDO-UHFFFAOYSA-N	5.6×10^{-1} 3.8×10^{-2} 6.2×10^{-1} 9.8×10^{-1} 4.2×10^{-1} 9.8×10^{-1} 7.4×10^{-1} 1.0×10^{-2} 1.1×10^{-2} 8.2×10^{-1} 1.2	9100 4800	Reyes-Pérez et al. (2008) Breiter et al. (1998) HSDB (2015) Mackay et al. (2006d) Breiter et al. (1998) Suntio et al. (1988) Burkhard and Guth (1981) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) Kühne et al. (2005) Kühne et al. (2005)	M M V V V V V X Q Q Q Q ?	12 567 568 67
thiabendazole $\text{C}_{10}\text{H}_7\text{N}_3\text{S}$ [148-79-8] WJCNZQLZVWNLKY-UHFFFAOYSA-N	4.7×10^5 4.7×10^5 4.7×10^5 1.3×10^5 2.7×10^5		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V V Q ?	186 241, 165
benzo[b]thiophene-4-ol, methylcarbamate $\text{C}_{10}\text{H}_9\text{NO}_2\text{S}$ (mobam) [1079-33-0] BOTUVXISJHKZKJ-UHFFFAOYSA-N	5.8×10^3		HSDB (2015)	Q	99
sulfamethoxazole $\text{C}_{10}\text{H}_{11}\text{N}_3\text{O}_3\text{S}$ [723-46-6] JLKIGFTWXXRPMT-UHFFFAOYSA-N	1.5×10^7		HSDB (2015)	Q	99
bentazone $\text{C}_{10}\text{H}_{12}\text{N}_2\text{O}_3\text{S}$ [25057-89-0] ZOMSMJKLGFBRBS-UHFFFAOYSA-N	4.5×10^3 1.3×10^2 3.6×10^2 1.4×10^4 4.7×10^5		HSDB (2015) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011) Maniere et al. (2011)	V X Q ? ?	567 568, 569 12, 165 12, 165



Rolf Sander: Compilation of Henry's law constants

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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
buthidazole $C_{10}H_{16}N_4O_2S$ [55511-98-3] SWMGXKSQWDSBKV-UHFFFAOYSA-N	4.8×10^6		MacBean (2012a)	?	
thiodicarb $C_{10}H_{18}N_4O_4S_3$ [59669-26-0] XDOTVMNBCQVZKG-UHFFFAOYSA-N	1.1×10^1 2.3×10^1		HSDB (2015) Mackay et al. (2006d)	V V	
pebulate $C_{10}H_{21}NOS$ [1114-71-2] SGEJQUSYQTVSIU-UHFFFAOYSA-N	4.1×10^{-2} 3.8×10^{-1} 8.6×10^{-2} 8.4×10^{-4} 6.6×10^{-3} 6.4×10^{-1} 8.9×10^{-1} $> 2.3 \times 10^{10}$		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007) MacBean (2012a)	V V V X Q Q Q ?	12 567 568 67
vernolate $C_{10}H_{21}NOS$ [1929-77-7] OKUGPJPKMAEJOE-UHFFFAOYSA-N	3.2×10^{-1} 4.9×10^{-1} 4.9×10^{-1} 4.8×10^{-3} 2.9×10^{-3} 6.5×10^{-1} 9.0×10^{-1}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V V X Q Q Q	12 567 568 67
biotin $C_{10}H_{16}N_2O_3S$ [58-85-5] YBJHBAHKTGYVGT-ZKWXMUHSA-N	5.6×10^2		Abraham et al. (2019)	Q	
methabenzthiazuron $C_{10}H_{11}N_3OS$ [18691-97-9] RRVIAQKBTUQODI-UHFFFAOYSA-N	1.8×10^4 6.6×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
sulfoxazole $C_{11}H_{13}N_3O_3S$ [127-69-5] NHHCSRWZMLRLA-UHFFFAOYSA-N	6.2×10^6		HSDB (2015)	Q	99
ethiofencarb $C_{11}H_{15}NO_2S$ [29973-13-5] HEZNVYQEUHLNI-UHFFFAOYSA-N	8.6×10^3 8.2×10^3 7.7×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methiocarb $C_{11}H_{15}NO_2S$ [2032-65-7] YFBPRJGDJKVWAH-UHFFFAOYSA-N	8.3 8.4×10^3		Mackay et al. (2006d) MacBean (2012b)	V X	350
cycloate $C_{11}H_{21}NOS$ [1134-23-2] DFCAFRGABIXSDS-UHFFFAOYSA-N	1.9 3.7 3.2		HSDB (2015) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q	67
methoprotryn $C_{11}H_{21}N_5OS$ [841-06-5] DDUIUBPJPOKOMV-UHFFFAOYSA-N	3.1×10^4 1.5×10^5 2.0×10^5 3.1×10^4		HSDB (2015) Hilal et al. (2008) Abraham et al. (2007) MacBean (2012a)	V Q Q ?	
butylate $C_{11}H_{23}NOS$ [2008-41-5] BMTAFVWTTTFSTOG-UHFFFAOYSA-N	1.2×10^{-1} 1.8 1.8×10^{-2} 2.1×10^{-1} 5.8×10^{-1} 6.0×10^{-1}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V V V X Q Q Q	558 12 567 568 67
2-octyl-3(2H)-isothiazolone $C_{11}H_{19}NOS$ [26530-20-1] JPMIIZHYWMDT-UHFFFAOYSA-N	4.8×10^2 1.8		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
metsulfovax $C_{12}H_{12}N_2OS$ [21452-18-6] UDSJPFDPKCMYBD-UHFFFAOYSA-N	9.2×10^5		Ebert et al. (2023)	?	318
carboxin $C_{12}H_{13}NO_2S$ [5234-68-4] GYSSRZJIHXQEHQ-UHFFFAOYSA-N	3.1×10^4 3.1×10^4 6.4×10^4 7.6×10^2 3.1×10^4		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V V Q ?	186 241, 165
oxycarboxin $C_{12}H_{13}NO_4S$ [5259-88-1] AMEKQAFGQBKLLX-UHFFFAOYSA-N	9.3×10^5 9.0×10^5 2.8×10^3 5.3×10^5		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186
thifensulfuron-methyl $C_{12}H_{13}N_5O_6S_2$ [79277-27-3] AHTPATJNIAFOLR-UHFFFAOYSA-N	3.4×10^8 1.0×10^{14} 3.6×10^{12}		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011)	V ? ?	241, 493, 165 241, 570, 165



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
sulfamethazine $C_{12}H_{14}N_4O_2S$ [57-68-1] ASWVTGNCAZCNR-UHFFFAOYSA-N	3.2×10^7		HSDB (2015)	Q	99
thiophanate-methyl $C_{12}H_{14}N_4O_4S_2$ [23564-05-8] QGHREAKMXXNCOA-UHFFFAOYSA-N	8.2×10^3 7.9×10^2 6.0×10^3		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	 241, 165
4,4'-oxydi(benzenesulphonohydrazide) $C_{12}H_{14}N_4O_5S_2$ [80-51-3] NBQCQTNZUPTTEI-UHFFFAOYSA-N	7.8×10^{11}		HSDB (2015)	Q	99
albendazole $C_{12}H_{15}N_3O_2S$ [54965-21-8] HXHWSAZORRCQMX-UHFFFAOYSA-N	1.3×10^8		HSDB (2015)	Q	99
oryzalin $C_{12}H_{18}N_4O_6S$ [19044-88-3] UNAHYJYOSSJHH-UHFFFAOYSA-N	5.2×10^3 5.3×10^3 3.6×10^7		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	 12, 570, 165
	2.5×10^8 3.0×10^7		Maniere et al. (2011) Maniere et al. (2011)	? ?	12, 572, 165 12, 493, 165
STK366145 $C_{12}H_{19}N_3O_3S$ (N-(2-ethyl(3-methyl-4-nitrosophenyl)amino)ethyl)-methanesulfonamide) [56046-62-9] XWQURWIJAIPQP-UHFFFAOYSA-N	9.9×10^4		HSDB (2015)	V	
isomethiozin $C_{12}H_{20}N_4OS$ [57052-04-7] MZTLOILRKLURF-UHFFFAOYSA-N	7.9×10^2		MacBean (2012a)	?	



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Rolf Sander: Compilation of Henry's law constants

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
thiocarbazone-methyl $C_{12}H_{14}N_4O_7S_2$ [317815-83-1] XSKZXGDFSCCXQX-UHFFFAOYSA-N	2.1×10^{12} 5.0×10^{12} 1.3×10^{13} 1.2×10^{13}		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ? ?	241, 815, 165 241, 577, 165 241, 493, 165 241, 573, 165
2,8-dinitrodibenzothiophene $C_{12}H_6N_2O_4S$ [109041-38-5] VMQHOWOVMIROE-UHFFFAOYSA-N	4.0×10^4		Parnis et al. (2015)	Q	369
2-nitrodibenzothiophene $C_{12}H_7NO_2S$ [6639-36-7] GXLYVLHWXVRVKI-UHFFFAOYSA-N	1.2×10^2		Parnis et al. (2015)	Q	369
azimsulfuron $C_{13}H_{16}N_{10}O_5S$ [120162-55-2] MAHPNPYYQAIQJN-UHFFFAOYSA-N	2.0×10^9 1.2×10^8 1.1×10^{10}		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ?	241, 493, 165 241, 570, 165 241, 573, 165
fenthioncarb $C_{13}H_{19}NO_2S$ [62850-32-2] HMIBKHNNXANVHR-UHFFFAOYSA-N	5.3×10^2		Ebert et al. (2023)	?	316
isobornyl thiocyanacetate $C_{13}H_{19}NO_2S$ [115-31-1] IXEVGHXRDBAOB-RUETXSTFSA-N	3.8×10^1		HSDB (2015)	Q	99
nitralin $C_{13}H_{19}N_3O_6S$ [4726-14-1] UMKANAFDOQQUKE-UHFFFAOYSA-N	1.4×10^3 7.2×10^{-3} 7.2×10^{-3}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988)	V V V	 12
bupirimate $C_{13}H_{24}N_4O_3S$ [41483-43-6] DSKJPMWIHSOYEA-UHFFFAOYSA-N	6.9×10^2 1.0×10^2 1.5×10^3 7.4×10^{-1}		Duchowicz et al. (2020) Mackay et al. (2006d) Duchowicz et al. (2020) Maniere et al. (2011)	V V Q ?	186 12, 165
timolol $C_{13}H_{24}N_4O_3S$ [26839-75-8] BLJRIMJGRPQVNF-JTQLQIEISA-N	2.3×10^{11}		HSDB (2015)	Q	99



Rolf Sander: Compilation of Henry's law constants

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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
triazamate $C_{13}H_{22}N_4O_3S$ [112143-82-5] NKNFWVNSBIXGLL-UHFFFAOYSA-N	8.6×10^4 1.2×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
dithianone $C_{14}H_4N_2O_2S_2$ [3347-22-6] PYZSVQVRHDXQSL-UHFFFAOYSA-N	1.7×10^5 7.4×10^6		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	558 12, 165
N-(cyclohexylthio)phthalimide $C_{14}H_{15}NO_2S$ [17796-82-6] UEZWYKZHXYJN-UHFFFAOYSA-N	1.5×10^2		HSDB (2015)	Q	99
metsulfuron-methyl $C_{14}H_{15}N_5O_6S$ [74223-64-6] RSMUVYRMZCOLBH-UHFFFAOYSA-N	7.5×10^{10} 2.1×10^8		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
rim sulfuron $C_{14}H_{17}N_5O_7S_2$ [122931-48-0] MEFOUWRMYYJCQC-UHFFFAOYSA-N	1.5×10^4 9.1×10^6 2.2×10^5 1.2×10^7		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V ? ? ?	573, 165 570, 165 493, 165
thiophanate $C_{14}H_{18}N_4O_4S_2$ [23564-06-9] YFNCATAIYKQPOO-UHFFFAOYSA-N	1.9×10^7		HSDB (2015)	Q	99
sumatriptan $C_{14}H_{21}N_3O_2S$ [103628-46-2] KQKPFRRSPRPDEB-UHFFFAOYSA-N	2.2×10^8		HSDB (2015)	Q	99
mesotrione $C_{14}H_{13}NO_7S$ [104206-82-8] KPUREKXXPHOJQT-UHFFFAOYSA-N	$>2.0 \times 10^6$		Maniere et al. (2011)	?	12, 165
prosulfocarb $C_{14}H_{21}NOS$ [52888-80-9] NQLVQOSNDJXLKG-UHFFFAOYSA-N	7.6×10^2 9.5×10^1 6.6×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	V Q ?	186 12, 165
pyrifthalid $C_{15}H_{14}N_2O_4S$ [135186-78-6] RRKHAIYNPVQKEF-UHFFFAOYSA-N	2.5×10^5		Ebert et al. (2023)	?	318



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Rolf Sander: Compilation of Henry's law constants

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
nicosulfuron $\text{C}_{15}\text{H}_{18}\text{N}_6\text{O}_6\text{S}$ [111991-09-4] RTCOGUMHFFWOJV-UHFFFAOYSA-N	6.8×10^{10}		Maniere et al. (2011)	?	12, 165
sulfometuron methyl $\text{C}_{15}\text{H}_{16}\text{N}_4\text{O}_5\text{S}$ [74222-97-2] ZDXMLEQEMNLCQG-UHFFFAOYSA-N	8.2×10^{12} 1.9×10^8		Armbrust (2000) HSDB (2015)	C Q	99
tribenuron-methyl $\text{C}_{15}\text{H}_{17}\text{N}_5\text{O}_6\text{S}$ [101200-48-0] VLCQZHSMCYCDJL-UHFFFAOYSA-N	9.7×10^7 6.1×10^7 8.4×10^8 9.7×10^7 1.1×10^9		MacBean (2012b) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020) Maniere et al. (2011)	X Q Q ? ?	350 185, 21 241, 570, 165
ethametsulfuron-methyl $\text{C}_{15}\text{H}_{18}\text{N}_6\text{O}_6\text{S}$ [97780-06-8] ZINJLDJMHCBIP-UHFFFAOYSA-N	2.1×10^9		Ebert et al. (2023)	?	318
propoxycarbazone $\text{C}_{15}\text{H}_{18}\text{N}_4\text{O}_7\text{S}$ [145026-81-9] JTHMVYBOQLDDIY-UHFFFAOYSA-N	7.0×10^{11}		HSDB (2015)	Q	99
dimepiperate $\text{C}_{15}\text{H}_{21}\text{NOS}$ [61432-55-1] BWUPSGJXXPATLU-UHFFFAOYSA-N	2.8×10^2		Ebert et al. (2023)	?	318
esprocarb $\text{C}_{15}\text{H}_{23}\text{NOS}$ [85785-20-2] BXEHUCNTIZGSOJ-UHFFFAOYSA-N	1.8×10^1 1.5×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
valdecoxib $\text{C}_{16}\text{H}_{14}\text{N}_2\text{O}_3\text{S}$ [181695-72-7] LNPDQAQAFDNKSHK-UHFFFAOYSA-N	4.5×10^5		HSDB (2015)	Q	99
topramezone $\text{C}_{16}\text{H}_{17}\text{N}_3\text{O}_5\text{S}$ [210631-68-8] BPPVUXSMLBXYGG-UHFFFAOYSA-N	1.0×10^{12}		HSDB (2015)	Q	99



Rolf Sander: Compilation of Henry's law constants

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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
sulfosulfuron $C_{16}H_{18}N_6O_7S_2$ [141776-32-1] RBSXHDIPCIWOMG-UHFFFAOYSA-N	4.3×10^5 3.4×10^7 1.2×10^6 1.1×10^8		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V ? ? ?	 12, 573, 165 12, 570, 165 12, 493, 165
orthosulfamuron $C_{16}H_{20}N_6O_6S$ [213464-77-8] UCDPMNSCCRBWIC-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	V	
cafenstrole $C_{16}H_{22}N_4O_3S$ [125306-83-4] HFEJHAAIJZXXRE-UHFFFAOYSA-N	8.0×10^5		Ebert et al. (2023)	?	318
buprofezin $C_{16}H_{23}N_3OS$ [69327-76-0] PRLVTUNWOQKEAI-UHFFFAOYSA-N	2.4 2.3 2.5×10^2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
bensulfuron methyl $C_{16}H_{18}N_4O_7S$ [83055-99-6] XMQFTWRPUQYINF-UHFFFAOYSA-N	7.0×10^{10} 2.5×10^{12} 5.0×10^{10} 1.7×10^9		Armbrust (2000) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	C ? ? ?	 573, 165 493, 165 570, 165
mefenacet $C_{16}H_{14}N_2O_2S$ [73250-68-7] XIGAUIHYSDTJHW-UHFFFAOYSA-N	2.1×10^4 3.4×10^4		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
alanycarb $C_{17}H_{25}N_3O_4S_2$ [83130-01-2] GMAUQNJOSOMMHI-JXAWBTJAJSA-N	1.1×10^4 1.8×10^5		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
fenamidone $C_{17}H_{17}N_3OS$ [161326-34-7] LMVPMGGRYSRMIW-KRWDZBQOSA-N	8.6×10^4		Ebert et al. (2023)	?	365
esomeprazole $C_{17}H_{19}N_3O_3S$ [119141-88-7] SUBDBMMJDZJVOS-UHFFFAOYSA-N	3.3×10^{13}		HSDB (2015)	Q	99



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Rolf Sander: Compilation of Henry's law constants

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
foramsulfuron $\text{C}_{17}\text{H}_{20}\text{N}_6\text{O}_7\text{S}$ [173159-57-4] PXDNXJSDGQBLKS-UHFFFAOYSA-N	1.7×10^{11} 1.7×10^{11}		HSDB (2015) Maniere et al. (2011)	V ?	12, 165
sethoxydim $\text{C}_{17}\text{H}_{29}\text{NO}_3\text{S}$ [74051-80-2] NMHGQXYVOKDNHF-UHFFFAOYSA-N	4.5×10^5		HSDB (2015)	Q	99
mesosulfuron-methyl $\text{C}_{17}\text{H}_{21}\text{N}_5\text{O}_9\text{S}_2$ [208465-21-8] NIFKBMCXCMAO-UHFFFAOYSA-N	9.0×10^{10} 8.7×10^{12} 2.7×10^{11}		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V ? ? ?	12, 573, 165 12, 493, 165 12, 570, 165
cycloxydim $\text{C}_{17}\text{H}_{27}\text{NO}_3\text{S}$ [101205-02-1] HAHCNFGVGRWFIP-VKAVYKQESA-N	1.6×10^4		Maniere et al. (2011)	?	12, 165
fenpyrazamine $\text{C}_{17}\text{H}_{21}\text{N}_3\text{O}_2\text{S}$ [473798-59-3] UTOHZQYBSYOOGC-UHFFFAOYSA-N	6.2×10^3		Maniere et al. (2011)	?	12, 165
cyprosulamide $\text{C}_{18}\text{H}_{18}\text{N}_2\text{O}_5\text{S}$ [221667-31-8] OAWUUPVZMNKZRY-UHFFFAOYSA-N	7.0×10^6 9.1×10^2 2.9×10^5		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ?	241, 573, 165 241, 577, 165 241, 493, 165
rosiglitazone $\text{C}_{18}\text{H}_{19}\text{N}_3\text{O}_3\text{S}$ [122320-73-4] YASAKCUCGLMORW-UHFFFAOYSA-N	5.8×10^8		HSDB (2015)	Q	99
rabeprazole $\text{C}_{18}\text{H}_{21}\text{N}_3\text{O}_3\text{S}$ [117976-89-3] YREYEVICYVEVJK-UHFFFAOYSA-N	8.2×10^{11}		HSDB (2015)	Q	99
pyributicarb $\text{C}_{18}\text{H}_{22}\text{N}_2\text{O}_2\text{S}$ [88678-67-5] VTRWMTJQBQJKQH-UHFFFAOYSA-N	4.3×10^1		Ebert et al. (2023)	?	318



Rolf Sander: Compilation of Henry's law constants

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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
furathiocarb $C_{18}H_{26}N_2O_5S$ [65907-30-4] HAWJXYBZNNRMNO-UHFFFAOYSA-N	7.6×10^3		HSDB (2015)	V	
lincomycin $C_{18}H_{34}N_2O_6S$ [154-21-2] OJMMVQQUTAEWLP-UHFFFAOYSA-N	3.3×10^{17}		HSDB (2015)	Q	99
pioglitazone $C_{19}H_{20}N_2O_3S$ [111025-46-8] HYAFETHFCAUJAY-UHFFFAOYSA-N	5.8×10^6		HSDB (2015)	Q	99
isofetamid $C_{20}H_{25}NO_3S$ [875915-78-9] WMKZDPFZIZQROT-UHFFFAOYSA-N	3.5×10^4		Ebert et al. (2023)	?	318
tamsulosin $C_{20}H_{28}N_2O_5S$ [106133-20-4] DRHKJLXJQTDTD-OAHLLOKOSA-N	2.0×10^9		HSDB (2015)	Q	99
carbosulfan $C_{20}H_{32}N_2O_3S$ [55285-14-8] JLQUFIHWWLZVTJ-UHFFFAOYSA-N	1.9×10^1 1.7		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
sufentanil $C_{22}H_{30}N_2O_2S$ [56030-54-7] GGCSSNBKKAUURC-UHFFFAOYSA-N	2.4×10^9		HSDB (2015)	Q	99
sildenafil $C_{22}H_{30}N_6O_4S$ [139755-83-2] BNRNXUUZRGQAQC-UHFFFAOYSA-N	1.4×10^{15}		HSDB (2015)	Q	99
benfuracarb $C_{20}H_{30}N_2O_5S$ [82560-54-1] FYZBOYWSHKHDMT-UHFFFAOYSA-N	4.9×10^2		Ebert et al. (2023)	?	318
tirofiban $C_{22}H_{36}N_2O_5S$ [144494-65-5] COKMIXFXJXBQG-NRFANRHFSA-N	1.3×10^9		HSDB (2015)	Q	99



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
ildenafil $C_{23}H_{32}N_6O_4S$ [224785-90-4] SECKRCOLJRRGGV-UHFFFAOYSA-N	5.2×10^{15}		HSDB (2015)	Q	99
taurocholic acid $C_{26}H_{45}NO_7S$ [81-24-3] WBWWGRHZICKQGZ-HZAMXRMSA-N	1.9×10^{15}		HSDB (2015)	Q	447
dalfopristin $C_{34}H_{50}N_4O_9S$ [112362-50-2] SUYRLXYZQTJHF-FUODUHIRSA-N	2.2×10^{24}		HSDB (2015)	Q	99
C.I. acid green 3 $C_{37}H_{37}N_2O_6S_2$ [4680-78-8] SRRJCDUOSQWHS-UHFFFAOYSA-O	2.0×10^{23}		HSDB (2015)	Q	447
tinopal $C_{40}H_{40}N_{12}O_8S_2$ [24231-46-7] YGUMVDWQQJBGAVAWYXSNFSA-N	1.2×10^{38} 1.4×10^{40} 4.2×10^{26} 2.2×10^{37}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
quinupristin $C_{53}H_{67}N_9O_{10}S$ [120138-50-3] WTHRRGMBUAHGNI-UHFFFAOYSA-N	4.9×10^{22}		HSDB (2015)	Q	99
3,3,4,4,4-pentafluorobutane-1-thiol $C_4H_5F_5S$ [68140-18-1] WEILNYJKAUGBAU-UHFFFAOYSA-N	5.2×10^{-5} 1.4×10^{-3} 1.5×10^{-3} 1.2×10^{-5}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,3,4,4,5,5,6,6,6-nonafluoro-1-hexanethiol $C_6H_5F_9S$ [68140-20-5] GQJXVHYUQPXZOL-UHFFFAOYSA-N	1.9×10^{-6} 4.7×10^{-4} 3.1×10^{-4} 1.9×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
3,3,4,4,5,5,7,7,8,8,9,9,10,10,10-pentadecafluoro-1-decanethiol $C_{10}H_7F_{15}S$ [68140-21-6] ROKKEEDUUQVHFZ-UHFFFAOYSA-N	9.7×10^{-9} 6.5×10^{-6} 8.6×10^{-4} 1.3×10^{-8}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
3,3,4,4,5,5-hexafluoro-1-(3,3,4,4,5,5-hexafluorohexyldisulfanyl)hexane $C_{12}H_{14}F_{12}S_2$ [118400-71-8] CIZUOSOWGOENRE-UHFFFAOYSA-N	1.2×10^{-7}		Zhang et al. (2010)	Q	287, 288
methanesulfonyl fluoride CH_3FO_2S [558-25-8] KNWQLFOXPOZGPX-UHFFFAOYSA-N	1.6×10^{-1}		Ebert et al. (2023)	?	318
perfluorobutane sulfonic acid $C_4HF_9O_3S$ (PFBS) [375-73-5] JGTNAGYHADQMCM-UHFFFAOYSA-N	2.0		Plassmann et al. (2011)	E	
4-(pentafluorosulfonyl)phenol $C_6H_5F_5OS$ [774-94-7] XHJLGVUIMCBMHL-UHFFFAOYSA-N	4.0×10^1		Ebert et al. (2023)	?	371
1H,1H,2H,2H-perfluorohexane sulfonic acid $C_6H_5F_9O_3S$ (4:2 FTS) [757124-72-4] TXGIGTRUEITPSC-UHFFFAOYSA-N	4.5×10^{-3}		Abusallout et al. (2022)	M	
perfluorohexane sulfonic acid $C_6HF_{13}O_3S$ (PFHxS) [355-46-4] QZHDEAJFRJCDMF-UHFFFAOYSA-N	5.1×10^{-1}		Plassmann et al. (2011)	E	
1H,1H,2H,2H-perfluorooctane sulfonic acid $C_8H_5F_{13}O_3S$ (6:2 FTS) [27619-97-2] VIONGDJUYAYOPU-UHFFFAOYSA-N	2.1×10^{-3}	11000	Abusallout et al. (2022)	M	
perfluorooctane sulfonic acid $C_8HF_{17}O_3S$ (PFOS) [1763-23-1] YFSUTJLHUFNCNZ-UHFFFAOYSA-N	9.0×10^{-4} 8.6×10^{-3} 1.6×10^{-1} 9.9×10^{-3} 1.0×10^{-1} 4.6×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006)	Q Q Q Q Q Q	287, 288 287, 289 287, 290 287, 291 633 634



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Rolf Sander: Compilation of Henry's law constants

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
heptadecafluorooctanesulphonyl fluoride $C_8F_{18}O_2S$ (perfluorooctylsulfonyl fluoride) [307-35-7] BHFJBHMTEDLICO-UHFFFAOYSA-N	1.5×10^{-7}		HSDB (2015)	Q	99
1H,1H,2H,2H-perfluorodecane sulfonic acid $C_{10}H_5F_{17}O_3S$ (8:2 FTS) [39108-34-4] ALVYVCQIFHTIRD-UHFFFAOYSA-N	2.2×10^{-3}		Abusallout et al. (2022)	M	
fluticasone $C_{22}H_{27}F_3O_4S$ [90566-53-3] MGNNYOODZCAHBA-GQKYHHCASA-N	4.3×10^3		HSDB (2015)	Q	99
3-aminophenylsulfur pentafluoride $C_6H_6F_5NS$ [2993-22-8] NUFLICUHOXHWER-UHFFFAOYSA-N	6.4		Ebert et al. (2023)	?	371
4-aminophenylsulfur pentafluoride $C_6H_6F_5NS$ [2993-24-0] MZGZUHNSMNSRJ-UHFFFAOYSA-N	4.0		Ebert et al. (2023)	?	371
flubenzimine $C_{17}H_{10}F_6N_4S$ [37893-02-0] IZFZCMFMJKDHJZ-UHFFFAOYSA-N	$>2.3 \times 10^{10}$		MacBean (2012a)	?	
thiazafurone $C_6H_7F_3N_4OS$ [25366-23-8] BBJPZPLAZVTGR-UHFFFAOYSA-N	3.2×10^4		MacBean (2012a)	?	
4-nitrophenylsulfur pentafluoride $C_6H_4F_5NO_2S$ [2613-27-6] AGNCKMHGYZKMLN-UHFFFAOYSA-N	1.6×10^{-1}		Ebert et al. (2023)	?	371
undecafluoro-N-methyl-1-pentanesulfonamide $C_6H_4F_{11}NO_2S$ [68298-13-5] BKKNZBSSSAGIB-UHFFFAOYSA-N	3.5×10^{-4}		Zhang et al. (2010)	Q	287, 288
	4.4×10^{-2}		Zhang et al. (2010)	Q	287, 289
	5.6×10^{-4}		Zhang et al. (2010)	Q	287, 290
	6.2×10^{-1}		Zhang et al. (2010)	Q	287, 291



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methylbutane-1-sulfonamide $C_7H_8F_9NO_3S$ [34454-97-2] DSRUAYIFDCHEEV-UHFFFAOYSA-N	1.8×10^1 1.1×10^1 4.6×10^{-1} 2.7×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
tridecafluoro-N-methyl-1-hexanesulfonamide $C_7H_4F_{13}NO_2S$ [68259-15-4] HPPDPHZGXWMRHN-UHFFFAOYSA-N	6.7×10^{-5} 9.2×10^{-3} 2.5×10^{-4} 1.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
perfluorooctane sulfonamide $C_8H_2F_{17}NO_2S$ (PFOSA) [754-91-6] RRRXPPIDPYTNJG-UHFFFAOYSA-N	5.5×10^{-6} 3.4 7.9×10^{-6}		HSDB (2015) Arp et al. (2006) Arp et al. (2006)	Q Q Q	99 633 634
emtricitabine $C_8H_{10}FN_3O_3S$ [143491-57-0] XQSPYNMVSJKOC-NTSWFWBYSA-N	9.0×10^{11}		HSDB (2015)	Q	99
N-ethyl-1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)butane-1-sulfonamide $C_8H_{10}F_9NO_3S$ [34449-89-3] ZSBOIPHQKYRMG-UHFFFAOYSA-N	1.3×10^1 8.8 1.4×10^{-1} 2.1×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-methylheptane-1-sulphonamide $C_8H_4NO_2F_{15}S$ [68259-14-3] KDHCALLFPWZTPN-UHFFFAOYSA-N	1.3×10^{-5} 1.6×10^{-3} 1.2×10^{-4} 2.4×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1,2,2,3,3,4,4,5,5,5-undecafluoro-N-(2-hydroxyethyl)-N-methylpentane-1-sulphonamide $C_8H_8NO_3F_{11}S$ [68555-74-8] BRBCKWCOTRYPYGH-UHFFFAOYSA-N	3.4 2.9 2.1×10^{-1} 5.6×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-(3-(dimethylamino)propyl)- nonafluoro-1-butanefulfonamide $C_9H_{13}F_9N_2O_2S$ [68555-77-1] XMRMVBVJGSKMEN-UHFFFAOYSA-N	2.1 3.1×10^1 1.1 6.0×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
N- methylperfluorooctanesulphonamide $C_9H_4F_{17}NO_2S$ (N-MeFOSA) [31506-32-8] SRMWNTGXHOWBT-UHFFFAOYSA-N	4.4×10^{-4} 2.4×10^{-6} 2.1×10^{-4} 5.2×10^{-5} 5.0×10^{-3}		Abusallout et al. (2022) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	M Q Q Q Q	 287, 288 287, 289 287, 290 287, 291
N-ethyl-1,1,2,2,3,3,4,4,5,5,5- undecafluoro-N-(2-hydroxyethyl)- 1-pentanesulfonamide $C_9H_{10}NO_3F_{11}S$ [68555-72-6] GBPAQIZWHVCENQ-UHFFFAOYSA-N	2.5 2.3 6.0×10^{-2} 4.1×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-N-(2-hydroxyethyl)- N-methyl-1-hexanesulfonamide $C_9H_8NO_3F_{13}S$ [68555-75-9] UYIBZOUSVFOPJK-UHFFFAOYSA-N	6.4×10^{-1} 6.0×10^{-1} 9.2×10^{-2} 9.9		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-N-(2- hydroxyethyl)hexane-1- sulfonamide $C_{10}H_{10}F_{13}NO_3S$ [34455-03-3] SSGYCIQAXNQIBC-UHFFFAOYSA-N	4.7×10^{-1} 4.6×10^{-1} 3.1×10^{-2} 8.8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2- methyl[(nonafluorobutyl)sulfonyl] aminoethyl acrylate $C_{10}H_{10}F_9NO_4S$ [67584-55-8] KEMCLRGAIUJIRAN-UHFFFAOYSA-N	5.1×10^{-1} 5.3×10^{-1} 8.2×10^1 4.8×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-ethylperfluorooctanesulfonamide $C_{10}H_6F_{17}NO_2S$ (N-EtFOSA) [4151-50-2] CCEKAJIANROZEO-UHFFFAOYSA-N	9.4×10^{-4} 1.8×10^{-6} 1.8×10^{-6} 1.4×10^{-4} 9.5×10^{-6} 3.8×10^{-3} 6.4×10^{-3} 7.5×10^{-3}		Abusallout et al. (2022) HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006)	M Q Q Q Q Q Q Q Q	
1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-(2-hydroxyethyl)-N-methylheptane-1-sulphonamide $C_{10}H_8NO_3F_{15}S$ [68555-76-0] UIZUTEDYGNRNSW-UHFFFAOYSA-N	1.2×10^{-1} 9.5×10^{-2} 4.5×10^{-2} 2.1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
N-methyl perfluorooctane sulfonamidoethanol $C_{11}H_8F_{17}NO_3S$ (MeFOSE) [24448-09-7] PLGACQRCZCVKGGK-UHFFFAOYSA-N	2.3×10^{-2} 1.2×10^{-2} 1.9×10^{-2} 4.3×10^{-1} 4.8×10^{-1} 2.1×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006)	Q Q Q Q Q Q	287, 288 287, 289 287, 290 287, 291 633 634
N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-(2-hydroxyethyl)-1-heptanesulfonamide $C_{11}H_{10}NO_3F_{15}S$ [68555-73-7] HINASMOVVHGCAGK-UHFFFAOYSA-N	9.0×10^{-2} 7.2×10^{-2} 1.5×10^{-2} 1.8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
mefluidide $C_{11}H_{13}F_3N_2O_3S$ [53780-34-0] OKIBNKYNPBDRS-UHFFFAOYSA-N	7.6×10^5		HSDB (2015)	Q	99
N-(3-(dimethylamino)propyl)-1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonamide $C_{11}H_{13}N_2O_2F_{13}S$ [50598-28-2] INDOGKYZLAGEM-UHFFFAOYSA-N	7.7×10^{-2} 1.5 2.2×10^{-1} 2.5×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-(methyl((undecafluoropentyl)sulfonyl)amino)ethyl prop-2-enoate $C_{11}H_{10}F_{11}NO_4S$ [67584-56-9] FZWFDJBZTLTRGH-UHFFFAOYSA-N	9.7×10^{-2} 2.0×10^{-1} 7.5×10^1 9.7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
2-(methyl((nonafluorobutyl)sulphonyl)amino)ethyl methacrylate $C_{11}H_{12}F_9NO_4S$ [67584-59-2] BEIWUHUHJDEMQO-UHFFFAOYSA-N	3.3×10^{-1} 5.0×10^{-1} 1.9×10^{-1} 2.9×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
N-(3-(dimethylamino)propyl)pentadecafluoro-1-heptanesulfonamide $C_{12}H_{13}F_{15}N_2O_2S$ [67584-54-7] RFJQYRXZGNILY-UHFFFAOYSA-N	1.5×10^{-2} 2.3×10^{-1} 1.8×10^{-2} 5.2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
acrylic acid 2-[methyl[(tridecafluorohexyl)sulfonyl]amino]ethyl ester $C_{12}H_{10}F_{13}NO_4S$ [67584-57-0] HLKZFXWGVYAY-UHFFFAOYSA-N	1.8×10^{-2} 6.0×10^{-2} 3.4×10^1 2.0		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
N-ethyl perfluorooctane sulfonamidoethanol $C_{12}H_{10}F_{17}NO_3S$ (EtFOSE) [1691-99-2] HUFHNYZNTFSKCT-UHFFFAOYSA-N	1.7×10^{-2} 8.6×10^{-3} 6.2×10^{-3} 3.3×10^{-1} 5.7×10^{-2} 1.2×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Arp et al. (2006) Arp et al. (2006)	Q Q Q Q Q Q	287, 288 287, 289 287, 290 287, 291 633 634
flumetsulam $C_{12}H_9F_2N_5O_2S$ [98967-40-9] RXCPQSJAVKGONC-UHFFFAOYSA-N	1.5×10^{11}		Ebert et al. (2023)	?	316
florasulam $C_{12}H_8F_3N_5O_3S$ [145701-23-1] QZXATCCPQKOEIH-UHFFFAOYSA-N	1.7×10^6 2.3×10^6 3.4×10^7 3.0×10^4		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V ? ? ?	12, 493, 165 12, 573, 165 12, 570, 165



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-(methyl((pentadecafluoroheptyl) sulphonyl)amino)ethyl acrylate $C_{13}H_{10}F_{15}NO_4S$ [68084-62-8] BEYGFVOTUDDJK-UHFFFAOYSA-N	3.5×10^{-3}		Zhang et al. (2010)	Q	287, 288
flazasulfuron $C_{13}H_{12}F_3N_5O_5S$ [104040-78-0] HWATZEJQIXKWQS-UHFFFAOYSA-N	1.5×10^{-2}		Zhang et al. (2010)	Q	287, 289
	9.9		Zhang et al. (2010)	Q	287, 290
	4.2×10^{-1}		Zhang et al. (2010)	Q	287, 291
tritosulfuron $C_{13}H_9F_6N_5O_4S$ [142469-14-5] KVEQCVKVIFQSGC-UHFFFAOYSA-N	1.6×10^6		HSDB (2015)	Q	99
	$>3.9 \times 10^5$		Maniere et al. (2011)	?	165
pyroxulam $C_{14}H_{13}F_3N_6O_5S$ [422556-08-9] GLBLPMUBLHYFCW-UHFFFAOYSA-N	$>1.0 \times 10^4$		Maniere et al. (2011)	?	12, 165
	1.4×10^6		Maniere et al. (2011)	?	241, 165
N-methyl perfluorooctane sulfonamidoethylacrylate $C_{14}H_{10}F_{17}NO_4S$ (MeFOSEA) [25268-77-3] RTJZWOGSCLVJLD-UHFFFAOYSA-N	4.4×10^{-2}		Arp et al. (2006)	Q	633
	2.2×10^{-3}		Arp et al. (2006)	Q	634
pyrasulfotole $C_{14}H_{13}F_3N_2O_4S$ [365400-11-9] CZRVDACSCJKRFL-UHFFFAOYSA-N	7.0×10^8		HSDB (2015)	V	
triafamone $C_{14}H_{13}F_3N_4O_5S$ [874195-61-6] GBHVIWKSEHWFDU-UHFFFAOYSA-N	8.2×10^3		Ebert et al. (2023)	?	318
	1.7×10^3		HSDB (2015)	V	
flufenacet $C_{14}H_{13}F_4N_3O_2S$ [142459-58-3] IANUJLZYFUDJIH-UHFFFAOYSA-N	1.1×10^3		Maniere et al. (2011)	?	12, 165



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
N-butyl- 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-N-(2- hydroxyethyl)-1- octanesulfonamide $C_{14}H_{14}F_{17}NO_3S$ [2263-09-4] AQWROZBAYZBWIH-UHFFFAOYSA-N	9.7×10^{-3}		Zhang et al. (2010)	Q	287, 288
ethyl N-ethyl-N-[(heptadecafluorooctyl) sulphonyl]glycinate $C_{14}H_{12}NO_4F_{17}S$ [1869-77-8] LMUUXHHNCDERBQ-UHFFFAOYSA-N	1.3×10^{-5}		Zhang et al. (2010)	Q	287, 288
perfluidone $C_{14}H_{12}F_3NO_4S_2$ [37924-13-3] WHTBVLXUSXVMEV-UHFFFAOYSA-N	1.3×10^2 1.6×10^8		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
2-((heptadecafluorooctyl)sulfonyl) methylamino)ethyl methacrylate $C_{15}H_{12}F_{17}NO_4S$ [14650-24-9] UZMOXNBUTMPDCX-UHFFFAOYSA-N	4.2×10^{-4}		Zhang et al. (2010)	Q	287, 288
2-(N-ethylperfluorooctane- sulfonamido)ethyl acrylate $C_{15}H_{12}F_{17}NO_4S$ [423-82-5] ZAZJGBCGMUKZEL-UHFFFAOYSA-N	3.3×10^{-3} 2.5 5.4×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	287, 289 287, 290 287, 291
2-(N-ethylperfluorooctane- sulfonamido)ethyl acrylate $C_{15}H_{12}F_{17}NO_4S$ [423-82-5] ZAZJGBCGMUKZEL-UHFFFAOYSA-N	1.1		Ebert et al. (2023)	?	371
isoxaflutole $C_{15}H_{12}F_3NO_4S$ [141112-29-0] OYIKARCXOQLFHF-UHFFFAOYSA-N	5.3×10^4 5.3×10^4		MacBean (2012b) Maniere et al. (2011)	X ?	350 12, 165
primisulfuron-methyl $C_{15}H_{12}F_4N_4O_7S$ [86209-51-0] ZTYVMAQSHCZLXF-UHFFFAOYSA-N	7.0×10^6		HSDB (2015)	Q	99
dithiopyr $C_{15}H_{16}F_5NO_2S_2$ [97886-45-8] YUBJPYNSGLJZPQ-UHFFFAOYSA-N	6.5		Ebert et al. (2023)	?	739



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
penoxsulam $C_{16}H_{14}F_5N_5O_5S$ [219714-96-2] SYJGKVOENHZYMQ-UHFFFAOYSA-N	9.0×10^{12} 1.2×10^{14} 4.7×10^{11} 3.4×10^{13}		HSDB (2015) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	V ? ? ?	 241, 573, 165 241, 570, 165 241, 493, 165
pantoprazole $C_{16}H_{15}F_2N_3O_4S$ [102625-70-7] IQPSEEYGBUAQFF-UHFFFAOYSA-N	1.7×10^{14}		HSDB (2015)	Q	99
2-(N-ethylperfluorooctanesulfamido)ethyl methacrylate $C_{16}H_{14}F_{17}NO_4S$ [376-14-7] DBCADAHIXJHCE-UHFFFAOYSA-N	3.2×10^{-4} 3.9×10^{-3} 1.5 4.1×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
thiazopyr $C_{16}H_{17}F_5N_2O_2S$ [117718-60-2] YIJZJEYQBAAWRJ-UHFFFAOYSA-N	2.1×10^1 2.1×10^1 8.7×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
penthiopyrad $C_{16}H_{20}F_3N_3OS$ [183675-82-3] PFFIDZXUXFLSSR-UHFFFAOYSA-N	7.1×10^3 1.3×10^2 2.4×10^3 1.6×10^2		Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011) Maniere et al. (2011)	? ? ? ?	12, 570, 165 12, 493, 165 12, 577, 165 12, 572, 165
triflurosulfuron-methyl $C_{17}H_{19}F_3N_6O_6S$ [126535-15-7] IMEVJVISCHQJRM-UHFFFAOYSA-N	$>4.2 \times 10^2$		Maniere et al. (2011)	?	241, 577, 165
celecoxib $C_{17}H_{14}F_3N_3O_2S$ [169590-42-5] RZEKVGVHFLEQIL-UHFFFAOYSA-N	1.3×10^7		HSDB (2015)	Q	99



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-(butyl((heptadecafluorooctyl) sulfonyl)amino)ethyl acrylate $C_{17}H_{16}F_{17}NO_4S$ [383-07-3] AQQNNAXBGPWALO-UHFFFAOYSA-N	2.9×10^{-4}		Zhang et al. (2010)	Q	287, 288
thidiazimin $C_{18}H_{17}N_4O_2FS$ [123249-43-4] HZKBYBNLTLVSPX-JZJYNLBNSA-N	4.1×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.8		Zhang et al. (2010)	Q	287, 290
	4.3×10^{-2}		Zhang et al. (2010)	Q	287, 291
benthiavalicarb isopropyl $C_{18}H_{24}FN_3O_3S$ [177406-68-7] USRKFGIXLGKMKU-IAQYHMDHSA-N	3.5×10^8		MacBean (2012a)	?	
	1.1×10^2		MacBean (2012b)	X	350
	$> 1.1 \times 10^2$		Maniere et al. (2011)	?	12, 165
flutianil $C_{19}H_{14}F_4N_2OS_2$ [958647-10-4] KGXUEPOHGFQKF-ZCXUNETKSA-N	7.2×10^1		Ebert et al. (2023)	?	318
rosuvastatin $C_{22}H_{28}N_3O_6FS$ [287714-41-4] BPRHUIZQVSMCRT-YXWZHEERSA-N	2.9×10^{14}		HSDB (2015)	Q	99
oxathiapiprolin $C_{24}H_{22}F_5N_5O_2S$ [1003318-67-9] IAQLCKZJGNTRDO-UHFFFAOYSA-N	2.8×10^2		Maniere et al. (2011)	?	12, 165
trichloromethanesulfonyl chloride CCl_4S [594-42-3] RYFZYUUAZYQLC-UHFFFAOYSA-N	4.1×10^{-2}		Zhang et al. (2010)	Q	287, 288
	6.9×10^{-4}		Zhang et al. (2010)	Q	287, 289
	9.5×10^{-4}		Zhang et al. (2010)	Q	287, 290
	5.3×10^{-3}		Zhang et al. (2010)	Q	287, 291
1,1,2,2-tetrachloroethanesulfonyl chloride C_2HCl_5S [1185-09-7] LCVOCDOSGJHZFH-UHFFFAOYSA-N	8.8×10^{-2}		Zhang et al. (2010)	Q	287, 288
	3.7×10^{-3}		Zhang et al. (2010)	Q	287, 289
	1.9×10^{-2}		Zhang et al. (2010)	Q	287, 290
	6.7×10^{-2}		Zhang et al. (2010)	Q	287, 291
2-chloroethyl methyl sulfide C_3H_7ClS [542-81-4] MYFKLQFBFSBPA-UHFFFAOYSA-N	5.3×10^{-2}		Bartelt-Hunt et al. (2008)	?	21



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
2-chloroethyl ethyl sulfide C_4H_9ClS [693-07-2] GBNVXYXIRHSYEG-UHFFFAOYSA-N	2.0×10^{-2} 2.7×10^{-2}		HSDB (2015) Bartelt-Hunt et al. (2008)	Q ?	99 21
2,2'-dichlorodiethylsulfide $(ClCH_2CH_2)_2S$ (mustard gas) [505-60-2] QKSKPIVNLNLAUV-UHFFFAOYSA-N	3.0×10^{-1} 2.2×10^{-2} 1.5×10^{-1} 1.6×10^{-1} 4.0×10^{-1} 4.1×10^{-1} 4.1×10^{-1}		Hine and Mookerjee (1975) Keshavarz et al. (2022) Duchowicz et al. (2020) Modarresi et al. (2007) Duchowicz et al. (2020) Bartelt-Hunt et al. (2008) Opresko et al. (1998)	V Q Q Q ? ? ?	 299 67 185, 21 21
1,2-bis(2-chloroethylthio)ethane $C_6H_{12}Cl_2S_2$ (sesquimustard) [3563-36-8] AMGNHZVUZWILSB-UHFFFAOYSA-N	8.8×10^1		Ebert et al. (2023)	?	318
pentachlorobenzenethiol C_6HCl_5S [133-49-3] LLMLGZUZTFMXSA-UHFFFAOYSA-N	6.6×10^{-2} 8.4×10^{-2} 2.7×10^{-2} 1.3 2.2×10^{-2}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
chloroethyl phenyl sulfide C_8H_9ClS [5535-49-9] QDXIHHOPZFCAP-UHFFFAOYSA-N	1.3×10^{-1}		Bartelt-Hunt et al. (2008)	?	21
tetrasul $C_{12}H_6Cl_4S$ [2227-13-6] QUWSDLYBOVGOCW-UHFFFAOYSA-N	9.3×10^{-1}		MacBean (2012a)	?	
methanesulfonyl chloride CH_3ClO_2S [124-63-0] QARBMVPHQWIHKH-UHFFFAOYSA-N	2.2×10^{-1}		HSDB (2015)	Q	99
bis(trichloromethyl)sulfone $C_2Cl_6O_2S$ [3064-70-8] YBNLWIZAWPBKQ-UHFFFAOYSA-N	8.2×10^2 8.2×10^2 1.2×10^{-2} 3.1×10^3 1.0×10^1		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
benzenesulfonyl chloride $C_6H_5ClO_2S$ [98-09-9] CSKNSYBAZQPLR-UHFFFAOYSA-N	1.1 1.7×10^1 6.7 1.6×10^2		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
4-methylbenzenesulfonyl chloride $C_7H_7ClO_2S$ [98-59-9] YYROPELSRYBVMQ-UHFFFAOYSA-N	1.0 1.8×10^1 1.2×10^1 9.2×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
endosulfan $C_9H_6Cl_6O_3S$ [115-29-7] RDYMFJSUJZBWLH-UHFFFAOYSA-N	9.4×10^{-1} 1.1×10^2 2.4×10^1 1.1×10^2 2.3×10^8 3.1×10^1 7.8×10^{-1}		Mackay et al. (2006d) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Hilal et al. (2008) Modarresi et al. (2007)	V Q Q Q Q Q Q	 287, 288 287, 289 287, 290 287, 291 67
α -endosulfan $C_9H_6Cl_6O_3S$ (endosulfan I) [959-98-8] RDYMFJSUJZBWLH-AMHWMVONSA-N	1.4 1.4 1.4 1.4 1.2 1.3 1.4 1.5×10^{-1} 1.3×10^{-1} 1.5 3.4×10^{-1} 9.2×10^{-1} 9.6×10^{-2} 5.2×10^1 8.0×10^{-1} 1.4	4200 2300	Shen and Wania (2005) Shen and Wania (2005) Muir et al. (2004) Muir et al. (2004) Chao et al. (2017) Cetin et al. (2006) Altschuh et al. (1999) Rice et al. (1997b) Rice et al. (1997a) Cotham and Bidleman (1989) Suntio et al. (1988) Suntio et al. (1988) Keshavarz et al. (2022) Duchowicz et al. (2020) Modarresi et al. (2007) Kühne et al. (2005) Duchowicz et al. (2020) Kühne et al. (2005)	L L L L M M M M M V V C Q Q Q Q Q ?	366 367 367 366 12 12 67 185, 21
β -endosulfan $C_9H_6Cl_6O_3S$ (endosulfan II) [33213-65-9] RDYMFJSUJZBWLH-MDBBVBHRSA-N	2.5×10^1 2.2×10^1 6.4 1.9×10^1 2.5 1.1 1.1 1.6×10^1 1.6×10^3 5.2×10^1 3.1×10^1 8.0×10^{-1} 2.5×10^1	3700	Shen and Wania (2005) Shen and Wania (2005) Chao et al. (2017) Cetin et al. (2006) Altschuh et al. (1999) Rice et al. (1997b) Rice et al. (1997a) Cotham and Bidleman (1989) Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	L L M M M M M V Q Q Q Q Q ?	366 367 184 67 185, 21



Rolf Sander: Compilation of Henry's law constants

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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
endosulfan sulfate $C_9H_6Cl_6O_4S$ [1031-07-8] AAPVQEMYVNZIOO-UHFFFAOYSA-N	8.2×10^5		HSDB (2015)	V	
mcpa-thioethyl $C_{11}H_{13}ClO_2S$ [25319-90-8] AZFKQCNGMSSWDS-UHFFFAOYSA-N	4.5×10^{-1}		Mackay et al. (2006d)	V	
1,1'-sulfonylbis(4-chlorobenzene) $C_{12}H_8Cl_2O_2S$ [80-07-9] GPAPPPVRLPGFEQ-UHFFFAOYSA-N	7.0×10^1 7.2×10^1 6.5×10^3 5.0×10^4 3.1×10^3		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
2,2'-thiobis-4,6-dichlorophenol $C_{12}H_6Cl_4O_2S$ (bithionol) [97-18-7] JFIOVJDNOJYLKP-UHFFFAOYSA-N	1.1×10^5		Ebert et al. (2023)	?	318
1,2,4-trichloro-5-[(4-chlorophenyl)sulfonyl]benzene $C_{12}H_6Cl_4O_2S$ (tetradifon) [116-29-0] MLGCXEBRWGEOQX-UHFFFAOYSA-N	6.9×10^3 6.9×10^3 1.0×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
ovex $C_{12}H_8Cl_2O_3S$ (chlorfenson) [80-33-1] RZXLPPRPEOUENN-UHFFFAOYSA-N	6.2×10^1		HSDB (2015)	Q	99
sulphenone $C_{12}H_9ClO_2S$ [80-00-2] OFCFYWOKHPOXKF-UHFFFAOYSA-N	5.2×10^1		HSDB (2015)	Q	99
sulcotrione $C_{14}H_{13}ClO_5S$ [99105-77-8] PQTBTFWAXVEPB-UHFFFAOYSA-N	1.7×10^6		Maniere et al. (2011)	?	12, 816, 165
aramite $C_{15}H_{23}ClO_4S$ [140-57-8] YKFRAOGHWKADFJ-UHFFFAOYSA-N	5.2×10^1		HSDB (2015)	Q	99



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
6-chloro-2-(6-chloro-4-methyl-3-oxobenzothien-2(3H)-ylidene)-4-methylbenzothiothiophene-3(2H)-one	3.2×10^7		Zhang et al. (2010)	Q	287, 288
$C_{18}H_{10}Cl_2O_2S_2$ [2379-74-0] NDDLLTAIKYHPOD-ISLYRVAYSA-N	1.2×10^7 5.4×10^4 2.4×10^6		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	287, 289 287, 290 287, 291
5-chloro-3-(trichloromethyl)-1,2,4-thiadiazole	1.6×10^1		Zhang et al. (2010)	Q	287, 288
$C_3Cl_4N_2S$ [5848-93-1] MARKPJMFLDWCID-UHFFFAOYSA-N	1.9×10^1 7.3×10^{-1} 4.2×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	287, 289 287, 290 287, 291
2,4-dichloro-6-(methylthio)-1,3,5-triazine	1.3×10^1		Zhang et al. (2010)	Q	287, 288
$C_4H_3Cl_2N_3S$ [13705-05-0] MWPZLWRHHPWTFS-UHFFFAOYSA-N	1.3×10^1 9.7×10^{-1} 1.7×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q	287, 289 287, 290 287, 291
chlorthiamid $C_7H_5Cl_2NS$ [1918-13-4] KGKGSIUWJCAFPX-UHFFFAOYSA-N	3.5×10^4		MacBean (2012a)	?	
(2-chlorophenyl)thiourea $C_7H_7ClN_2S$ [5344-82-1] YZUKKTCOYSIWKJ-UHFFFAOYSA-N	$>9.9 \times 10^1$		HSDB (2015)	Q	545
2-chloroallyl-N,N-diethylthiocarbamate $C_8H_{14}ClNS_2$ [95-06-7] XJCLWVXTCRQIDI-UHFFFAOYSA-N	1.5 1.5 2.1×10^2 2.1×10^1 4.1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007)	V V Q Q Q	186 67
thiacloprid $C_{10}H_9ClN_4S$ [111988-49-9] HOKKPVIRMVDYPB-UHFFFAOYSA-N	9.0×10^8 2.1×10^9		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
chloromethiuron $C_{10}H_{13}N_2ClS$ [28217-97-2] IBZZDPVVVSNQOY-UHFFFAOYSA-N	2.0×10^5		MacBean (2012a)	?	
imibenconazole $C_{17}H_{13}Cl_3N_4S$ [86598-92-7] AGKSTYPVMZODRV-UHFFFAOYSA-N	4.9×10^4 6.8×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186



Rolf Sander: Compilation of Henry's law constants

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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
etridiazole $C_5H_5Cl_3N_2OS$ [2593-15-9] KQTVWCSONPJJE-UHFFFAOYSA-N	3.6×10^1 3.3×10^{-1} 1.6×10^1 5.3×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186
4-chloro-3-nitrobenzenesulfonamide $C_6H_5ClN_2O_4S$ [97-09-6] SPZGXONNVLTQDE-UHFFFAOYSA-N	8.2×10^3		HSDB (2015)	Q	99
clothianidin $C_6H_8ClN_5O_2S$ [210880-92-5] PGOOBECODWQEAB-UHFFFAOYSA-N	3.4×10^{10} 3.4×10^{10}		MacBean (2012b) Maniere et al. (2011)	X ?	350 12, 165
chlobenthiazone C_8H_6NOClS [63755-05-5] QCPASDYEQAVIJF-UHFFFAOYSA-N	1.3		MacBean (2012a)	?	
prothiocarb hydrochloride $C_8H_{19}ClN_2OS$ [19622-19-6] NMFAMPYSJHIYMR-UHFFFAOYSA-N	2.5×10^9		MacBean (2012a)	?	
thicyofen $C_8H_5N_2OClS_2$ [116170-30-0] GNOOAFGERMHQJE-UHFFFAOYSA-N	$>2.3 \times 10^{10}$		MacBean (2012a)	?	
thiamethoxam $C_8H_{10}ClN_5O_3S$ [153719-23-4] NWWZPOKUUAIXIW-DHZHZOJOSA-N	2.1×10^9 2.1×10^9		HSDB (2015) Maniere et al. (2011)	V ?	165
4-amino-3,5-dichloro-N-ethyl-2-methylbenzenesulfonamide $C_9H_{12}Cl_2N_2O_2S$ [151574-12-8] SBBHTEMLRJIGK-UHFFFAOYSA-N	3.8×10^4 1.1×10^4 1.2×10^6 1.5×10^7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
dichlofluanid $C_9H_{11}Cl_2FN_2O_2S_2$ [1085-98-9] WURGXGVFSMYFCG-UHFFFAOYSA-N	2.6×10^2 1.9×10^2 2.5×10^4 5.7×10^2 1.5×10^1		Duchowicz et al. (2020) Mackay et al. (2006d) Siebers and Mattusch (1996) Duchowicz et al. (2020) HSDB (2015)	V V V Q Q	186 12 99



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
captan $\text{C}_9\text{H}_8\text{Cl}_3\text{NO}_2\text{S}$ [133-06-2] LDVVMCZRFWMZSG-UHFFFAOYSA-N	1.4×10^3 1.5×10^3 1.7 1.6×10^{-2} 2.1×10^{-3} 3.3×10^3 5.0×10^3		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011) Maniere et al. (2011)	V V V X Q ? ?	12 567 568, 571 12, 570, 165 12, 493, 165
benazolin $\text{C}_9\text{H}_6\text{ClNO}_3\text{S}$ [3813-05-6] HYJSGOXICXYZGS-UHFFFAOYSA-N	4.2×10^6		Ebert et al. (2023)	?	316
folpet $\text{C}_9\text{H}_4\text{Cl}_3\text{NO}_2\text{S}$ [133-07-3] HKIOYBQGHSTUDB-UHFFFAOYSA-N	1.3×10^2 1.3×10^2 2.6 2.6×10^{-2} 1.9×10^1 1.2×10^{-1} 1.2×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Duchowicz et al. (2020) Goodarzi et al. (2010) Maniere et al. (2011)	V V V X Q Q ?	186 186 567 568 165
captafol $\text{C}_{10}\text{H}_9\text{Cl}_4\text{NO}_2\text{S}$ (difolatan) [2425-06-1] JHRWWRDRBPCWTF-UHFFFAOYSA-N	2.0×10^3 3.7×10^3 3.7×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
diallate $\text{C}_{10}\text{H}_{17}\text{Cl}_2\text{NOS}$ (avadex) [2303-16-4] SPANOECCGNXGNR-UITAMQMPSA-N	2.6 9.3 4.0 2.6		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) MacBean (2012a)	V V V ?	12
triallate $\text{C}_{10}\text{H}_{16}\text{Cl}_3\text{NOS}$ [2303-17-5] MWBPRDNLNQCFV-UHFFFAOYSA-N	8.2×10^{-1} 8.8×10^{-1} 9.8×10^{-1} 1.0×10^{-2} 1.6×10^{-2} 1.1		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V V V X Q ?	12 567 568 12, 165
tolyfluanid $\text{C}_{10}\text{H}_{13}\text{Cl}_2\text{FN}_2\text{O}_2\text{S}_2$ [731-27-1] HYVWIQDYBVKITD-UHFFFAOYSA-N	1.3×10^1 1.3×10^1 1.6×10^2 3.7×10^2		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186



Rolf Sander: Compilation of Henry's law constants

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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tiadinil $C_{11}H_{10}ClN_3OS$ [223580-51-6] VJQYLJSMBWXGDV-UHFFFAOYSA-N	5.3×10^4		Ebert et al. (2023)	?	318
benazolin-ethyl $C_{11}H_{10}NO_3ClS$ [25059-80-7] WQRCEBAZAUJQC-UHFFFAOYSA-N	4.7×10^2 5.2×10^3		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
orbencarb $C_{12}H_{16}ClNOS$ [34622-58-7] LLLFASISUZUJEQ-UHFFFAOYSA-N	2.0×10^1		Ebert et al. (2023)	?	318
S-(4-chlorobenzyl) diethylthiocarbamate $C_{12}H_{16}ClNOS$ (thiobencarb) [28249-77-6] OHTQREMOGMZHV-UHFFFAOYSA-N	1.9×10^1 4.9 3.7×10^1 5.8×10^1 3.7×10^1		Watanabe (1993) Kawamoto and Urano (1989) HSDB (2015) Woodrow et al. (1990) Armbrust (2000) Mackay et al. (2006d)	M M V V C W	12 817
furosemide $C_{12}H_{11}ClN_2O_5S$ [54-31-9] ZZUFCTLCJUWOSV-UHFFFAOYSA-N	2.5×10^{10}		HSDB (2015)	Q	99
chlorsulfuron $C_{12}H_{12}ClN_5O_4S$ [64902-72-3] VJYIFXVZLXQVHO-UHFFFAOYSA-N	3.2×10^4 1.5×10^5 2.9×10^{10}		Mackay et al. (2006d) Armbrust (2000) Maniere et al. (2011)	V C ?	241, 165
phosalone $C_{12}H_{15}ClNO_4S_2$ [2310-17-0] IOUNQDKNJZEDEP-UHFFFAOYSA-N	2.5×10^1		HSDB (2015)	Q	99
dimethenamid $C_{12}H_{18}ClNO_2S$ [87674-68-8] JLYFCTQDENRSOL-UHFFFAOYSA-N	8.9×10^2 4.7 4.5×10^2 2.3×10^2 1.2×10^2		Keshavarz et al. (2022) Duchowicz et al. (2020) Hilal et al. (2008) Modarresi et al. (2007) Duchowicz et al. (2020)	Q Q Q Q ?	67 185, 21
dimethenamid-p $C_{12}H_{18}ClNO_2S$ [163515-14-8] JLYFCTQDENRSOL-VIFPVBQESA-N	2.1×10^3 2.1×10^3		MacBean (2012b) Maniere et al. (2011)	X ?	350 165



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Rolf Sander: Compilation of Henry's law constants

Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
cyazofamid $C_{13}H_{13}ClN_4O_2S$ [120116-88-3] YXKMMRDKEKCERS-UHFFFAOYSA-N	2.5×10^1 $> 2.5 \times 10^1$		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
metosulam $C_{14}H_{13}Cl_2N_5O_4S$ [139528-85-1] VGHPMIFEKOFHHQ-UHFFFAOYSA-N	1.2×10^{12}		Maniere et al. (2011)	?	12, 165
prothioconazole $C_{14}H_{15}Cl_2N_3OS$ [178928-70-6] MNHVNIJQQRJYDH-UHFFFAOYSA-N	2.2×10^4 $> 3.3 \times 10^4$		HSDB (2015) Maniere et al. (2011)	V ?	12, 165
triasulfuron $C_{14}H_{16}ClN_5O_5S$ [82097-50-5] XOPFESVZMSQIKC-UHFFFAOYSA-N	8.0×10^8		Ebert et al. (2023)	?	316
chlorimuron-ethyl $C_{15}H_{15}ClN_4O_6S$ [90982-32-4] NSWAMPUCUPHTTC-UHFFFAOYSA-N	5.5×10^9		HSDB (2015)	V	
clopidogrel $C_{16}H_{16}ClNO_2S$ [113665-84-2] GKTWGGQPFAXNFI-HNNXBMFYSA-N	4.5×10^3		HSDB (2015)	Q	99
thenylchlor $C_{16}H_{18}ClNO_2S$ [96491-05-3] KDWQYMPYJGPHS-UHFFFAOYSA-N	1.2×10^3 6.3×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
chlorpromazine $C_{17}H_{19}ClN_2S$ [50-53-3] ZPEIMTDSQAKGNT-UHFFFAOYSA-N	6.5×10^4		Ebert et al. (2023)	?	316
hexythiazox $C_{17}H_{21}N_2O_2ClS$ [78587-05-0] XGWIJUOSCAQSSV-XHDPSFHLSA-N	4.2×10^2 8.4×10^1		HSDB (2015) Maniere et al. (2011)	V ?	12, 165
clethodim $C_{17}H_{26}ClNO_3S$ [99129-21-2] INNPZTGYZSAJFN-ZTVUPKSFSA-N	8.2×10^5 7.1×10^6		HSDB (2015) Maniere et al. (2011)	Q ?	99 12, 165



Rolf Sander: Compilation of Henry's law constants

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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
clindamycin $C_{18}H_{33}N_2O_5ClS$ [18323-44-9] KDLRVYVGXIQJDK-AWPVFWJPSA-N	3.4×10^{16}		HSDB (2015)	Q	99
pyridate $C_{19}H_{23}ClN_2O_2S$ [55512-33-9] JTZCTMAVMHRNTR-UHFFFAOYSA-N	3.0×10^2 4.9 8.3×10^3		Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	X Q ?	567 568 12, 165
vismodegib $C_{19}H_{14}Cl_2N_2O_3S$ [879085-55-9] BPQMGSKTAYIVFO-UHFFFAOYSA-N	6.2×10^{11}		HSDB (2015)	Q	99
pyridaben $C_{19}H_{25}ClN_2OS$ [96489-71-3] DWFZBUWUXWZWKD-UHFFFAOYSA-N	2.1×10^{-1}		HSDB (2015)	V	
tembotrione $C_{17}H_{16}ClF_3O_6S$ [335104-84-2] IUQAXCIUEPFSF-UHFFFAOYSA-N	5.8×10^9 5.8×10^9		HSDB (2015) Maniere et al. (2011)	V ?	12, 165
fluensulfone $C_7H_5ClF_3NO_2S_2$ [318290-98-1] XSNMWAPKHUGZGQ-UHFFFAOYSA-N	6.1×10^1		Ebert et al. (2023)	?	318
fluothiuron $C_{10}H_{10}Cl_2F_2N_2OS$ [33439-45-1] YFEUKKUPOVGUIW-UHFFFAOYSA-N	$>2.3 \times 10^{10}$		MacBean (2012a)	?	
sulfentrazone $C_{11}H_{10}Cl_2F_2N_4O_3S$ [122836-35-5] OORLZFULGXMEF-UHFFFAOYSA-N	1.5×10^7 1.5×10^7 3.7×10^8		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
flurazole $C_{12}H_7NO_2ClF_3S$ [72850-64-7] MKQSWTQPLLC SOB-UHFFFAOYSA-N	4.0×10^1 1.2×10^2 4.0×10^1		Duchowicz et al. (2020) Duchowicz et al. (2020) MacBean (2012a)	V Q ?	186
fipronil $C_{12}H_4Cl_2F_6N_4OS$ [120068-37-3] ZOCSXAVNDGMNBV-UHFFFAOYSA-N	1.2×10^4 1.2×10^4 4.4×10^7		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186



Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
flusulfamide $C_{13}H_7Cl_2F_3N_2O_4S$ [106917-52-6] GNVDZSPJWCQZ-UHFFFAOYSA-N	4.0×10^3		Ebert et al. (2023)	?	318
ethiprole $C_{13}H_9Cl_2F_3N_4OS$ [181587-01-9] FNELVJVBIMMC-UHFFFAOYSA-N	2.5×10^5		Ebert et al. (2023)	?	318
diclosulam $C_{13}H_{10}Cl_2FN_5O_3S$ [145701-21-9] QNXAVFXEJCPCJO-UHFFFAOYSA-N	2.5×10^{10}		Ebert et al. (2023)	?	318
cloransulam-methyl $C_{15}H_{13}ClFN_5O_5S$ [147150-35-4] BIKACRYIQSLICJ-UHFFFAOYSA-N	1.6×10^{11}		Ebert et al. (2023)	?	318
fluthiacet-methyl $C_{15}H_{15}ClFN_3O_3S_2$ [117337-19-6] ZCNQYNHDRVPRZIH-UHFFFAOYSA-N	4.8×10^3 4.7×10^3 4.2×10^5 6.6×10^5		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Modarresi et al. (2007)	V V Q Q	186 67
vemurafenib $C_{23}H_{18}ClF_2N_3O_3S$ [918504-65-1] GPXBXXGIAQBQNI-UHFFFAOYSA-N	8.2×10^{11}		HSDB (2015)	Q	99
tetrabromobisphenol S $C_{12}H_6Br_4O_4S$ [39635-79-5] JHJUYGMZWDHMO-UHFFFAOYSA-N	1.5×10^{11} 9.7×10^5 5.8×10^6 1.2×10^7		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
1,3-dibromo-5-[3,5-dibromo-4-(2,3-dibromopropoxy)benzenesulfonyl]-2-(2,3-dibromopropoxy)benzene $C_{18}H_{14}Br_8O_4S$ [42757-55-1] CWZVMVIHYSYLSI-UHFFFAOYSA-N	8.2×10^8 5.2×10^8 1.8×10^{11} 6.4×10^8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
bromphenol blue $C_{19}H_{10}Br_4O_5S$ [115-39-9] UDSAIICHUKSCKT-UHFFFAOYSA-N	1.9×10^{13} 5.1×10^5 9.2×10^9 5.3×10^{10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A9.1: Sulfur (C, H, O, N, Cl, S) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bromocresol green $C_{21}H_{14}Br_4O_5S$ [76-60-8] FRPHFZCDPYBUAU-UHFFFAOYSA-N	1.5×10^{13} 1.0×10^6 1.8×10^9 1.6×10^{10}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
bromocresol purple $C_{21}H_{16}Br_2O_5S$ [115-40-2] ABIUHPWEYMSGSR-UHFFFAOYSA-N	9.9×10^{12}		HSDB (2015)	Q	99
difethialone $C_{31}H_{23}BrO_2S$ [104653-34-1] VSAQRUUFVBBFS-UHFFFAOYSA-N	9.9 9.9 5.4×10^6		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
amisulbrom $C_{13}H_{13}BrFN_5O_4S_2$ [348635-87-0] BREATYVWRHIPIY-UHFFFAOYSA-N	4.7×10^1 3.6×10^4		MacBean (2012b) Maniere et al. (2011)	X ?	350 241, 165
thifluzamide $C_{13}H_6Br_2F_6N_2O_2S$ [130000-40-7] WOSNCVAPUOFXEH-UHFFFAOYSA-N	1.2×10^6		Ebert et al. (2023)	?	318
amical 48 $C_8H_8I_2O_2S$ (diiodomethyl <i>p</i> -tolyl sulfone) [20018-09-1] XOILGBPDXMVFIP-UHFFFAOYSA-N	1.3×10^3		HSDB (2015)	Q	99
flubendiamide $C_{23}H_{22}F_7IN_2O_4S$ [272451-65-7] ZGNITFSDLCMLGI-UHFFFAOYSA-N	4.5×10^{-2}		HSDB (2015)	V	



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A10 Organic species with phosphorus (P)

A10.1 Phosphorus (C, H, O, N, Cl, Br, S, P)

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
9-icosyl-9-phosphabicyclo[4.2.1]nonane $C_{28}H_{55}P$ [13886-99-2] UNOEFGBOLKBFW-UHFFFAOYSA-N	3.1×10^{-5} 3.1×10^{-3} 2.2×10^{-2} 8.0×10^{-6}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
triphenylphosphine $C_{18}H_{15}P$ [603-35-0] RIOQSEWOXXDEQQ-UHFFFAOYSA-N	4.3×10^2 9.5×10^{-3} 1.3×10^1 4.8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
phosphoric acid, trimethyl ester $C_3H_9O_4P$ (trimethyl phosphate) [512-56-1] WVLBCYQITXONBZ-UHFFFAOYSA-N	1.4×10^3 6.3×10^1 6.1×10^1 1.4×10^3 5.2×10^1		Wolfenden and Williams (1983) Yaws (2003) Gharagheizi et al. (2010) Bartelt-Hunt et al. (2008) Yaws (1999)	M X Q ? ?	12 237 246 21 21
trimethyl phosphite $C_3H_9O_3P$ [121-45-9] CYTQBVOFDCPGCX-UHFFFAOYSA-N	9.0×10^{-1}		HSDB (2015)	Q	99
dimethyl methylphosphonate $C_3H_9O_3P$ [756-79-6] VONWDASPFIQPDY-UHFFFAOYSA-N	7.6 7.6		HSDB (2015) Bartelt-Hunt et al. (2008)	Q ?	99 21
diethyl hydrogen phosphite $C_4H_{11}O_3P$ [762-04-9] MJUJXFBTEFXVKU-UHFFFAOYSA-N	1.7 5.5×10^{-3}		HSDB (2015) Bartelt-Hunt et al. (2008)	Q ?	99 21
triethylphosphate $C_6H_{15}O_4P$ [78-40-0] DQWPFSLDHJDLRL-UHFFFAOYSA-N	2.7×10^2 1.4×10^2 6.7×10^1 6.6×10^1 5.2×10^1 6.7×10^1 6.6 9.6×10^1		Wolfenden and Williams (1983) Abraham et al. (1994a) Yaws (2003) Yaws (2003) Dupeux et al. (2022) Gharagheizi et al. (2010) Bartelt-Hunt et al. (2008) Yaws (1999)	M R X X Q Q ? ?	12 258 237 259 246 21 21
diethyl ethyl phosphonate $C_6H_{15}O_3P$ [78-38-6] AATNZNJRDOVKDD-UHFFFAOYSA-N	3.4		Bartelt-Hunt et al. (2008)	?	21



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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
mevinphos $C_7H_{13}O_6P$ [7786-34-7] GEPDYQSQVLXLEU-AATRIKPKSA-N	2.4×10^5 2.5×10^3		Mackay et al. (2006d) Sanders and Seiber (1983) HSDB (2015)	V V Q	558 87 99
diisopropyl methanephosphonate $C_7H_{17}O_3P$ [1445-75-6] WOAFDHWYKSOANX-UHFFFAOYSA-N	2.2×10^{-1} 2.2×10^{-1}		HSDB (2015) Bartelt-Hunt et al. (2008)	V ?	21
dibutyl hydrogen phosphite $C_8H_{19}O_3P$ [1809-19-4] NFJPGAKRJJKLOJK-UHFFFAOYSA-N	5.5×10^{-1}		HSDB (2015)	Q	99
dibutyl phosphate $C_8H_{19}O_4P$ [107-66-4] JYFHYPJRHGVZDY-UHFFFAOYSA-N	2.3×10^3		HSDB (2015)	Q	99
tetraethyl pyrophosphate $C_8H_{20}O_7P_2$ [107-49-3] IDCBOTIENDVCBQ-UHFFFAOYSA-N	4.5×10^4		HSDB (2015)	V	
tripropyl phosphate $C_9H_{21}O_4P$ [513-08-6] RXPQRKFMDQNODS-UHFFFAOYSA-N	1.5×10^1		Wolfenden and Williams (1983)	M	12
triallyl phosphate $C_9H_{15}O_4P$ [1623-19-4] XHGIFBQQEGRTPB-UHFFFAOYSA-N	1.8×10^1		HSDB (2015)	Q	99
tributylphosphate $C_{12}H_{27}O_4P$ [126-73-8] STCOOQWBFONSKY-UHFFFAOYSA-N	7.0 1.6×10^1 4.8		HSDB (2015) Glotfelty et al. (1987) Yoshida et al. (1983)	V V V	
hexaethyl tetraphosphate $C_{12}H_{30}O_{13}P_4$ [757-58-4] DAJYZXUXDOSMCG-UHFFFAOYSA-N	3.0×10^{11}		HSDB (2015)	Q	99
crotoxyphos $C_{14}H_{19}O_6P$ [7700-17-6] XXXSILNSXNPGKG-ZHACJKMWSA-N	1.7×10^3 1.7×10^3 1.7×10^3		HSDB (2015) Mackay et al. (2006d) MacBean (2012a)	V V ?	



Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phosphoric acid, dibutyl phenyl ester $C_{14}H_{23}O_4P$ [2528-36-1] YICSVBJRVMLQNS-UHFFFAOYSA-N	2.0×10^1		HSDB (2015)	Q	99
bis(2-ethylhexyl) hydrogen phosphite $C_{16}H_{35}O_3P$ [3658-48-8] HZIUHEQKVCPTAJ-UHFFFAOYSA-N	5.8×10^{-2} 6.6×10^{-4}		HSDB (2015) Bartelt-Hunt et al. (2008)	Q ?	99 21
bis(2-ethylhexyl)hydrogen phosphate $C_{16}H_{35}O_4P$ (bis(2-ethylhexyl) phosphate) [298-07-7] SEGLCEQVOFDUPX-UHFFFAOYSA-N	2.4×10^2		HSDB (2015)	Q	99
triphenyl phosphate $C_{18}H_{15}O_4P$ [115-86-6] XZZNDPSIHUTMOC-UHFFFAOYSA-N	3.0		HSDB (2015)	V	
tris(2-butoxyethyl) phosphate $C_{18}H_{39}O_7P$ [78-51-3] WTLBZVNBKAMVDP-UHFFFAOYSA-N	8.2×10^5		HSDB (2015)	Q	99
<i>p</i> -cresyl diphenyl phosphate $C_{19}H_{17}O_4P$ [78-31-9] OJUZRFGUKHQJX-UHFFFAOYSA-N	9.9×10^1		HSDB (2015)	Q	447
triphenylphosphine oxide $C_{18}H_{15}OP$ [791-28-6] FIQMHBVFRAXMOP-UHFFFAOYSA-N	1.9×10^4 4.6×10^4 1.1×10^7 2.5×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
phosphorous acid, triphenyl ester $C_{18}H_{15}O_3P$ [101-02-0] HVLLSGMXQDNUAL-UHFFFAOYSA-N	1.8×10^1 4.4×10^{-2} 1.5×10^2 7.0×10^4		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
triethylphosphine oxide $C_{18}H_{39}OP$ [3084-48-8] PPDZLUVUQQGIOJ-UHFFFAOYSA-N	4.5×10^{-3} 2.9×10^{-3} 5.8×10^4 3.5×10^{-7}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phosphoric acid, octyl diphenyl ester $C_{20}H_{27}O_4P$ [115-88-8] YAFOVCNAQTZDQB-UHFFFAOYSA-N	3.9×10^1		HSDB (2015)	Q	99
octyldihexylphosphine oxide $C_{20}H_{43}OP$ [31160-64-2] XHRRUIJGMKIISX-UHFFFAOYSA-N	2.5×10^{-3} 3.1×10^{-3} 5.3×10^4 2.3×10^{-7}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
octicizer $C_{20}H_{27}O_4P$ [1241-94-7] CGSLYBDCEGBZCG-UHFFFAOYSA-N	1.0×10^{-1} 2.7 1.8×10^{-1}		Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	Q Q ?	 185, 21
tris(methylphenyl) phosphate $C_{21}H_{21}O_4P$ (tricresyl phosphate) [1330-78-5] IUJJIYUAKFBGBCG-UHFFFAOYSA-N	1.2×10^1		HSDB (2015)	V	
phosphoric acid, (1-methylethyl)phenyl diphenyl ester $C_{21}H_{21}O_4P$ [28108-99-8] JJXNVYMIYBNZQX-UHFFFAOYSA-N	1.3×10^2		HSDB (2015)	Q	99
phosphoric acid, tris(2-methylphenyl) ester $C_{21}H_{21}O_4P$ (tri- <i>o</i> -cresyl phosphate) [78-30-8] YSMRWXYRXBRSND-UHFFFAOYSA-N	5.2		HSDB (2015)	Q	447
phosphoric acid, tris(3-methylphenyl) ester $C_{21}H_{21}O_4P$ (tri- <i>m</i> -cresyl phosphate) [563-04-2] RMLPZKRPSQVRAB-UHFFFAOYSA-N	1.4×10^{-1} 5.1 9.9 1.2×10^{-1}		Keshavarz et al. (2022) Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	Q Q Q ?	 447 185, 21
phosphoric acid, tris(4-methylphenyl) ester $C_{21}H_{21}O_4P$ (tri- <i>p</i> -cresyl phosphate) [78-32-0] BOSMZFHBAYFUBJ-UHFFFAOYSA-N	1.8×10^2		HSDB (2015)	Q	447



Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
(3- <i>tert</i> -butylphenyl) diphenyl phosphate $C_{22}H_{23}O_4P$ NIAVXHWAURFNOW-UHFFFAOYSA-N	1.1×10^1		Ebert et al. (2023)	?	365
(4- <i>tert</i> -butylphenyl) diphenyl phosphate $C_{22}H_{23}O_4P$ [981-40-8] ULGAVXUJJBOWOD-UHFFFAOYSA-N	4.5×10^1 1.8×10^2 3.6 1.1×10^1		HSDB (2015) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q Q ?	 185, 21
isodecyl diphenyl phosphate $C_{22}H_{31}O_4P$ [29761-21-5] RYUJRXVXSJCHDZ-UHFFFAOYSA-N	2.3×10^1		HSDB (2015)	Q	99
diethylhexylphosphine oxide $C_{22}H_{47}OP$ [31160-66-4] MKEFGIKZDCMQC-UHFFFAOYSA-N	1.4×10^{-3} 3.4×10^{-3} 4.0×10^4 1.4×10^{-7}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
tris(2,4-dimethylphenyl)phosphate $C_{24}H_{27}O_4P$ [3862-12-2] KOWVWXQNCRRS-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	99
tris(2,5-dimethylphenyl)phosphate $C_{24}H_{27}O_4P$ [19074-59-0] MDHAARLWBHZGIP-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	99
tris(2,6-dimethylphenyl)phosphate $C_{24}H_{27}O_4P$ [121-06-2] QLORRTLSJTMNS-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	99
tris(3,4-dimethylphenyl)phosphate $C_{24}H_{27}O_4P$ [3862-11-1] BCKKCHOESSAGCN-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	99
tris(3,5-dimethylphenyl)phosphate $C_{24}H_{27}O_4P$ [25653-16-1] LLPMAOBOEQPRE-UHFFFAOYSA-N	1.4×10^2		HSDB (2015)	Q	99
tris(4-isopropylphenyl) phosphate $C_{27}H_{33}O_4P$ [26967-76-0] ANVREEJNGJMLVO-UHFFFAOYSA-N	3.4×10^1		HSDB (2015)	Q	99



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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
trioctylphosphine oxide $C_{24}H_{51}OP$ [78-50-2] ZMBHCYHQLYEYDV-UHFFFAOYSA-N	8.2×10^{-4} 3.7×10^{-3} 3.4×10^4 9.2×10^{-8}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
bis(2-ethylhexyl)-2-ethylhexyl phosphonate $C_{24}H_{51}O_3P$ [126-63-6] GOCVCBDBQYEFQD-UHFFFAOYSA-N	2.1×10^{-2} 6.2×10^{-6} 5.4×10^4 7.7×10^{-5} 1.3×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Bartelt-Hunt et al. (2008)	Q Q Q Q ?	287, 288 287, 289 287, 290 287, 291 21
didodecyl hydrogen phosphate $C_{24}H_{51}O_4P$ [7057-92-3] JTXUVYOABGUBMX-UHFFFAOYSA-N	2.5×10^1		HSDB (2015)	Q	99
phosphoric acid, tris(2-ethylhexyl) ester $C_{24}H_{51}O_4P$ (trioctyl phosphate) [78-42-2] GTVWRXRDKAHEAD-UHFFFAOYSA-N	1.2×10^2		HSDB (2015)	V	
diisodecylphenyl phosphite $C_{26}H_{47}O_3P$ [25550-98-5] SXXILWLQSQDLDL-UHFFFAOYSA-N	1.9 2.5 1.6×10^3 3.9×10^{-3}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
4-nonylphenyl diphenyl phosphate $C_{27}H_{33}O_4P$ [64532-97-4] LMCLPMXCYFSRNG-UHFFFAOYSA-N	8.1×10^2 2.5×10^1 7.0×10^2		Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	Q Q ?	 184 185, 21
resorcinol bis(diphenyl phosphate) $C_{30}H_{24}O_8P_2$ [57583-54-7] OWICEWMBIBPFAH-UHFFFAOYSA-N	3.4×10^7 1.4×10^{-2} 2.6×10^8 3.9×10^{16}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
hydroquinone bis(diphenyl phosphate) $C_{30}H_{24}O_8P_2$ [51732-57-1] RECLNCPBBUHRDY-UHFFFAOYSA-N	3.4×10^{12}		Abraham et al. (2019)	Q	
tris(4- <i>tert</i> -butylphenyl) phosphate $C_{30}H_{39}O_4P$ [78-33-1] LORSVOJSXMHDFH-UHFFFAOYSA-N	1.4×10^1 8.4×10^{-4} 1.6×10^3 3.5×10^1		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291



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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tris-(2,4-di- <i>tert</i> -butylphenyl) phosphite $C_{42}H_{63}O_3P$ [31570-04-4] JKIJEFPNVSHHEI-UHFFFAOYSA-N	6.1×10^{-2} 6.5×10^{-5} 1.5×10^2 5.8		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
glyphosate $C_3H_8NO_5P$ [1071-83-6] XDDAORKBJWWYJS-UHFFFAOYSA-N	1.8×10^6 4.8×10^6		Mackay et al. (2006d) Maniere et al. (2011)	V ?	165
krenite $C_3H_{11}N_2O_4P$ (fosamine-ammonium) [25954-13-6] OTSAMNSACVKIOJ-UHFFFAOYSA-N	2.0×10^7		HSDB (2015)	V	
tabun $C_5H_{11}N_2O_2P$ [77-81-6] PJVJTCIRVMBVIA-UHFFFAOYSA-N	6.6×10^1 6.2×10^2 6.5×10^1		HSDB (2015) Bartelt-Hunt et al. (2008) Opresko et al. (1998)	V ? ?	21
glufosinate-ammonium $C_5H_{15}N_2O_4P$ [77182-82-2] ZBMRKNMTMPPMMK-UHFFFAOYSA-N	2.2×10^8		MacBean (2012b)	X	350
hexamethylphosphoramide $C_6H_{18}N_3OP$ [680-31-9] GNOIPBMMFNIUFM-UHFFFAOYSA-N	4.9×10^2 5.3×10^{-4}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
monocrotophos $C_7H_{14}NO_5P$ [6923-22-4] KRTSDMXIXPKRQR-AATRIKPKSA-N	1.5×10^7		HSDB (2015) Mackay et al. (2006d)	V V	558
dicrotophos $C_8H_{16}NO_5P$ [141-66-2] VEENJGZXVHKXNB-VOTSOKGWSA-N	2.0×10^5 7.8×10^4 1.0×10^3 2.0×10^5		Mackay et al. (2006d) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q Q ?	185, 21
octamethyldiphosphoramidate $C_8H_{24}N_4O_3P_2$ (schradan) [152-16-9] SZKKRCSOSQAJDE-UHFFFAOYSA-N	1.6×10^{11}		HSDB (2015)	Q	99



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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fyrol 6 $C_9H_{22}NO_5P$ (diethyl ((diethanolamino)methyl) phosphonate) [2781-11-5] CCJKFLLIJCGHMO-UHFFFAOYSA-N	6.2×10^1		HSDB (2015)	V	
diethyl 4-nitrophenyl phosphate $C_{10}H_{14}NO_6P$ (paraoxon) [311-45-5] WYMSBXTXOHUIGT-UHFFFAOYSA-N	9.1×10^4 1.6×10^3 9.0×10^1 1.5×10^4 2.7×10^{-1}		Duchowicz et al. (2020) Glotfelty et al. (1987) Duchowicz et al. (2020) HSDB (2015) Bartelt-Hunt et al. (2008)	V V Q Q ?	186 99 21
dimethyl 4-nitrophenyl phosphate $C_8H_{10}NO_6P$ (methyl paraoxon) [950-35-6] BAFQDKPJCOLXFZ-UHFFFAOYSA-N	$> 1.1 \times 10^4$		Woodrow et al. (1990)	V	
buminafos $C_{18}H_{38}NO_3P$ [51249-05-9] NMBXMBCZBXUXAM-UHFFFAOYSA-N	5.0		MacBean (2012a)	?	12
methylphosphonyldifluoride CH_3F_2OP [676-99-3] PQIOSYKVBWRRI-UHFFFAOYSA-N	4.5×10^{-1}		HSDB (2015)	Q	99
sarin $C_4H_{10}FO_2P$ [107-44-8] DYAHQFWOVKZOOW-UHFFFAOYSA-N	1.7×10^1 1.1 1.8×10^1		HSDB (2015) Bartelt-Hunt et al. (2008) Opresko et al. (1998)	V ? ?	21
dimefox $C_4H_{12}FN_2OP$ [115-26-4] PGJBQBDNXAZHBP-UHFFFAOYSA-N	4.5×10^2		HSDB (2015)	V	
isofluorophate $C_6H_{14}FO_3P$ (diisopropyl fluorophosphate) [55-91-4] MUCZHBLJLSDCSD-UHFFFAOYSA-N	3.1 7.6×10^{-5}		HSDB (2015) Bartelt-Hunt et al. (2008)	Q ?	99 21
cyclohexyl methylphosphonofluoridate $C_7H_{14}FO_2P$ (cyclosarin) [329-99-7] SNTRKUOVAPUGAY-UHFFFAOYSA-N	3.5 3.5 4.3×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186



Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
soman $C_7H_{16}FO_2P$ [96-64-0] GRXKLBQBQUKJJZ-UHFFFAOYSA-N	2.1 2.1 2.2		HSDB (2015) Bartelt-Hunt et al. (2008) Opresko et al. (1998)	V ? ?	 21
mipafox $C_6H_{16}FN_2OP$ [371-86-8] UOSHUBFBCPGQAY-UHFFFAOYSA-N	3.3×10^3		HSDB (2015)	V	
phenylphosphonous dichloride $C_6H_5Cl_2P$ [644-97-3] IMDXZWRUJZPMDH-UHFFFAOYSA-N	6.5×10^{-1} 2.5×10^{-3} 6.2×10^{-2} 3.3×10^{-2}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
chlorophonium chloride $C_{19}H_{32}Cl_3P$ [115-78-6] IVHVNMLJNASKHW-UHFFFAOYSA-M	2.8×10^7		MacBean (2012a)	?	12
triclofos $C_2H_4Cl_3O_4P$ [306-52-5] YYQRGCZGSFRBAM-UHFFFAOYSA-N	7.0×10^7		HSDB (2015)	Q	99
(2-chloroethyl)-phosphonic acid $C_2H_6ClO_3P$ (ethephon) [16672-87-0] UDPGUMQDCGORJQ-UHFFFAOYSA-N	6.9×10^7 $>6.9 \times 10^6$		HSDB (2015) Maniere et al. (2011)	V ?	 241, 165
1-hydroxy-2,2,2-trichloroethylphosphonic acid, dimethyl ester $C_4H_8Cl_3O_4P$ (trichlorfon) [52-68-6] NFACJZMKEDPNKN-UHFFFAOYSA-N	5.5×10^1 $>8.1 \times 10^2$ 5.8×10^5 6.0×10^5 5.9×10^5 5.8×10^3 3.8×10^1		Chao et al. (2017) Kawamoto and Urano (1989) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	M M V V V X Q	 12 567 568
dimethyl-2,2-dichlorovinyl phosphate $C_4H_7Cl_2O_4P$ (dichlorvos) [62-73-7] OEBRKOCOSUFCWJD-UHFFFAOYSA-N	3.9×10^1 8.1×10^{-2} 1.7×10^1 5.2 5.3 5.2×10^{-2} 9.7×10^{-1}	11000	Gautier et al. (2003) Kawamoto and Urano (1989) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	M M V V V X Q	 12 567 568, 571



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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tris(2-chloroethyl) phosphate $\text{C}_6\text{H}_{12}\text{Cl}_3\text{O}_4\text{P}$ [115-96-8] HQUQLFOMPYWACS-UHFFFAOYSA-N	3.0		HSDB (2015)	V	
cyclophosphamide $\text{C}_7\text{H}_{15}\text{Cl}_2\text{N}_2\text{O}_2\text{P}$ [50-18-0] CMSMOCZEIVJLDB-UHFFFAOYSA-N	7.0×10^5		HSDB (2015)	Q	99
ifosfamide $\text{C}_7\text{H}_{15}\text{Cl}_2\text{N}_2\text{O}_2\text{P}$ [3778-73-2] HOMGKSMUEGBAAB-UHFFFAOYSA-N	7.0×10^5		HSDB (2015)	Q	99
butonate $\text{C}_8\text{H}_{14}\text{Cl}_3\text{O}_5\text{P}$ [126-22-7] BKAQXYNWONVOAX-UHFFFAOYSA-N	3.3×10^4		HSDB (2015)	Q	99
phosphoric acid, 7-chlorobicyclo[3.2.0]hepta-2,6- dien-6-yl dimethyl ester $\text{C}_9\text{H}_{12}\text{ClO}_4\text{P}$ (heptenophos) [23560-59-0] GBAWQJNHVWMTLU-UHFFFAOYSA-N	5.8×10^1		HSDB (2015)	V	
tris(2,3-dichloropropyl) phosphate $\text{C}_9\text{H}_{15}\text{Cl}_6\text{O}_4\text{P}$ [78-43-3] JZZBTMVTLBHJHL-UHFFFAOYSA-N	3.8×10^3		HSDB (2015)	Q	99
tris(1,3- dichloroisopropyl)phosphate $\text{C}_9\text{H}_{15}\text{Cl}_6\text{O}_4\text{P}$ [13674-87-8] ASLWPAWFJZFKCF-UHFFFAOYSA-N	3.8×10^3 3.8×10^3 4.1×10^{-2} 1.3×10^7		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	99 287, 288 287, 289 287, 290
tris(2-chloropropyl) phosphate $\text{C}_9\text{H}_{18}\text{Cl}_3\text{O}_4\text{P}$ [6145-73-9] GTRSAMFYSUBAGN-UHFFFAOYSA-N	1.6×10^2 1.4×10^{-3} 6.7×10^2 3.8×10^{-1}		Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q	287, 288 287, 289 287, 290 287, 291
tri-(2-chloroisopropyl)phosphate $\text{C}_9\text{H}_{18}\text{Cl}_3\text{O}_4\text{P}$ [13674-84-5] KVMPUXDNESXNOH-UHFFFAOYSA-N	1.6×10^2 1.6×10^2 1.9×10^{-4} 3.6×10^4 3.8×10^{-1}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291



Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bis(2-chloropropyl) 2-chloro-1-methylethyl phosphate $\text{C}_9\text{H}_{18}\text{Cl}_3\text{O}_4\text{P}$ [76649-15-5] WDLBXPJJVVVRGX-UHFFFAOYSA-N	1.6×10^2		Zhang et al. (2010)	Q	287, 288
	7.2×10^{-4}		Zhang et al. (2010)	Q	287, 289
	5.6×10^3		Zhang et al. (2010)	Q	287, 290
	3.8×10^{-1}		Zhang et al. (2010)	Q	287, 291
tetrachlorvinphos $\text{C}_{10}\text{H}_9\text{Cl}_4\text{O}_4\text{P}$ [22248-79-9] UBCKGWBNUIFUST-YHYXMXQVSA-N	5.5×10^3		HSDB (2015)	V	
	2.4×10^3		Ebert et al. (2023)	?	316
	5.4×10^3		MacBean (2012a)	?	
dimethylvinphos $\text{C}_{10}\text{H}_{10}\text{Cl}_3\text{O}_4\text{P}$ [2274-67-1] QSGNQLHULIMSJ-UHFFFAOYSA-N	3.0×10^2		Ebert et al. (2023)	?	318
diphenyl chlorophosphate $\text{C}_{12}\text{H}_{10}\text{ClO}_3\text{P}$ [2524-64-3] BHIIGRBMZRSRI-UHFFFAOYSA-N	3.7×10^{-2}		Bartelt-Hunt et al. (2008)	?	21
chlorfenvinphos $\text{C}_{12}\text{H}_{14}\text{Cl}_3\text{O}_4\text{P}$ (clofenvinfos) [470-90-6] FSAVDKDHPSCTO-XYOKQWHBSA-N	3.4×10^2		HSDB (2015)	V	
	3.4×10^3		Mackay et al. (2006d)	V	
	3.6×10^3		Suntio et al. (1988)	V	12
	3.5×10^1		Barcelo and Hennion (1997)	X	567
	4.1		Goodarzi et al. (2010)	Q	568
crufomate $\text{C}_{12}\text{H}_{19}\text{ClNO}_3\text{P}$ (ruelene) [299-86-5] BOFHKBZYOYVHSI-UHFFFAOYSA-N	3.9×10^3		HSDB (2015)	Q	99
phosdiphen $\text{C}_{14}\text{H}_{11}\text{O}_4\text{Cl}_4\text{P}$ [36519-00-3] HEMINMLPKZELPP-UHFFFAOYSA-N	2.6×10^{-2}		MacBean (2012a)	?	
phosphamidon $\text{C}_{10}\text{H}_{19}\text{ClNO}_5\text{P}$ [13171-21-6] RGCLLPNLLBQHPF-HJWRWDBZSA-N	2.8		Mackay et al. (2006d)	V	
	2.8		Suntio et al. (1988)	V	12
	6.6×10^6		HSDB (2015)	Q	99
tris(2,3-dibromo-1-propyl) phosphate $\text{C}_9\text{H}_{15}\text{Br}_6\text{O}_4\text{P}$ [126-72-7] PQYJRMFWJJONBO-UHFFFAOYSA-N	3.8×10^{-1}		HSDB (2015)	V	



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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
naled $\text{C}_4\text{H}_7\text{Br}_2\text{Cl}_2\text{O}_4\text{P}$ [300-76-5] BUYMVQAILCEWRR-UHFFFAOYSA-N	1.5×10^{-1}		HSDB (2015)	V	
2-bromo-1,1-dimethylethyl 2-bromoethyl 2-chloroethyl phosphate $\text{C}_9\text{H}_{18}\text{Br}_2\text{ClO}_4\text{P}$ [125997-20-8] GZSKSYDWLZIPOX-UHFFFAOYSA-N	1.5×10^3		Zhang et al. (2010)	Q	287, 288
leptophos $\text{C}_{13}\text{H}_{10}\text{O}_3\text{BrCl}_2\text{P}$ [21609-90-5] CVRALZAYCYJELZ-UHFFFAOYSA-N	3.7 3.7 4.0 4.0 2.6×10^1		Mackay and Shiu (1981) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Hilal et al. (2008)	L V V V Q	12
tributyl phosphorotrithioite $\text{C}_{12}\text{H}_{27}\text{PS}_3$ [150-50-5] KLAPGAOQRZTCBI-UHFFFAOYSA-N	4.3×10^{-1} 4.3×10^{-1} 6.0×10^{-4} 1.5×10^{-1} 5.1×10^{-2}		HSDB (2015) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010) Zhang et al. (2010)	Q Q Q Q Q	99 287, 288 287, 289 287, 290 287, 291
bis(2,6,6-trimethylbicyclo[3.1.1]hept-2-enyl) bis(2,6,6-trimethylbicyclo[3.1.1]hept-2-enyl)thiodiphosphonate $\text{C}_{40}\text{H}_{60}\text{P}_2\text{S}_5$ [68400-79-3] ZZMOHCWFHCHISQ-UHFFFAOYSA-N	8.2×10^{-5}		Zhang et al. (2010)	Q	287, 288
thiometon $\text{C}_6\text{H}_{15}\text{O}_2\text{PS}_3$ [640-15-3] OPASCBHCTNRLRM-UHFFFAOYSA-N	3.5×10^{-1}		HSDB (2015)	V	
demeton-S-methyl sulfone $\text{C}_6\text{H}_{15}\text{O}_5\text{PS}_2$ [17040-19-6] PZIRJMYRYORVIT-UHFFFAOYSA-N	$< 2.3 \times 10^{10}$		MacBean (2012a)	?	
oxydemeton-methyl $\text{C}_6\text{H}_{15}\text{O}_4\text{PS}_2$ [301-12-2] PMCMORKVPSKHZ-UHFFFAOYSA-N	6.2×10^7		HSDB (2015)	Q	99



Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
demeton-O-methyl $C_6H_{15}O_3PS_2$ [867-27-6] ZVZQKNVMDKSGGF-UHFFFAOYSA-N	3.2		Ebert et al. (2023)	?	316
demeton-S-methyl $C_6H_{15}O_3PS_2$ [919-86-8] WEBQKRLKWNIIYKK-UHFFFAOYSA-N	3.7×10^2 3.6×10^2		HSDB (2015) Mackay et al. (2006d)	V V	
methacrifos $C_7H_{13}O_5PS$ [62610-77-9] NTAHCMPOMKHKEU-AATRIKPKSA-N	1.0×10^1		MacBean (2012a)	?	
phorate $C_7H_{17}O_2PS_3$ [298-02-2] BULVZWIRKLYCBC-UHFFFAOYSA-N	2.1 9.9×10^{-1} 1.5 1.5×10^{-2} 4.5×10^{-2}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	12 567 568
salthion $C_8H_9O_3PS$ [3811-49-2] OUNSASXJZHBGAI-UHFFFAOYSA-N	4.7×10^{-1}		MacBean (2012a)	?	
acetoxon $C_8H_{17}O_5PS$ [2425-25-4] ZRCQYAQOWIQUBA-UHFFFAOYSA-N	1.3×10^4		HSDB (2015)	Q	99
demeton-O $C_8H_{19}O_3PS_2$ [298-03-3] DGLIBALSRMUQDD-UHFFFAOYSA-N	6.1		MacBean (2012a)	?	12
demeton-S $C_8H_{19}O_3PS_2$ (isosystox) [126-75-0] GRPRVIYRYGLIJU-UHFFFAOYSA-N	2.0×10^2		HSDB (2015)	V	
sulfotep $C_8H_{20}O_5P_2S_2$ [3689-24-5] XIUROWKZWPIAB-UHFFFAOYSA-N	2.2 3.4 9.9×10^{-3} 4.4×10^{-3}		HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V X Q	567 568, 571



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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetrakis(hydroxymethyl) phosphonium sulfate $C_8H_{24}O_{12}P_2S$ [55566-30-8] YIEDHPBKGZGLIK-UHFFFAOYSA-L	5.8×10^{17}		HSDB (2015)	Q	99
ethophosphos $C_8H_{19}O_2PS_2$ [13194-48-4] VJYFKVYYMZPMAB-UHFFFAOYSA-N	6.1×10^1 6.1×10^1		HSDB (2015) Mackay et al. (2006d)	V V	
disulfoton $C_8H_{19}O_2PS_3$ [298-04-4] DOFZAXZDOSGAJZ-UHFFFAOYSA-N	1.1×10^1 4.5 4.5 4.5		Muir et al. (2004) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988)	L V V V	367 12
	4.5×10^{-2} 6.4×10^{-1}		Barcelo and Hennion (1997) Goodarzi et al. (2010)	X Q	567 568, 571
endothion $C_9H_{13}O_6PS$ [2778-04-3] YCAGGFXSQFVQL-UHFFFAOYSA-N	1.5×10^6		HSDB (2015)	Q	99
terbufos $C_9H_{21}O_2PS_3$ [13071-79-9] XLNZEKHULJKQBA-UHFFFAOYSA-N	4.1×10^{-1} 4.1×10^{-1} 9.9×10^{-3} 3.0×10^{-1}		HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V X Q	 567 568
ethion $C_9H_{22}O_4P_2S_4$ [563-12-2] RIZMRRKBZQXFOY-UHFFFAOYSA-N	2.6×10^1 3.1×10^1 3.1×10^1 3.1×10^{-1} 6.8×10^{-1}		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 12 567 568
fonofos $C_{10}H_{15}OPS_2$ [944-22-9] KVGLBTYUCJYMND-UHFFFAOYSA-N	1.4 1.4 1.4 1.9×10^5		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Duchowicz et al. (2020)	V V V Q	186
fenthion $C_{10}H_{15}O_3PS_2$ [55-38-9] PNVJTZOFSHSLTO-UHFFFAOYSA-N	6.8 4.5×10^1 4.5×10^1 4.5×10^{-1} 1.9		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 12 567 568



Rolf Sander: Compilation of Henry's law constants

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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
aspon $C_{12}H_{28}O_5P_2S_2$ (tetrapropyl dithiopyrophosphate) [3244-90-4] IIDFEIDMIKSJSV-UHFFFAOYSA-N	6.1		Ebert et al. (2023)	?	318
iprobephos $C_{13}H_{21}O_3PS$ [26087-47-8] FCOAHACKGGIURQ-UHFFFAOYSA-N	2.6×10^2		Watanabe (1993)	M	
propaphos $C_{13}H_{21}O_4PS$ [7292-16-2] PWYIUUEFFPNVCMW-UHFFFAOYSA-N	3.4×10^3 3.4×10^3 3.6×10^1 3.4×10^3		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) MacBean (2012a)	V V Q ?	186
edifenphos $C_{14}H_{15}O_2PS_2$ [17109-49-8] AWZOLILCOUMRDG-UHFFFAOYSA-N	5.0×10^3 1.3×10^4 1.4×10^1		Watanabe (1993) HSDB (2015) Mackay et al. (2006d)	M V V	
systox $C_{16}H_{38}O_6P_2S_4$ [8065-48-3] FAXIJTUDSBIMHY-UHFFFAOYSA-N	5.5×10^1		HSDB (2015)	V	
temefos $C_{16}H_{20}O_6P_2S_3$ (temephos) [3383-96-8] WWJZWCUNLNYYAU-UHFFFAOYSA-N	1.7 4.9×10^3 4.4		Barcelo and Hennion (1997) HSDB (2015) Goodarzi et al. (2010)	X Q Q	567 99 568
methamidophos $C_2H_8NOPS_2$ [10265-92-6] NNKVPIKMPQWCG-UHFFFAOYSA-N	1.1×10^4		HSDB (2015)	Q	99
acephate $C_4H_{10}NO_3PS$ [30560-19-1] YASYVMFVAPKPKKE-UHFFFAOYSA-N	2.0×10^7 2.0×10^7 1.9×10^5 4.4×10^2		HSDB (2015) Mackay et al. (2006d) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V X Q	567 568
dimethoate $C_5H_{12}NO_3PS_2$ [60-51-5] MCWXGJITAZMZEV-UHFFFAOYSA-N	4.1×10^4 8.7×10^3 9.1×10^3 9.0×10^1 5.3×10^2		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	12 567 568, 569



Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
omethoate $C_5H_{12}NO_4PS$ [1113-02-6] PZXOQEXFMJCDPG-UHFFFAOYSA-N	2.1×10^8		HSDB (2015)	Q	99
methidathion $C_6H_{11}N_2O_4PS_3$ [950-37-8] MEBQXILRKZHVXC-UHFFFAOYSA-N	1.4×10^3 5.8×10^3 5.8×10^3		HSDB (2015) Glotfelty et al. (1987) Burkhard and Guth (1981)	V V V	
fosthietan $C_6H_{12}NO_3PS_2$ [21548-32-3] RHJIOVESMTJEK-UHFFFAOYSA-N	2.4×10^5 2.4×10^5		HSDB (2015) MacBean (2012a)	V ?	
formothion $C_6H_{12}NO_4PS_2$ [2540-82-1] AIKKULXCBHRFOS-UHFFFAOYSA-N	9.0×10^4		HSDB (2015)	V	
menazon $C_6H_{12}N_5O_2PS_2$ [78-57-9] SUYHYHLFUHHVJQ-UHFFFAOYSA-N	6.6×10^3		HSDB (2015)	V	
ethoate-methyl $C_6H_{14}NO_3PS_2$ [116-01-8] DICRHEJCQXFJBY-UHFFFAOYSA-N	3.5×10^5		HSDB (2015)	Q	99
glyphosate-trimesium $C_6H_{16}NO_5PS$ [81591-81-3] RUCAXVJQQJZGU-UHFFFAOYSA-M	$>2.3 \times 10^{10}$		MacBean (2012a)	?	
phosfolan $C_7H_{14}NO_3PS_2$ (cyolane) [947-02-4] ILBONRFSLATCRE-UHFFFAOYSA-N	5.1×10^4		Ebert et al. (2023)	?	316
methylparathion $C_8H_{10}NO_5PS$ (parathion-methyl) [298-00-0] RLBIQVWOMPOHC-UHFFFAOYSA-N	5.0×10^1 1.7×10^1 2.6×10^2 1.6×10^2 9.9×10^1 4.7×10^1 9.9×10^1 4.7×10^1 9.2×10^1 2.1×10^3		Mackay and Shiu (1981) Chao et al. (2017) Rice et al. (1997b) Fendinger and Glotfelty (1990) Metcalf et al. (1980) Mackay et al. (2006d) Woodrow et al. (1990) Suntio et al. (1988) Glotfelty et al. (1987) Sanders and Seiber (1983)	L M M M M V V V V V V	12



Rolf Sander: Compilation of Henry's law constants

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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.6×10^2		Metcalfé et al. (1980)	V	
	1.3×10^{-1}		Smith and Bomberger (1980)	V	24
	4.7×10^{-1}		Barcelo and Hennion (1997)	X	567
	2.1×10^1		Goodarzi et al. (2010)	Q	568
	1.5×10^1		Hilal et al. (2008)	Q	
zinophos $C_8H_{13}N_2O_3PS$ (thionazin) [297-97-2] IRVDMKJLOCGUBJ-UHFFFAOYSA-N	1.0×10^1		Mackay et al. (2006d)	V	
	1.2×10^1		Suntio et al. (1988)	V	12
	1.1×10^1		MacBean (2012a)	?	
vamidothion $C_8H_{18}NO_4PS_2$ [2275-23-2] LESVOLZBIFDZGS-UHFFFAOYSA-N	1.1×10^{10}		HSDB (2015)	Q	99
cyanophos $C_9H_{10}NO_3PS$ [2636-26-2] SCKHCCSZFPSHGR-UHFFFAOYSA-N	1.8		HSDB (2015)	V	
fenitrothion $C_9H_{12}NO_5PS$ [122-14-5] ZNOLGFHPUJIMJ-UHFFFAOYSA-N	8.3×10^1		Watanabe (1993)	M	
	1.1×10^1		Metcalfé et al. (1980)	M	
	8.3×10^2		Mackay et al. (2006d)	V	
	2.8×10^2		Suntio et al. (1988)	V	12
	2.7×10^1		Mackay and Shiu (1981)	V	
	1.5×10^1		Metcalfé et al. (1980)	V	
	2.7		Barcelo and Hennion (1997)	X	567
	4.4×10^1		Goodarzi et al. (2010)	Q	568, 569
	5.3		Hilal et al. (2008)	Q	
fosthiazate-1 $C_9H_{18}NO_3PS_2$ [98886-44-3] DUFVKSUJRWYZQP-UHFFFAOYSA-N	7.5×10^1		MacBean (2012b)	X	350
	1.0×10^5		Keshavarz et al. (2022)	Q	
	5.7×10^4		Duchowicz et al. (2020)	Q	
	5.7×10^4		Duchowicz et al. (2020)	?	185, 21
	5.7×10^4		Maniere et al. (2011)	?	241, 165
prothoate $C_9H_{20}NO_3PS_2$ (trimethoate) [2275-18-5] QTXHFDHVLBDJIO-UHFFFAOYSA-N	1.5×10^5		HSDB (2015)	Q	99
amiton $C_{10}H_{24}NO_3PS$ [78-53-5] PJISLFCKHOHLLP-UHFFFAOYSA-N	3.5×10^4		Bartelt-Hunt et al. (2008)	?	21



Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
azinphos-methyl $C_{10}H_{12}N_3O_3PS_2$ [86-50-0] CJJOSEISRRTUQB-UHFFFAOYSA-N	3.4×10^3 3.2×10^3 3.1×10^2 3.1 4.6×10^1		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010)	V V V X Q	 12 567 568
parathion $C_{10}H_{14}NO_5PS$ (E 605) [56-38-2] LCCNCVORNKJIRZ-UHFFFAOYSA-N	1.2×10^2 7.1×10^1 5.0×10^1 5.0×10^1 8.3×10^1 4.2×10^1 1.6×10^3 8.1 1.3×10^1 1.0×10^1 3.3×10^1 8.0×10^{-1} 3.2×10^{-1} 6.5 3.4×10^1		Fendinger and Glotfelty (1990) Mackay et al. (2006d) Siebers and Mattusch (1996) Siebers et al. (1994) Suntio et al. (1988) Glotfelty et al. (1987) Sanders and Seiber (1983) Mackay and Shiu (1981) Burkhard and Guth (1981) Chiou et al. (1980) MacBean (2012b) Barcelo and Hennion (1997) Goodarzi et al. (2010) Hilal et al. (2008) Bartelt-Hunt et al. (2008)	M V V V V V V V V X X Q Q ?	 12 12 350 567 568 21
isoparathion $C_{10}H_{14}NO_5PS$ [597-88-6] BGWJTLALYACOG-UHFFFAOYSA-N	6.1×10^1		Ebert et al. (2023)	?	318
etrimfos $C_{10}H_{17}N_2O_4PS$ [38260-54-7] FGIWF CGDPUIBEZ-UHFFFAOYSA-N	1.6×10^1		HSDB (2015)	V	
propetamphos $C_{10}H_{20}NO_4PS$ [31218-83-4] BZNDWPRGXNILMS-VQHVLOKHSA-N	2.1×10^2		HSDB (2015)	V	
mecarbam $C_{10}H_{20}NO_5PS_2$ [2595-54-2] KLGMSAQDHLCOU-UHFFFAOYSA-N	1.1×10^4		HSDB (2015)	Q	99
phosmet $C_{11}H_{12}NO_4PS_2$ [732-11-6] LMNZTLDVJIUSHT-UHFFFAOYSA-N	1.2×10^3 1.3×10^3 1.1×10^3 1.0×10^1 3.8 7.4×10^2		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Barcelo and Hennion (1997) Goodarzi et al. (2010) Maniere et al. (2011)	V V V X Q ?	 12 567 568 165



Rolf Sander: Compilation of Henry's law constants

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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
pirimiphos methyl $C_{11}H_{20}N_3O_3PS$ [29232-93-7] QHOQHJPRIBSPCY-UHFFFAOYSA-N	1.6×10^1 1.7×10^1		HSDB (2015) Maniere et al. (2011)	V ?	241, 165
imicyafos $C_{11}H_{21}N_4O_2PS$ [140163-89-9] PPCUNNLZTNMXFO-UHFFFAOYSA-N	1.5×10^9		Ebert et al. (2023)	?	318
Agent VX $C_{11}H_{26}NO_2PS$ [50782-69-9] JJIUCEJQJXNMHV-UHFFFAOYSA-N	9.1×10^2 2.8×10^3 1.2×10^3		HSDB (2015) Bartelt-Hunt et al. (2008) Opresko et al. (1998)	V ? ?	21
ditalimfos $C_{12}H_{14}NO_4PS$ [5131-24-8] MTBZIGHNGSTDJV-UHFFFAOYSA-N	2.3×10^3		Ebert et al. (2023)	?	316
quinalphos $C_{12}H_{15}N_2O_3PS$ [13593-03-8] JYQUHIFYBATCCY-UHFFFAOYSA-N	1.1×10^2		Ebert et al. (2023)	?	316
phoxim $C_{12}H_{15}N_2O_3PS$ [14816-18-3] ATROHALUCMTWTB-UHFFFAOYSA-N	5.0×10^1		Ebert et al. (2023)	?	316
triazophos $C_{12}H_{16}N_3O_3PS$ [24017-47-8] AMFGTOFWMRQMEM-UHFFFAOYSA-N	3.2×10^2		HSDB (2015)	V	
azinphos-ethyl $C_{12}H_{16}N_3O_3PS_2$ [2642-71-9] RQVGAIADHNPSME-UHFFFAOYSA-N	1.0×10^2		HSDB (2015)	V	
diazinon $C_{12}H_{21}N_2O_3PS$ (dimpylate) [333-41-5] FHIVAFMUCKRCQO-UHFFFAOYSA-N	4.6×10^1 9.2×10^1 1.5×10^1 1.1×10^1 8.4×10^1 8.8×10^1 2.5×10^1 1.5×10^1 6.7 1.0×10^2 1.3×10^1	12000	Muir et al. (2004) Muir et al. (2004) Feigenbrugel et al. (2004a) Watanabe (1993) Fendinger et al. (1989) Fendinger and Glotfelty (1988) Mackay et al. (2006d) Suntio et al. (1988) Glotfelty et al. (1987) Sanders and Seiber (1983) Burkhard and Guth (1981)	L L M M M M V V V V V V	367 366 72 72 12 87



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Rolf Sander: Compilation of Henry's law constants

Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	1.5×10^{-1}		Barcelo and Hennion (1997)	X	567
	1.7×10^{-1}		Goodarzi et al. (2010)	Q	568
	1.4×10^2		Meylan and Howard (1991)	Q	
isoxathion $\text{C}_{13}\text{H}_{16}\text{NO}_4\text{PS}$ [18854-01-8] SDMSCIWHRZJSRN-UHFFFAOYSA-N	1.6×10^2		HSDB (2015)	Q	99
butamifos $\text{C}_{13}\text{H}_{21}\text{N}_2\text{O}_4\text{PS}$ [36335-67-8] OEYOMNZEMCPTKN-UHFFFAOYSA-N	3.4×10^1		Ebert et al. (2023)	?	316
fenamiphos $\text{C}_{13}\text{H}_{22}\text{NO}_3\text{PS}$ [22224-92-6] ZCJPOPBZHLUFHF-UHFFFAOYSA-N	1.1×10^3		HSDB (2015)	V	
tebupirimfos $\text{C}_{13}\text{H}_{23}\text{N}_2\text{O}_3\text{PS}$ [96182-53-5] AWYOMXWDGWUJHS-UHFFFAOYSA-N	3.5		HSDB (2015)	V	
pirimiphos ethyl $\text{C}_{13}\text{H}_{24}\text{N}_3\text{O}_3\text{PS}$ [23505-41-1] TZBPRYIJAJUOY-UHFFFAOYSA-N	1.8×10^{-1}		HSDB (2015)	V	
bensulide $\text{C}_{14}\text{H}_{24}\text{NO}_4\text{PS}_3$ [741-58-2] RRNIZKPFKNDTRS-UHFFFAOYSA-N	1.1×10^3		HSDB (2015)	V	
ethyl <i>p</i> -nitrophenyl benzenethiophosphonate $\text{C}_{14}\text{H}_{14}\text{NO}_4\text{PS}$ [2104-64-5] AIGRXSNLSLVJMEA-UHFFFAOYSA-N	2.2×10^1		Duchowicz et al. (2020)	V	186
	2.2×10^1		HSDB (2015)	V	
	4.3×10^7		Duchowicz et al. (2020)	Q	
pyridaphenthion $\text{C}_{14}\text{H}_{17}\text{N}_2\text{O}_4\text{PS}$ [119-12-0] CXJSOEPQXUCJSA-UHFFFAOYSA-N	5.1×10^4		Ebert et al. (2023)	?	318
piperophos $\text{C}_{14}\text{H}_{28}\text{NO}_3\text{PS}_2$ [24151-93-7] UNLYSVIDNRIVFJ-UHFFFAOYSA-N	8.8×10^2		Ebert et al. (2023)	?	318



Rolf Sander: Compilation of Henry's law constants

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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
isofenphos $C_{15}H_{24}NO_4PS$ [25311-71-1] HOQADATXFBQEGG-UHFFFAOYSA-N	1.2×10^2 2.4×10^2 1.0×10^3 6.9×10^{-1} 2.4×10^2		Mackay et al. (2006d) MacBean (2012b) Barcelo and Hennion (1997) Goodarzi et al. (2010) MacBean (2012a)	V X X Q ?	 350 567 568, 569 12
chlormephos $C_5H_{12}ClO_2PS_2$ [24934-91-6] QGTYWWGEWOBMAK-UHFFFAOYSA-N	3.4×10^{-2} 3.4×10^{-2} 3.2×10^5		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186
chlroethoxyfos $C_6H_{11}Cl_4O_3PS$ [54593-83-8] XFDJMIHUAHSGKG-UHFFFAOYSA-N	2.3		HSDB (2015)	Q	99
ronnel $C_8H_8O_3Cl_3PS$ [299-84-3] JHJOOSLFWRRSGU-UHFFFAOYSA-N	4.8×10^{-1} 1.7×10^{-2} 3.1×10^{-1} 5.7×10^{-2}		Mackay and Shiu (1981) Mackay et al. (2006d) Suntio et al. (1988) Hilal et al. (2008)	L V V Q	 12
tolclofos-methyl $C_9H_{11}Cl_2O_3PS$ [57018-04-9] OBZIQJJIKNWNO-UHFFFAOYSA-N	1.7×10^{-2} 2.7		Mackay et al. (2006d) Maniere et al. (2011)	V ?	12, 165
methyl trithion $C_9H_{12}ClO_2PS_3$ [953-17-3] OUCCVXVYGFBXSV-UHFFFAOYSA-N	9.9×10^1		HSDB (2015)	Q	99
trichloronate $C_{10}H_{12}Cl_3O_2PS$ [327-98-0] ANIAQSUBRGXWLS-UHFFFAOYSA-N	8.8×10^{-1} 9.0×10^{-1} 2.6×10^4 7.5×10^1		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) MacBean (2012a)	V V Q ?	186
dichlofenthion $C_{10}H_{13}Cl_2O_3PS$ [97-17-6] WGOWCPGHOCIBHW-UHFFFAOYSA-N	1.0×10^{-2} 1.0×10^{-2} 3.2×10^{-5} 3.2×10^{-5} 1.5×10^1		Duchowicz et al. (2020) HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Duchowicz et al. (2020)	V V V V Q	186 12
prothiofos $C_{11}H_{15}Cl_2O_2PS_2$ [34643-46-4] FITIWKDOCAUBQD-UHFFFAOYSA-N	3.4×10^{-1}		Ebert et al. (2023)	?	318
chlorthiophos $C_{11}H_{15}Cl_2O_3PS_2$ [21923-23-9] JAZJVWLGNLNDD-UHFFFAOYSA-N	8.2		HSDB (2015)	Q	99



Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
carbophenothion $C_{11}H_{16}ClO_2PS_3$ [786-19-6] VEDTXTNSFWUXGQ-UHFFFAOYSA-N	4.9×10^1 2.2×10^1		HSDB (2015) Suntio et al. (1988)	V V	12
coumaphos $C_{14}H_{16}ClO_5PS$ [56-72-4] BXNANOICGRISHX-UHFFFAOYSA-N	9.0×10^1		HSDB (2015)	V	
methylchlorpyrifos $C_7H_7NO_3Cl_3PS$ [5598-13-0] HRBKVYFZANMGRE-UHFFFAOYSA-N	4.1 2.5 2.9 3.3 6.5×10^{-1} 4.3		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Mackay and Shiu (1981) Hilal et al. (2008) Maniere et al. (2011)	V V V V Q ?	12 241, 165
dicapthon $C_8H_9NO_5ClPS$ [2463-84-5] OTKXWJHPGBRXC-R-UHFFFAOYSA-N	1.0×10^2 4.2×10^1 4.2×10^1 4.4×10^1 6.5		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988) Mackay and Shiu (1981) Hilal et al. (2008)	V V V V Q	12
chlorthion $C_8H_9ClNO_5PS$ [500-28-7] NZNRRXXETLSZRO-UHFFFAOYSA-N	2.5×10^2 2.4×10^2		HSDB (2015) MacBean (2012a)	V ?	
azamethiphos $C_9H_{10}ClN_2O_5PS$ [35575-96-3] VNBKTWQZTQIWDV-UHFFFAOYSA-N	3.0×10^5		Ebert et al. (2023)	?	318
isazophos $C_9H_{17}ClN_3O_3PS$ [42509-80-8] XRHGWAGWAHHLF-UHFFFAOYSA-N	1.9×10^1 1.1×10^2 7.2×10^1		HSDB (2015) Burkhard and Guth (1981) MacBean (2012a)	V V ?	
chlorpyrifos $C_9H_{11}Cl_3NO_3PS$ [2921-88-2] SBPBAQFVLVIKOP-UHFFFAOYSA-N	1.8 2.1 2.2×10^{-1} 3.1 2.4 9.2×10^{-1} 1.7 5.7×10^{-1} 8.1×10^{-1} 5.6×10^{-3} 3.4 1.4 1.0×10^{-1}	7800	Muir et al. (2004) Muir et al. (2004) Cetin et al. (2006) Rice et al. (1997b) Fendinger and Glotfelty (1990) Mackay et al. (2006d) Siebers et al. (1994) Suntio et al. (1988) Glotfelty et al. (1987) Barcelo and Hennion (1997) HSDB (2015) Armbrust (2000) Goodarzi et al. (2010)	L L M M M V V V V V X C C Q	367 366 12 12 567



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Table A10.1: Phosphorus (C, H, O, N, Cl, Br, S, P) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
	2.2×10^{-1}		Hilal et al. (2008)	Q	
	2.5×10^2		Meylan and Howard (1991)	Q	
	2.1		Maniere et al. (2011)	?	241, 165
chlorphoxim $\text{C}_{12}\text{H}_{14}\text{ClN}_2\text{O}_3\text{PS}$ [14816-20-7] GQKRUMZWUHSJLF-NTCAYCPXSA-N	$>2.3 \times 10^{10}$		MacBean (2012a)	?	
phosazetim $\text{C}_{14}\text{H}_{11}\text{Cl}_2\text{N}_2\text{O}_4\text{PS}$ [4104-14-7] XIBXUAZIXDFTG-UHFFFAOYSA-N	2.1×10^3		HSDB (2015)	Q	99
dialifor $\text{C}_{14}\text{H}_{17}\text{ClNO}_4\text{PS}_2$ [10311-84-9] MUMQYXACQUZOFU-UHFFFAOYSA-N	5.5×10^1 7.1 7.1		HSDB (2015) Mackay et al. (2006d) Suntio et al. (1988)	V V V	12
pyraclofos $\text{C}_{14}\text{H}_{18}\text{ClN}_2\text{O}_3\text{PS}$ [77458-01-6] QHGVXILFMXYDRS-UHFFFAOYSA-N	2.3×10^4		Ebert et al. (2023)	?	318
bromophos $\text{C}_8\text{H}_8\text{BrCl}_2\text{O}_3\text{PS}$ [2104-96-3] NYQDCVLCJXRDSK-UHFFFAOYSA-N	1.0×10^{-1} 1.1×10^{-1}		HSDB (2015) MacBean (2012a)	V ?	12
bromophos-ethyl $\text{C}_{10}\text{H}_{12}\text{BrCl}_2\text{O}_3\text{PS}$ [4824-78-6] KWGUFOITWDSNQY-UHFFFAOYSA-N	6.2×10^{-1}		HSDB (2015)	Q	99
profenofos $\text{C}_{11}\text{H}_{15}\text{BrClO}_3\text{PS}$ [41198-08-7] QYMMJNLHFKGANY-UHFFFAOYSA-N	4.5×10^2 6.2×10^2		HSDB (2015) Mackay et al. (2006d)	V V	
iodofenphos $\text{C}_8\text{H}_8\text{Cl}_2\text{IO}_3\text{PS}$ [18181-70-9] LFVLUOAHQIVABZ-UHFFFAOYSA-N	2.2 $>2.3 \times 10^{10}$		HSDB (2015) MacBean (2012a)	V ?	



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A11 Organic species with other elements

A11.1 Sodium (Na)

Table A11.1: Sodium (Na)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{CP} (at T^{\ominus}) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}}\right]$	$\frac{d \ln H_s^{CP}}{d(1/T)}$ [K]	Reference	Type	Note
sesone $C_8H_7Cl_2NaO_5S$ (2,4-dichlorophenoxyethyl sulfate) [136-78-7] KISFEBPWFCGRGN-UHFFFAOYSA-M	3.8×10^5		HSDB (2015)	Q	99
iodosulfuron-methyl-sodium $C_{14}H_{14}IN_5O_6SNa$ [144550-36-7] JUJFQMPKBJPSFZ-UHFFFAOYSA-M	4.4×10^{10}		Maniere et al. (2011)	?	12, 165
propoxycarbazone-sodium $C_{15}H_{17}N_4O_7NaS$ [181274-15-7] JRQGGDDUXDKCWRWF-UHFFFAOYSA-M	$>1.0 \times 10^{10}$		Maniere et al. (2011)	?	12, 165
dioctyl sulfosuccinatesodium salt $C_{20}H_{37}NaO_7S$ (bis(2-ethylhexyl) sodium sulfosuccinate) [577-11-7] APSBXTVYXVQYAB-UHFFFAOYSA-M	2.0×10^6		HSDB (2015)	Q	99
dodecylbenzenesulfonic acid sodium salt $C_{18}H_{29}NaO_3S$ (sodium dodecylbenzenesulfonate) [25155-30-0] BWUAQXVVJWAXHR-UHFFFAOYSA-M	1.6×10^2		HSDB (2015)	Q	99
D&C yellow 10 $C_{20}H_{17}NO_8Na_2S_2$ [8004-92-0] NYMFWSWVZMTZQO-UHFFFAOYSA-L	3.4×10^{14}		HSDB (2015)	Q	99
D&C yellow 8 $C_{20}H_{10}Na_2O_5$ (fluorescein sodium) [518-47-8] NJDNXYGOVLYJHP-UHFFFAOYSA-L	3.5×10^{10}		HSDB (2015)	Q	447
D&C black 1 $C_{22}H_{14}N_6Na_2O_9S_2$ (amido black 10B) [1064-48-8] HKBVRFLHNUEVRO-DWTBGCDMSA-L	8.2×10^{25}		HSDB (2015)	Q	99



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Table A11.1: Sodium (Na) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
D&C green 5 $\text{C}_{28}\text{H}_{20}\text{N}_2\text{Na}_2\text{O}_8\text{S}_2$ [4403-90-1] FPAYXBWYIMERV-UHFFFAOYSA-L	3.1×10^{23}		HSDB (2015)	Q	447
FD&C green 2 $\text{C}_{37}\text{H}_{34}\text{N}_2\text{Na}_2\text{O}_9\text{S}_3$ [5141-20-8] DGOBMKYRQHEFGQ-UHFFFAOYSA-L	7.0×10^{30}		HSDB (2015)	Q	447



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A11.2 Aluminum (Al)

Table A11.2: Aluminum (Al)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
fosetyl-aluminum $\text{C}_6\text{H}_{18}\text{AlO}_9\text{P}_3$ [39148-24-8] ZKZMJOFIHHZSRW-UHFFFAOYSA-K	3.1×10^9 $> 3.1 \times 10^9$		HSDB (2015) Maniere et al. (2011)	V ?	12, 165



A11.3 Silicon (Si)

Table A11.3: Silicon (Si)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetramethylsilane $\text{C}_4\text{H}_{12}\text{Si}$ [75-76-3] CZDYPVPMEAXLPK-UHFFFAOYSA-N	2.3×10^{-6} 2.3×10^{-6} 1.4×10^{-3} 2.4×10^{-6}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Abraham et al. (1990)	V V Q ?	186
tetraethylsilane $\text{C}_8\text{H}_{20}\text{Si}$ [631-36-7] VCZQFJFZMMALHB-UHFFFAOYSA-N	3.8×10^{-6}		Abraham et al. (1990)	?	
trimethylsilanol $(\text{CH}_3)_3\text{SiOH}$ (TMS) [1066-40-6] AAPLIUHOKVUFCC-UHFFFAOYSA-N	7.0×10^{-2} 2.2×10^{-1}		Xu and Kropscott (2014) Mazzoni et al. (1997)	M V	
silicic acid $\text{Si}(\text{OH})_4$ [10193-36-9] RMAQACBXLXPBSY-UHFFFAOYSA-N	2.3×10^{10}	14000	Plyasunov (2012)	M	818
dimethylsilanediol $\text{C}_2\text{H}_8\text{O}_2\text{Si}$ [1066-42-8] XCLIHDJZGPCUBT-UHFFFAOYSA-N	2.8×10^3 2.9×10^{-1}		Xu and Kropscott (2012) Mazzoni et al. (1997)	M V	12
tetramethyl silicate $\text{C}_4\text{H}_{12}\text{O}_4\text{Si}$ [681-84-5] LFQCEHFDDXELDD-UHFFFAOYSA-N	1.5		HSDB (2015)	Q	99
pentamethyldisiloxanol $\text{C}_5\text{H}_{16}\text{O}_2\text{Si}_2$ [56428-93-4] FGOLZCPMTWJPOU-UHFFFAOYSA-N	7.3×10^{-4}		Mazzoni et al. (1997)	V	
tetraethyl silicate $\text{C}_8\text{H}_{20}\text{O}_4\text{Si}$ [78-10-4] BOTDANWDWHJENH-UHFFFAOYSA-N	4.9×10^{-1}		HSDB (2015)	Q	99
trimethoxysilylpropyl methacrylate $\text{C}_{10}\text{H}_{20}\text{O}_5\text{Si}$ [2530-85-0] XDLMVUHYZWKMMD-UHFFFAOYSA-N	3.3×10^1		HSDB (2015)	Q	99



Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note		
hexamethyldisiloxane $C_6H_{18}OSi_2$ (L2) [107-46-0] UQEAIHBTYFGYIE-UHFFFAOYSA-N	1.3×10^{-6}		Xu and Kropscott (2014)	M			
	1.7×10^{-4}		Kochetkov et al. (2001)	M	402, 330		
	3.1×10^{-4}		Kochetkov et al. (2001)	M	402, 331		
	7.7×10^{-7}		David et al. (2000)	M	72		
	1.0×10^{-6}		Xu and Kropscott (2014)	V			
	1.0×10^{-6}		Kochetkov et al. (2001)	V			
	4.2×10^{-6}		Mazzoni et al. (1997)	V			
	2.2×10^{-4}		Keshavarz et al. (2022)	Q			
octamethyltrisiloxane $C_8H_{24}O_2Si_3$ (L3) [107-51-7] CXQXSVUQTKNFP-UHFFFAOYSA-N	1.9×10^{-4}		Duchowicz et al. (2020)	Q			
	2.2×10^{-4}		Duchowicz et al. (2020)	?	185, 21		
	3.4×10^{-7}		Xu and Kropscott (2014)	M			
	3.3×10^{-6}		Kochetkov et al. (2001)	M	402, 330		
	2.7×10^{-6}		Kochetkov et al. (2001)	M	402, 331		
	2.8×10^{-7}		Xu and Kropscott (2014)	V			
	2.8×10^{-7}		Kochetkov et al. (2001)	V			
	1.2×10^{-6}		Mazzoni et al. (1997)	V			
decamethyltetrasiloxane $C_{10}H_{30}O_3Si_4$ (L4) [141-62-8] YFCGDEUVHLPRCZ-UHFFFAOYSA-N	1.3×10^{-5}		Keshavarz et al. (2022)	Q			
	2.5×10^{-5}		Duchowicz et al. (2020)	Q			
	3.0×10^{-6}		Duchowicz et al. (2020)	?	185, 21		
	1.4×10^{-7}		Xu and Kropscott (2014)	M			
	5.8×10^{-7}		Kochetkov et al. (2001)	M	402, 330		
	3.7×10^{-7}		Xu and Kropscott (2014)	V			
	4.3×10^{-7}		Kochetkov et al. (2001)	V			
	3.1×10^{-7}		Mazzoni et al. (1997)	V			
dodecamethylpentasiloxane $C_{12}H_{36}O_4Si_5$ (L5) [141-63-9] FBZANXDWQAVSTQ-UHFFFAOYSA-N	8.1×10^{-7}		Keshavarz et al. (2022)	Q			
	3.3×10^{-6}		Duchowicz et al. (2020)	Q	184		
	5.8×10^{-7}		Duchowicz et al. (2020)	?	185, 21		
	8.7×10^{-8}		Mazzoni et al. (1997)	V			
	silthiofam $C_{13}H_{21}NOSSi$ [175217-20-6] MXMXHPPIGKYAR-UHFFFAOYSA-N	1.9		Maniere et al. (2011)	?	241, 165	
		tetradecamethylhexasiloxane $C_{14}H_{42}O_5Si_6$ (L6) [107-52-8] ADANNTQYRVPQLJ-UHFFFAOYSA-N	2.7×10^{-8}		Mazzoni et al. (1997)	V	



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Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
hexadecamethylheptasiloxane $C_{16}H_{48}O_6Si_7$ (L7) [541-01-5] NFVSLUJRHRJG-UHFFFAOYSA-N	7.6×10^{-9}		Mazzoni et al. (1997)	V	
octadecamethyloctasiloxane $C_{18}H_{54}O_7Si_8$ (L8) [556-69-4] VWGDQBQTSZDFMX-UHFFFAOYSA-N	3.3×10^{-9}		Mazzoni et al. (1997)	V	
hexamethylcyclotrisiloxane $C_6H_{18}O_3Si_3$ (D3) [541-05-9] HTDJPCNNEPUOOQ-UHFFFAOYSA-N	5.6×10^{-6} 6.4×10^{-6} 1.6×10^{-5} 2.5×10^{-6}		Mazzoni et al. (1997) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	V Q Q Q	819 820 821
octamethylcyclotetrasiloxane $C_8H_{24}O_4Si_4$ (D4) [556-67-2] HMMGMWAXVFQOQA-UHFFFAOYSA-N	7.3×10^{-7} 8.3×10^{-7} 1.7×10^{-5} 1.7×10^{-5} 1.2×10^{-4} 1.5×10^{-6} 1.6×10^{-6} 8.3×10^{-7} 2.7×10^{-6} 5.4×10^{-7} 1.3×10^{-6} 1.1×10^{-6} 1.3×10^{-5} 4.2×10^{-5} 8.4×10^{-5}		Xu and Kropscott (2014) Xu and Kropscott (2012) Kochetkov et al. (2001) Kochetkov et al. (2001) Hamelink et al. (1996) Xu and Kropscott (2014) Kochetkov et al. (2001) Mazzoni et al. (1997) Hamelink et al. (1996) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022) Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	M M M M M V V V V Q Q Q Q Q Q ?	87 297, 330 297, 331 12 12 819 820 821 819 820 821 185, 21
decamethylcyclopentasiloxane $C_{10}H_{30}O_5Si_5$ (D5) [541-02-6] XMSXQFUHVRWGNA-UHFFFAOYSA-N	2.8×10^{-7} 3.0×10^{-7} 3.4×10^{-5} 3.1×10^{-5} 7.4×10^{-5} 2.3×10^{-6} 2.2×10^{-6} 1.5×10^{-6} 2.3×10^{-7} 1.2×10^{-6} 3.1×10^{-6}		Xu and Kropscott (2014) Xu and Kropscott (2012) Kochetkov et al. (2001) Kochetkov et al. (2001) David et al. (2000) Xu and Kropscott (2014) Kochetkov et al. (2001) Mazzoni et al. (1997) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	M M M M M V V V Q Q Q	372, 330 372, 331 72 819 820 821



Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dodecamethylcyclohexasiloxane $C_{12}H_{36}O_6Si_6$ (D6) [540-97-6] IUMSDRXLFWAGNT-UHFFFAOYSA-N	4.0×10^{-7} 6.8×10^{-5} 1.5×10^{-4} 3.9×10^{-6}		Xu and Kropscott (2012) Kochetkov et al. (2001) Kochetkov et al. (2001) Kochetkov et al. (2001)	M M M V	79 372, 330 372, 331
tetramethyldisiloxane-1,3-diol $C_4H_{14}O_3Si_2$ [1118-15-6] PFEAZKFNWPIFCV-UHFFFAOYSA-N	1.8×10^{-1}		Mazzoni et al. (1997)	V	
hexamethyltrisiloxane-1,5-diol $C_6H_{20}O_4Si_3$ [3663-50-1] XYBQTARozGWoz-UHFFFAOYSA-N	3.4×10^{-3}		Mazzoni et al. (1997)	V	
octamethyltetrasiloxane-1,7-diol $C_8H_{26}O_5Si_4$ [3081-07-0] VERNMKKMBJGSQB-UHFFFAOYSA-N	2.7×10^{-3}		Mazzoni et al. (1997)	V	
pentamethylcyclotrisiloxanol $C_5H_{16}O_4Si_3$ (D3OH) [106916-50-1] OGNYSZJXUXVWRE-UHFFFAOYSA-N	1.1×10^{-3} 1.2×10^{-1} 2.7×10^{-2} 1.5×10^{-3}		Mazzoni et al. (1997) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	V Q Q Q	819 820 821
heptamethylcyclotetrasiloxanol $C_7H_{22}O_5Si_4$ (D4OH) [5290-02-8] MLGUQSFCJNMKPT-UHFFFAOYSA-N	2.3×10^{-4} 1.1×10^{-2} 1.1×10^{-2} 1.3×10^{-5}		Mazzoni et al. (1997) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	V Q Q Q	819 820 821
nonamethylcyclopentasiloxanol $C_9H_{28}O_6Si_5$ (D5OH) [5290-04-0] DKTKKERLEMHMHS-UHFFFAOYSA-N	7.0×10^{-5} 4.6×10^{-3} 2.0×10^{-2} 4.4×10^{-5}		Mazzoni et al. (1997) Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	V Q Q Q	819 820 821
D3FormEst $C_6H_{16}O_5Si_3$ TZIXLALHTGGYNZ-UHFFFAOYSA-N	2.8×10^{-4} 3.2×10^{-4} 1.7×10^{-3}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D3OHFormEst $C_5H_{14}O_6Si_3$ RMJPGVNUQFKGPC-UHFFFAOYSA-N	5.4 9.9 1.2×10^{-2}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D3Hydroperoxide $C_6H_{18}O_5Si_3$ JKDUHABXPCJOJB-UHFFFAOYSA-N	6.9×10^{-2} 1.9×10^{-3} 8.9×10^{-6}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821



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Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
D3EtherHydroperoxide $C_6H_{18}O_6Si_3$ LHGAYMWHCKTFJV-UHFFFAOYSA-N	8.4×10^{-1} 1.9×10^{-2} 1.7×10^{-2}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D3FormEst2 $C_6H_{14}O_7Si_3$ WKTLUKWDJZJCN-UHFFFAOYSA-N	1.2×10^{-2} 9.2×10^{-3} 2.0×10^{-2}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D3OH2O1 $C_4H_{14}O_5Si_3$ UGEQNRIYBONGCP-UHFFFAOYSA-N	2.4×10^3 2.9 1.8×10^{-1}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D4FormEst $C_8H_{22}O_6Si_4$ PWVQOGDRWKITJQ-UHFFFAOYSA-N	2.4×10^{-5} 8.5×10^{-5} 8.8×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D4OHFormEst $C_7H_{20}O_7Si_4$ AXBVNNTZSENOJ-UHFFFAOYSA-N	4.6×10^{-1} 3.1 1.2×10^{-4}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
1,1,1,3,5,5,5- heptamethyltrisiloxane $C_7H_{22}O_2Si_3$ [1873-88-7] QNWOFLWXQGHSRH-UHFFFAOYSA-N	1.1×10^{-7}		Ebert et al. (2023)	?	318
D4Hydroperoxide $C_8H_{24}O_6Si_4$ IEOAKTNTPADFJB-UHFFFAOYSA-N	5.8×10^{-3} 4.4×10^{-4} 1.8×10^{-6}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D4EtherHydroperoxide $C_8H_{24}O_7Si_4$ BKBHFCQPJIYNBR-UHFFFAOYSA-N	7.1×10^{-2} 4.5×10^{-3} 1.5×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D4FormEst2 $C_8H_{20}O_8Si_4$ WJOJQLFAIHHNFX-UHFFFAOYSA-N	1.0×10^{-3} 1.8×10^{-3} 2.9×10^{-4}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D4OH2 $C_6H_{20}O_6Si_4$ ONAQLRRZBYFKLA-UHFFFAOYSA-N	2.1×10^2 1.0 8.3×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D5FormEst $C_{10}H_{28}O_7Si_5$ IGERVNZEGVJPED-UHFFFAOYSA-N	1.0×10^{-5} 1.2×10^{-4} 6.4×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
glycidoxypropyltrimethoxysilane $C_9H_{20}O_5Si$ [2530-83-8] BPSIOYPQMFLKFR-UHFFFAOYSA-N	1.4×10^2		Ebert et al. (2023)	?	318



Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
D5OHFormEst $C_9H_{26}O_8Si_5$ KNIXZSAQQHGMJX-UHFFFAOYSA-N	2.0×10^{-1} 5.6 4.7×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D5Hydroperoxide $C_{10}H_{30}O_7Si_5$ VGMLSGIAATVHVB-UHFFFAOYSA-N	2.5×10^{-3} 6.3×10^{-4} 1.1×10^{-6}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D5EtherHydroperoxide $C_{10}H_{30}O_8Si_5$ GSAPDUDDTPAQSH-UHFFFAOYSA-N	3.1×10^{-2} 6.8×10^{-3} 1.1×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D5FormEst2 $C_{10}H_{26}O_9Si_5$ QFORSIVEJZTNKQ-UHFFFAOYSA-N	4.5×10^{-4} 2.5×10^{-3} 2.0×10^{-4}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
isobutyltriethoxysilane $C_{10}H_{24}O_3Si$ [17980-47-1] ALVYUZIFSCKIFP-UHFFFAOYSA-N	5.5×10^{-3}		Ebert et al. (2023)	?	316
methyltris(trimethylsiloxy)silane $C_{10}H_{30}O_3Si_4$ [17928-28-8] RGMZLNZABJYWAEC-UHFFFAOYSA-N	2.9×10^{-8}		Ebert et al. (2023)	?	316
vinyltris(2-methoxyethoxy)silane $C_{11}H_{24}O_6Si$ [1067-53-4] WOXXJEVNDJOOVL-UHFFFAOYSA-N	5.9×10^2		Ebert et al. (2023)	?	318
tetrakis(trimethylsiloxy)silane $C_{12}H_{36}O_4Si_5$ [3555-47-3] VNRWTCZXQWOWIG-UHFFFAOYSA-N	2.6×10^{-8}		Ebert et al. (2023)	?	318
2-(3,4-epoxycyclohexyl) ethyltriethoxysilane $C_{14}H_{28}O_4Si$ [10217-34-2] UDUKMRHNZLJRB-UHFFFAOYSA-N	9.9		Ebert et al. (2023)	?	318
D5OH2 $C_8H_{26}O_7Si_5$ AGIASGIZCMBNMT-UHFFFAOYSA-N	8.9×10^1 2.5 1.3×10^{-4}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
hexamethyldisilazane $C_6H_{19}NSi_2$ [999-97-3] FFUAGWLWBFBQJT-UHFFFAOYSA-N	1.1×10^{-1}		HSDB (2015)	Q	99



Rolf Sander: Compilation of Henry's law constants

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Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
D3Organonitrate $C_6H_{17}NO_6Si_3$ WGZJMUDCTAXYSF-UHFFFAOYSA-N	2.4×10^{-3} 1.6×10^{-4} 1.0×10^{-4}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D3EtherOrganonitrate $C_6H_{17}NO_7Si_3$ CJWFNCZCCFYEKP-UHFFFAOYSA-N	2.9×10^{-2} 1.7×10^{-3} 1.4×10^{-3}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D4Organonitrate $C_8H_{23}NO_7Si_4$ CYMCLGYPZKOOI-UHFFFAOYSA-N	2.0×10^{-4} 4.1×10^{-5} 7.5×10^{-6}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D4EtherOrganonitrate $C_8H_{23}NO_8Si_4$ XHFUWVKWVPBCDO-UHFFFAOYSA-N	2.4×10^{-3} 3.8×10^{-4} 1.6×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
(3-aminopropyl)triethoxysilane $C_9H_{23}NO_3Si$ [919-30-2] WYTZZXDRDKSJID-UHFFFAOYSA-N	1.2×10^2		Ebert et al. (2023)	?	318
D5Organonitrate $C_{10}H_{29}NO_8Si_5$ KWHVDACCYNMOAR-UHFFFAOYSA-N	8.7×10^{-5} 4.9×10^{-5} 1.2×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
D5EtherOrganonitrate $C_{10}H_{29}NO_9Si_5$ BQINUVFPZWRBWB-UHFFFAOYSA-N	1.1×10^{-3} 5.7×10^{-4} 2.9×10^{-5}		Alton and Browne (2022) Alton and Browne (2022) Alton and Browne (2022)	Q Q Q	819 820 821
silafluofen $C_{25}H_{29}FO_2Si$ [105024-66-6] HPYNBECUCCGGPA-UHFFFAOYSA-N	4.0×10^{-1}		Ebert et al. (2023)	?	318
flusilazole $C_{16}H_{15}F_2N_3Si$ [85509-19-9] FQKUGOMFVDPBIZ-UHFFFAOYSA-N	2.7×10^1 4.4×10^2		Barcelo and Hennion (1997) Goodarzi et al. (2010)	X Q	567 568, 571
simeconazole $C_{14}H_{20}FN_3OSi$ [149508-90-7] YABFPHSQTSFWQB-UHFFFAOYSA-N	4.0×10^3		Ebert et al. (2023)	?	318
dichloromethylsilane CH_4Cl_2Si (methyl dichlorosilane) [75-54-7] NWKBSEBOBPHMKL-UHFFFAOYSA-N	7.6×10^{-4}		HSDB (2015)	Q	99



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Rolf Sander: Compilation of Henry's law constants

Table A11.3: Silicon (Si) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
etacelasil $\text{C}_{11}\text{H}_{25}\text{O}_6\text{ClSi}$ [37894-46-5] SLZWEMYSYKOWCG-UHFFFAOYSA-N	2.9×10^3		MacBean (2012a)	?	



Rolf Sander: Compilation of Henry's law constants

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A11.4 Calcium (Ca)

Table A11.4: Calcium (Ca)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
prohexadione-calcium $\text{C}_{20}\text{H}_{22}\text{O}_{10}\text{Ca}$ [127277-53-6] VQIYODJWCVPJRC-UHFFFAOYSA-N	5.2×10^4		Maniere et al. (2011)	?	241, 165



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Rolf Sander: Compilation of Henry's law constants

A11.5 Zinc (Zn)

Table A11.5: Zinc (Zn)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
zineb $\text{C}_4\text{H}_6\text{N}_2\text{S}_4\text{Zn}$ [12122-67-7] AMHNZOICSMBGDH-UHFFFAOYSA-L	2.7×10^3 $> 3.7 \times 10^3$ $> 1.9 \times 10^2$		Mackay et al. (2006d) MacBean (2012b) Maniere et al. (2011)	V X ?	 350 12, 165
ziram $\text{C}_6\text{H}_{12}\text{N}_2\text{S}_4\text{Zn}$ [137-30-4] DUBNHZYBDBBJHD-UHFFFAOYSA-L	1.6×10^4 2.1×10^5 1.8×10^2		HSDB (2015) Mackay et al. (2006d) Maniere et al. (2011)	V V ?	 165
mancozeb $\text{C}_8\text{H}_{12}\text{MnN}_4\text{S}_8\text{Zn}$ [8018-01-7] CHNQZRKUZNPOOH-UHFFFAOYSA-J	1.6×10^1		Maniere et al. (2011)	?	12, 165



A11.6 Arsenic (Sn)

Table A11.6: Arsenic (Sn)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
methylarsine CH_5As [593-52-2] IDDBICIFODFKQO-UHFFFAOYSA-N	9.0×10^{-6}		Ebert et al. (2023)	?	318
ethylarsine $\text{C}_2\text{H}_7\text{As}$ [593-59-9] OSAGMAAQMRQLLW-UHFFFAOYSA-N	1.5×10^{-5}		Ebert et al. (2023)	?	316
diethyl arsine $\text{C}_4\text{H}_{11}\text{As}$ [692-42-2] JZCIYTSNUPIOMK-UHFFFAOYSA-N	2.2×10^{-5}		HSDB (2015)	Q	99
phenylarsine oxide $\text{C}_6\text{H}_5\text{AsO}$ [637-03-6] BQVCCPGCDUSGOE-UHFFFAOYSA-N	9.0×10^{-1}		Bartelt-Hunt et al. (2008)	?	21
diphenylarsanylformonitrile $\text{C}_{13}\text{H}_{10}\text{AsN}$ [23525-22-6] BDHNJKLLVSRGDK-UHFFFAOYSA-N	1.1×10^3		Ebert et al. (2023)	?	318
dichloro(methyl)arsane CH_3AsCl_2 [593-89-5] VXRMBBLRHSRVDK-UHFFFAOYSA-N	5.1×10^{-3}		Ebert et al. (2023)	?	318
lewisite $\text{C}_2\text{H}_2\text{AsCl}_3$ [541-25-3] GIKLTQKNOXNBNY-OWOJBTEDSA-N	4.5×10^{-2} 3.1×10^{-2} 5.2×10^{-3} 3.7×10^{-2}		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020) Bartelt-Hunt et al. (2008)	V V Q ?	186 21
diphenylchloroarsine $\text{C}_{12}\text{H}_{10}\text{AsCl}$ [712-48-1] YHHKGGKCOLGRKKB-UHFFFAOYSA-N	6.1×10^1		Ebert et al. (2023)	?	318
lewisite oxide $\text{C}_2\text{H}_2\text{AsClO}$ [3088-37-7] MVCVAGFCWDFQX-OWOJBTEDSA-N	5.2×10^{-3}		Bartelt-Hunt et al. (2008)	?	21



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Rolf Sander: Compilation of Henry's law constants

Table A11.6: Arsenic (Sn) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
phenyldichloroarsine $\text{C}_6\text{H}_5\text{AsCl}_2$ [696-28-6] UDHDFEGCOJAVRE-UHFFFAOYSA-N	3.3×10^{-1}		HSDB (2015)	Q	99
adamsite $\text{C}_{12}\text{H}_9\text{AsClN}$ [578-94-9] PBNSPNYJYOYWTA-UHFFFAOYSA-N	3.0×10^2		HSDB (2015)	Q	99



Rolf Sander: Compilation of Henry's law constants

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A11.7 Selenium (Se)

Table A11.7: Selenium (Se)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethyl selenide $\text{C}_2\text{H}_6\text{Se}$ [593-79-3] RVIXKDRPFPUUOO-UHFFFAOYSA-N	1.2×10^{-2} 4.3×10^{-3} 5.7×10^{-3}		Keshavarz et al. (2022) Duchowicz et al. (2020) Duchowicz et al. (2020)	Q Q ?	 185, 21
dimethyl diselenide $\text{C}_2\text{H}_6\text{Se}_2$ [7101-31-7] VLXBWPOEOIIREY-UHFFFAOYSA-N	1.4×10^{-3}		Ebert et al. (2023)	?	318
2-amino-4-(methylselenyl)butyric acid $\text{C}_5\text{H}_{11}\text{NO}_2\text{Se}$ (selenium methionine) [1464-42-2] RJFAYQIBOAGBLC-UHFFFAOYSA-N	2.9×10^5		HSDB (2015)	Q	99



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Rolf Sander: Compilation of Henry's law constants

A11.8 Tin (Sn)

Table A11.8: Tin (Sn)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetramethylstannane $C_4H_{12}Sn$ (tetramethyltin) [594-27-4] VXKWYPOMXBVZSJ-UHFFFAOYSA-N	9.4×10^{-6} 9.7×10^{-6} 1.2×10^{-5}	3800	Abraham and Nasehzadeh (1981) Abraham et al. (1990) Abraham (1979)	M ? ?	
tetraethylstannane $C_8H_{20}Sn$ (tetraethyltin) [597-64-8] RWWNQEOPUOCKGR-UHFFFAOYSA-N	1.6×10^{-5} 6.1×10^{-6} 5.7×10^{-6} 1.1×10^{-5}	6100	HSDB (2015) Abraham et al. (1990) Abraham and Nasehzadeh (1981) Abraham (1979)	Q ? ? ?	99 822
tetrabutylstannane $C_{16}H_{36}Sn$ (tetra-butyl tin) [1461-25-2] AFCAKJKUYFLYFK-UHFFFAOYSA-N	1.6×10^{-6}		HSDB (2015)	Q	99
triphenyltin hydroxide $C_{18}H_{16}OSn$ [76-87-9] BFWMWXRWVJXSE-UHFFFAOYSA-M	2.3×10^1 3.8×10^{-1}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186
hexabutylstannoxane $C_{24}H_{54}OSn_2$ (bis(tributyltin)oxide) [56-35-9] APQHKWPGGHMYKJ-UHFFFAOYSA-N	7.6×10^1		HSDB (2015)	V	
hexakis(2-methyl-2-phenylpropyl)distannoxane $C_{60}H_{78}OSn_2$ (fenbutatin oxide) [13356-08-6] HOXINJBQVZWYGZ-UHFFFAOYSA-N	4.9×10^3		HSDB (2015)	V	
fentin acetate $C_{20}H_{18}O_2Sn$ [900-95-8] WDQNIWFZKXZFAY-UHFFFAOYSA-M	2.0×10^3		Ebert et al. (2023)	?	365
1-(tricyclohexylstannyl)1H-1,2,4-triazole $C_{20}H_{35}N_3Sn$ (azocyclotin) [41083-11-8] ONHBDDJTDLIR-UHFFFAOYSA-N	4.6×10^6 4.6×10^6 1.2		Duchowicz et al. (2020) HSDB (2015) Duchowicz et al. (2020)	V V Q	186



Rolf Sander: Compilation of Henry's law constants

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A11.9 Mercury (Hg)

Table A11.9: Mercury (Hg)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
dimethylmercury $\text{C}_2\text{H}_6\text{Hg}$ [593-74-8] ATZBPOVXVPIOMR-UHFFFAOYSA-N	1.3×10^{-3} 2.1×10^{-3} 1.3×10^{-3} 1.0×10^{-3}	2700 2700 2700 3000	Talmi and Mesmer (1975) Abraham et al. (2008) WHO (1990) Abraham et al. (2008)	M C C Q	 218
	1.5×10^{-3} 1.3×10^{-3} 3.1×10^{-3}	 2700 	Schroeder and Munthe (1998) Schroeder and Munthe (1998) Iverfeldt and Persson (1985)	? ? ?	21 21 219
diethylmercury $\text{C}_4\text{H}_{10}\text{Hg}$ [627-44-1] SPIUPAOJDZNUJH-UHFFFAOYSA-N	1.0×10^{-3}	3800	Abraham et al. (2008)	Q	218
dipropylmercury $\text{C}_6\text{H}_{14}\text{Hg}$ [628-85-3] UZTYYPBPVOXULF-UHFFFAOYSA-N	5.6×10^{-4}	4600	Abraham et al. (2008)	Q	218
diisopropylmercury $\text{C}_6\text{H}_{14}\text{Hg}$ [1071-39-2] UVUGOJQWNVFTRT-UHFFFAOYSA-N	3.9×10^{-4}	4600	Abraham et al. (2008)	Q	218
dibutylmercury $\text{C}_8\text{H}_{18}\text{Hg}$ [629-35-6] CCYKQVBIPYDCKS-UHFFFAOYSA-N	2.9×10^{-4}	5400	Abraham et al. (2008)	Q	218
diphenylmercury $\text{C}_{12}\text{H}_{10}\text{Hg}$ [587-85-9] HWMTUNCVVYPZH-Z-UHFFFAOYSA-N	2.8×10^2	8800	Abraham et al. (2008)	Q	218
hydroxymethylmercury CH_3HgOH [1184-57-2] KRZWEBVPFGCYMY-UHFFFAOYSA-M	9.8×10^2 1.5×10^3	7700	Iverfeldt and Persson (1985) Shon et al. (2005)	M ?	 823
phenyl mercuric ethanoate $\text{C}_8\text{H}_8\text{HgO}_2$ [62-38-4] XEBWQGVTUSTLN-UHFFFAOYSA-M	1.5×10^4		Suntio et al. (1988)	V	12
(3-cyanoguanidino)methylmercury $\text{C}_3\text{H}_6\text{N}_4\text{Hg}$ (methylmercuric dicyanamide) [502-39-6] JVJUWCMBRUMDDQ-UHFFFAOYSA-N	7.0×10^4		HSDB (2015)	Q	99



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Rolf Sander: Compilation of Henry's law constants

Table A11.9: Mercury (Hg) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{ Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
chloromethylmercury CH_3HgCl [115-09-3] BABMCXWQNSQAOC-UHFFFAOYSA-M	2.2×10^1 1.5×10^1 2.0×10^1	1800 4100 5300	Iverfeldt and Lindqvist (1982) Talmi and Mesmer (1975) WHO (1990) Abraham et al. (2008)	M M C Q	33, 824 87 33 214
chloroethylmercury $\text{C}_2\text{H}_5\text{HgCl}$ [107-27-7] QWUGXIXRFGEYBD-UHFFFAOYSA-M	2.6×10^1 1.5×10^1 1.5×10^1	5600	Schroeder and Munthe (1998) Iverfeldt and Persson (1985) Abraham et al. (2008)	? ? Q	80, 21 219 218
chloropropylmercury $\text{C}_3\text{H}_7\text{HgCl}$ [2440-40-6] ZLAYJSKLDWSALK-UHFFFAOYSA-M	1.2×10^1	5900	Abraham et al. (2008)	Q	218
chloroisopropylmercury $\text{C}_3\text{H}_7\text{HgCl}$ [30615-19-1] YOKZNIQWABELX-UHFFFAOYSA-M	9.9	6000	Abraham et al. (2008)	Q	218
chlorobutylmercury $\text{C}_4\text{H}_9\text{HgCl}$ [543-63-5] OKPMTXZRMGMMOO-UHFFFAOYSA-M	8.8	6300	Abraham et al. (2008)	Q	218
chloropentylmercury $\text{C}_5\text{H}_{11}\text{HgCl}$ [544-15-0] UHFZINPMKCNPQL-UHFFFAOYSA-M	7.0	6700	Abraham et al. (2008)	Q	218
chlorophenylmercury $\text{C}_6\text{H}_5\text{HgCl}$ [100-56-1] AWGTVRDHKJQFAX-UHFFFAOYSA-M	3.8×10^2 9.2×10^2	7400	Abraham et al. (2008) Abraham et al. (2008)	V Q	218
2-methoxyethylmercury chloride $\text{CH}_3\text{OC}_2\text{H}_4\text{HgCl}$ (aretan) [123-88-6] VJTAZCKMHINUKO-UHFFFAOYSA-M	3.9×10^3	8600	Abraham et al. (2008)	Q	218
bromomethylmercury CH_3HgBr [506-83-2] ZDHHIJSJLJCLMPX-UHFFFAOYSA-M	3.7	4800	Abraham et al. (2008) Iverfeldt and Persson (1985)	Q ?	214 219



Rolf Sander: Compilation of Henry's law constants

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Table A11.9: Mercury (Hg) (... continued)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}} \right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
bromoethylmercury $\text{C}_2\text{H}_5\text{HgBr}$ [107-26-6] UREACWLXSOUKQ-UHFFFAOYSA-M	3.0	5200	Abraham et al. (2008)	Q	218
bromophenylmercury $\text{C}_6\text{H}_5\text{HgBr}$ [1192-89-8] PUPHNPSAIQNEE-UHFFFAOYSA-M	1.8×10^2	6900	Abraham et al. (2008)	Q	218
iodomethylmercury CH_3HgI [143-36-2] JVDIOYBHEYUIBM-UHFFFAOYSA-M	2.0 5.8×10^{-1}	4800	Abraham et al. (2008) Iverfeldt and Persson (1985)	Q ?	218 219
iodoethylmercury $\text{C}_2\text{H}_5\text{HgI}$ [2440-42-8] BYIGJUQTUPMNMF-UHFFFAOYSA-M	2.5	5200	Abraham et al. (2008)	Q	218
iodophenylmercury $\text{C}_6\text{H}_5\text{HgI}$ [823-04-1] BISBXZWWFIOZSX-UHFFFAOYSA-M	9.0×10^1	6700	Abraham et al. (2008)	Q	218



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Rolf Sander: Compilation of Henry's law constants

A11.10 Lead (Pb)

Table A11.10: Lead (Pb)

Substance Formula (Trivial Name) [CAS Registry Number] InChIKey	H_s^{cp} (at T^\ominus) $\left[\frac{\text{mol}}{\text{m}^3 \text{Pa}}\right]$	$\frac{d \ln H_s^{cp}}{d(1/T)}$ [K]	Reference	Type	Note
tetramethyl lead $\text{C}_4\text{H}_{12}\text{Pb}$ [75-74-1] XOOGZRUBTYCLHG-UHFFFAOYSA-N	1.6×10^{-5}		HSDB (2015)	V	
ethyltrimethylplumbane $\text{C}_5\text{H}_{14}\text{Pb}$ [1762-26-1] KHQJREYATBQBHY-UHFFFAOYSA-N	2.8×10^{-5}		HSDB (2015)	Q	99
diethyldimethylplumbane $\text{C}_6\text{H}_{16}\text{Pb}$ (diethyldimethyl lead) [1762-27-2] OLOAJSHVLXNSQV-UHFFFAOYSA-N	2.1×10^{-5}		HSDB (2015)	Q	99
triethylmethylplumbane $\text{C}_7\text{H}_{18}\text{Pb}$ (methyltriethyl lead) [1762-28-3] KGFRUGHBHNUHOS-UHFFFAOYSA-N	1.6×10^{-5}		HSDB (2015)	Q	99
tetraethyl lead $\text{C}_8\text{H}_{20}\text{Pb}$ [78-00-2] MRMOZBOQVYRSEM-UHFFFAOYSA-N	1.3×10^{-5} 1.3×10^{-5}	6400	Feldhake and Stevens (1963) Abraham (1979)	M ?	
trimethyl lead chloride $\text{C}_3\text{H}_9\text{ClPb}$ [1520-78-1] HPQRSQFZILKRDH-UHFFFAOYSA-M	2.5		Ebert et al. (2023)	?	316
triethyl lead chloride $\text{C}_6\text{H}_{15}\text{ClPb}$ [1067-14-7] UQWYUMLFPULIRT-UHFFFAOYSA-M	2.1×10^5 1.1×10^{-3}		Duchowicz et al. (2020) Duchowicz et al. (2020)	V Q	186



Appendix: Notes

- 1) A detailed temperature dependence with more than one parameter is available in the original publication. Here, only the temperature dependence at 298.15 K according to the van 't Hoff equation is presented.
- 2) Clever et al. (2014) recommend the data from Rettich et al. (2000).
- 3) Vapor pressure data for water from Wagner and Pruss (1993) was needed to calculate H_s .
- 4) The data from Millero et al. (2002a) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-130.91491 + 6700.12242/T + 17.04684 \ln(T))$ mol/(m³ Pa) with T in K.
- 5) Almost the same data were also published in Millero et al. (2002b).
- 6) The data from Millero et al. (2002b) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-118.73105 + 6163.97787/T + 15.22401 \ln(T))$ mol/(m³ Pa) with T in K.
- 7) Almost the same data were also published in Millero et al. (2002a).
- 8) The data from Rettich et al. (2000) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-179.13831 + 8707.17767/T + 24.33473 \ln(T))$ mol/(m³ Pa) with T in K.
- 9) The data from Sherwood et al. (1991) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-197.67462 + 9515.09306/T + 27.11204 \ln(T))$ mol/(m³ Pa) with T in K.
- 10) The data from Rettich et al. (1981) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-178.21340 + 8672.23354/T + 24.19307 \ln(T))$ mol/(m³ Pa) with T in K.
- 11) Measured at high temperature and extrapolated to $T^\ominus = 298.15$ K.
- 12) Value at $T = 293$ K.
- 13) Value at $T = 273$ K.
- 14) Value at $T = 310$ K.
- 15) The data from Murray and Riley (1969) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-180.22078 + 8760.50130/T + 24.49289 \ln(T))$ mol/(m³ Pa) with T in K.
- 16) The data from Shoor et al. (1969) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-91.44799 + 4548.67245/T + 11.38821 \ln(T))$ mol/(m³ Pa) with T in K.
- 17) The data from Carpenter (1966) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-130.04464 + 6687.45227/T + 16.90114 \ln(T))$ mol/(m³ Pa) with T in K.
- 18) The data from Morrison and Billett (1952) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-167.89288 + 8254.02144/T + 22.62741 \ln(T))$ mol/(m³ Pa) with T in K.
- 19) The data from Winkler (1891b) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-155.30315 + 7638.78869/T + 20.77945 \ln(T))$ mol/(m³ Pa) with T in K.
- 20) Calculated using machine learning matrix completion methods (MCMs).
- 21) Several references are given in the list of Henry's law constants but not assigned to specific species.
- 22) The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-161.84252 + 7966.66767/T + 21.73409 \ln(T))$ mol/(m³ Pa) with T in K.
- 23) The partial pressure of water vapor (needed to convert some Henry's law constants) was calculated using the formula given by Buck (1981). The quantities A and α from Dean and Lange (1999) were assumed to be identical.
- 24) Value at "room temperature".
- 25) Clever et al. (2014) recommend the data from Battino (1981).
- 26) Battino (1981) concludes that ozone aqueous chemistry needs further clarification. Data from Roth and Sullivan (1981) are recommended, in spite of limitations and assumptions of the data.
- 27) Roth and Sullivan (1981) found that H_s depends on the concentration of OH⁻.
- 28) Value at $T = 291$ K.
- 29) Value given here as quoted by Durham et al. (1981).
- 30) Lide and Frederikse (1995) present an unusually low value for the Henry solubility of ozone. They refer to Battino (1981) as the source but the quoted value cannot be found there.
- 31) Parker (1992) assume that the free energy of solvation of atomic hydrogen is equal to that of He because of a similar van der Waals radius.
- 32) Roduner and Bartels (1992) say that the free energy of solvation $\Delta G_{\text{solv}}^{\text{H}}$ (and therefore Henry's law constant) of atomic hydrogen is approximated well by that of molecular hydrogen. However, they apparently do not give a value for $\Delta G_{\text{solv}}^{\text{H}}$.
- 33) Fitting the temperature dependence $d \ln H/d(1/T)$ produced a low correlation coefficient ($r^2 < 0.9$). The data should be treated with caution.
- 34) Data digitized from Figs. 2 and 3. in Schmidt (1979).



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- 35) The data from Gordon et al. (1977) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-158.95051 + 6959.76267/T + 21.73478 \ln(T))$ mol/(m³ Pa) with T in K.
- 5 36) The data from Crozier and Yamamoto (1974) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-129.44163 + 5676.58091/T + 17.31002 \ln(T))$ mol/(m³ Pa) with T in K.
- 10 37) The data presented for hydrogen in Tab. II of Shoor et al. (1969) appear to be incorrect and are not reproduced here.
- 38) Value at $T = 303$ K.
- 39) The data from Morrison and Billett (1952) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-94.36490 + 4110.23880/T + 12.07743 \ln(T))$ mol/(m³ Pa) with T in K.
- 15 40) The data from Braun (1900) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(171.59451 - 6856.02728/T - 28.14739 \ln(T))$ mol/(m³ Pa) with T in K.
- 20 41) The data from Winkler (1891a) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-103.47250 + 4506.63123/T + 13.44160 \ln(T))$ mol/(m³ Pa) with T in K.
- 25 42) Fitting the temperature dependence $d \ln H/d(1/T)$ produced a very low correlation coefficient ($r^2 < 0.5$). The data should be treated with caution.
- 43) The paper by Bunsen (1855a) was written in German. English versions with the same data were published by Bunsen (1855b) and Bunsen (1855c).
- 30 44) The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-98.78036 + 4298.15060/T + 12.74131 \ln(T))$ mol/(m³ Pa) with T in K.
- 35 45) Young (1981a) recommend the data from Muccitelli and Wen (1978).
- 46) The data from Muccitelli and Wen (1978) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-103.11330 + 4676.56978/T + 13.28348 \ln(T))$ mol/(m³ Pa) with T in K.
- 40 47) Calculated from correlation between the polarizabilities and solubilities of stable gases. The temperature dependence is an estimate of the upper limit.
- 45 48) Jacob (1986) assumed the temperature dependence to be the same as for water.
- 49) In the abstract, Schwartz (1984) gives a range of $9.9 \text{ mol}/(\text{m}^3 \text{ Pa}) < H_s^{cp} < 3.0 \times 10^1 \text{ mol}/(\text{m}^3 \text{ Pa})$. The mean value of this range ($2.0 \times 10^1 \text{ mol}/(\text{m}^3 \text{ Pa})$) has been used by Lelieveld and Crutzen (1991), Pandis and Seinfeld (1989), and Jacob (1986).
- 50 50) The value of H_s^\ominus was taken from Schwartz (1984).
- 51) Erratum for page 264 of Fogg and Sangster (2003): The second value from their Ref. [10] refers to 291.15 K, not 281.15 K. 55
- 52) This value is a correction of the solubility published by Lind and Kok (1986).
- 53) This value was measured at low pH. It is superseded by a later publication of the same group (Lind and Kok, 1994). 60
- 54) Pandis and Seinfeld (1989) cite an incorrect value from Lind and Kok (1986), see erratum by Lind and Kok (1994).
- 55) The data from Rettich et al. (1984) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-187.67954 + 8903.42524/T + 25.60079 \ln(T))$ mol/(m³ Pa) with T in K. 65
- 56) The data from Murray et al. (1969) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-174.95275 + 8370.22025/T + 23.67878 \ln(T))$ mol/(m³ Pa) with T in K. 70
- 57) The data from Morrison and Billett (1952) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-193.68175 + 9249.63150/T + 26.45117 \ln(T))$ mol/(m³ Pa) with T in K. 75
- 58) Value at $T = 311$ K.
- 59) The data from Braun (1900) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(291.66324 - 11637.66767/T - 46.44134 \ln(T))$ mol/(m³ Pa) with T in K. 80
- 60) The data from Winkler (1891b) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-164.15156 + 7906.86704/T + 22.05399 \ln(T))$ mol/(m³ Pa) with T in K.
- 61) The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-163.64571 + 7887.30480/T + 21.97696 \ln(T))$ mol/(m³ Pa) with T in K. 85
- 62) Tsuji et al. (1990) provide effective Henry's law constants at several pH values. Here, only the value at pH 5.8 is shown for the (acidic) S-compounds, and the value at pH 8.6 for the alkaline N-compounds. 90
- 63) Value given here as quoted by Betterton (1992).
- 64) The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(206.08500 - 7165.18642/T - 32.18383 \ln(T))$ mol/(m³ Pa) with T in K. 95
- 65) Bone et al. (1983) gives Carter et al. (1968) as the source. However, no data were found in that reference.
- 66) There is a typo in Sander et al. (2011): The value for A should be -10.19 , not 10.19 . 100



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- 67) Modarresi et al. (2007) use different descriptors for their calculations. They conclude that GA/RBFN is the best QSPR model. Only these results are shown here.
- 68) Incorrect data are given by Burkholder et al. (2019) for HN_3 . The correct parameter for the temperature dependence is: $A = -10.19$ (R. E. Huie, pers. comm. 2021).
- 69) Incorrect data are given by Burkholder et al. (2015) for HN_3 . The correct parameter for the temperature dependence is: $A = -10.19$ (R. E. Huie, pers. comm. 2021).
- 70) Solubility in sea water.
- 71) The data from Weiss and Price (1980) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-180.63611 + 9824.20147/T + 24.46112 \ln(T))$ mol/(m³ Pa) with T in K.
- 72) Value at $T = 296$ K.
- 73) The data from Roth (1897) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-125.17909 + 7706.80638/T + 15.96486 \ln(T))$ mol/(m³ Pa) with T in K.
- 74) Value given here as quoted by Gabel and Schultz (1973).
- 75) Value given here as quoted by Sy and Hasbrouck (1964).
- 76) The H298 and A,B,C data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 94 % difference.
- 77) The H298 and A,B,C data listed in Table 5.4 of Sander et al. (2006) are inconsistent, with 94 % difference.
- 78) A minus sign is missing in the fitting parameter presented by Young (1981b). It should be -62.8086, not 62.8086.
- 79) Value at $T = 297$ K.
- 80) Value at $T = 288$ K.
- 81) The data from Winkler (1901) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-184.00012 + 8924.34832/T + 25.13228 \ln(T))$ mol/(m³ Pa) with T in K.
- 82) The data from Loomis (1928) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-223.88313 + 10620.37030/T + 31.13453 \ln(T))$ mol/(m³ Pa) with T in K.
- 83) The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-160.19223 + 7888.02642/T + 21.56401 \ln(T))$ mol/(m³ Pa) with T in K.
- 84) Incorrect data are given by Burkholder et al. (2019) for NO. The correct parameters for the temperature dependence are: $A = -163.86$, $B = 8234$, $C = 22.816$ (R. E. Huie, pers. comm. 2021).
- 85) Incorrect data are given by Burkholder et al. (2015) for NO. The correct parameters for the temperature dependence are: $A = -163.86$, $B = 8234$, $C = 22.816$ (R. E. Huie, pers. comm. 2021).
- 86) The fitting parameters A , B , C , and D in Table I of Wilhelm et al. (1977) do not reproduce the data in their Table III.
- 87) Value at $T = 295$ K.
- 88) Pandis and Seinfeld (1989) refer to Schwartz (1984) as the source but the quoted value cannot be found there.
- 89) Value obtained by estimating the diffusion coefficient for NO_3 to be $D = 1.0 \times 10^{-5}$ cm²/s.
- 90) Jacob (1986) assume that NO_3 has the same Henry's law constant as HNO_3 .
- 91) Seinfeld and Pandis (1998) probably refer to the incorrect value given by Pandis and Seinfeld (1989).
- 92) Calculated from the solvation free energy.
- 93) Calculated from the solvation free energy.
- 94) Calculated from the solvation free energy.
- 95) This value was extrapolated from data at $T = 230$ K and $T = 273$ K.
- 96) Robinson et al. (1997) applied an empirical correlation between Henry's law solubilities and boiling points from Schwartz and White (1981).
- 97) Estimate based on the relation between boiling points and Henry's law constants for other nitrogen oxides from Schwartz and White (1981).
- 98) Fast, irreversible hydrolysis is assumed, which is equivalent to an infinite effective Henry's law constant.
- 99) Calculated based on the method by Meylan and Howard (1991).
- 100) Lelieveld and Crutzen (1991) assume the temperature dependence to be the same as for $a(\text{H}^+)a(\text{NO}_3^-)/p(\text{HNO}_3)$ in Schwartz and White (1981).
- 101) $H'_s = 2.6 \times 10^7 \times \exp\left(8700 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 102) $H'_s = 2.4 \times 10^7 \times \exp\left(8700 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 103) Pandis and Seinfeld (1989) refer to Schwartz (1984) as the source but it is probably from Schwartz and White (1981).
- 104) The value is incorrect. See erratum by Brimblecombe and Clegg (1989).
- 105) Möller and Mauersberger (1992) assumed the solubility of HNO_4 to be comparable to that of HNO_3 .
- 106) $H'_s = 9.4 \times 10^1 \times \exp\left(7400 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$



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107) The data from Dean et al. (1973) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-164.52717 + 8214.77776/T + 21.97482 \ln(T))$ mol/(m³ Pa) with T in K.

108) The data from Ashton et al. (1968) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-279.21972 + 13536.60588/T + 38.97386 \ln(T))$ mol/(m³ Pa) with T in K.

109) The data from Dean et al. (1973) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-318.29953 + 15733.17858/T + 44.55320 \ln(T))$ mol/(m³ Pa) with T in K.

110) The value presented here appears to be the total solubility of chlorine (i.e., the sum of Cl₂ and HOCl) at a partial pressure of $p(\text{Cl}_2) = 101325$ Pa. This is different from Henry's law constant, which is defined at extrapolation to infinite dilution.

111) Young (1983) recommends values calculated from Table 1 of Adams and Edmonds (1937). Thus, the data refer to effective values that take into account the hydrolysis in the aqueous-phase:

$$H_{s,\text{eff}} = ([\text{Cl}_2] + [\text{HOCl}])/p(\text{Cl}_2)$$

In addition, the values apply to a partial pressure of $p(\text{Cl}_2) = 101325$ Pa, and not to infinite dilution.

112) The same experimental data were also published by Whitney and Vivian (1941b).

113) The data from Yakovkin (1900) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-122.31264 + 7690.40834/T + 15.63947 \ln(T))$ mol/(m³ Pa) with T in K.

114) Leaist (1986) converted the total solubility of chlorine in pure water from Adams and Edmonds (1937) to an intrinsic Henry's law constant.

115) Adams and Edmonds (1937) re-analyzed the data from Yakovkin (1900) and Arkadiev (1918), considering deviations from the perfect gas law. They calculated the total solubility of chlorine (i.e., the sum of Cl₂ and HOCl) at several partial pressures of Cl₂. This is different from Henry's law constant, which is defined at extrapolation to infinite dilution.

116) Arkadiev (1918) re-analyzed the measurements of Yakovkin (1900). In addition to the data between 15 °C and 83.4 °C, he also analyzed the experimental results at 0 °C and obtained a dimensionless Henry solubility of $H_s^{cc} = 4.115$ at that temperature.

117) The value of ΔH° listed in Table 2 of Bartlett and Margerum (1999) is incorrect. The correct value can be found in the text on page 3411.

118) Wilhelm et al. (1977) present a fitting function for Cl₂ based on four papers which are cited in the footnotes of

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Table I. However, Bunsen (1855b) and Bunsen (1855c) don't contain any data for Cl₂, and the data from Whitney and Vivian (1941a) and Whitney and Vivian (1941b) are inconsistent with the fitting function.

119) Calculated from the free energy of solution by Schwarz and Dodson (1984). 50

120) $H_s' = 2.0 \times 10^7 \frac{\text{mol}^2}{\text{m}^6 \text{Pa}}$

121) $H_s' = 2.0 \times 10^7 \times \exp\left(9000 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{Pa}}$

122) $H_s' = 2.0 \times 10^7 \times \exp\left(9000 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{Pa}}$

123) $H_s' = 2.0 \times 10^7 \times \exp\left(9000 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{Pa}}$ 55

124) The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(9.16427 + 45.13997/T - 1.92853 \ln(T))$ mol/(m³ Pa) with T in K.

125) Pandis and Seinfeld (1989) refer to Marsh and McElroy (1985) as the source but the quoted value cannot be found there. 60

126) This value was extrapolated from data at $T = 215$ K and $T = 263$ K.

127) Value at pH = 6.5. 65

128) Value at $T = 200$ K.

129) Secoy and Cady (1941) measured the gas/aqueous equilibrium constant $p(\text{Cl}_2\text{O})/c(\text{HOCl})^2$ but not the intrinsic Henry's law constant of Cl₂O.

130) Ourisson and Kastner (1939) measured the gas/aqueous equilibrium constant $p(\text{Cl}_2\text{O})/c(\text{HOCl})^2$ but not the intrinsic Henry's law constant of Cl₂O. 70

131) The data from this work were fitted to the 3-parameter equation: $H_s^{cp} = \exp(1680.49677 - 69933.08019/T - 254.37188 \ln(T))$ mol/(m³ Pa) with T in K. 75

132) The gas/aqueous equilibrium constant $p(\text{Cl}_2\text{O})/c(\text{HOCl})^2$ was combined with the temperature-dependent aqueous-phase hydration constant $c(\text{HOCl})^2/c(\text{Cl}_2\text{O})$ from Roth (1929) in order to calculate the intrinsic Henry's law constant of Cl₂O. 80

133) Data for the equilibrium between gaseous Cl₂O and aqueous HOCl were taken from Secoy and Cady (1941). 85

134) Data for the equilibrium between gaseous Cl₂O and aqueous HOCl were taken from Ourisson and Kastner (1939).

135) Value at $T = 277$ K.



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- 136)** The recommended value from Wilhelm et al. (1977) appears to be dubious as it refers to Secoy and Cady (1941) who do not provide a value for the intrinsic Henry's law constant of Cl₂O.
- 137)** Young (1983) cites data from Secoy and Cady (1941). However, that paper only describes the equilibrium between gas-phase Cl₂O and aqueous-phase HOCl. A Henry's law constant of Cl₂O is not provided. In addition, the values given by Young (1983) are not extrapolated to infinite dilution but to 1 atm partial pressure of Cl₂O. It is not explained how the nonlinear pressure dependence was extrapolated to 1 atm.
- 138)** Wilhelm et al. (1977) cite Secoy and Cady (1941) as the source for their value. However, that paper only describes the equilibrium between gas-phase Cl₂O and aqueous-phase HOCl. A Henry's law constant of Cl₂O is not provided.
- 139)** Even though Haller and Northgraves (1955) have been cited several times as the source of the ClO₂ solubility data, they did not perform any measurements. They took the data from the 1952 edition of the Kirk-Othmer Encyclopedia of Chemical Technology which apparently reproduced data from Holst (1944).
- 140)** Derived as a fitting parameter used in numerical modeling.
- 141)** Robinson et al. (1997) assumed that the entropy of vaporization is the same for HOCl and ClNO₃ according to Trouton's rule. On their page 3592, they mention a value of 7 M/atm at 250 K. However, checking their Fig. 9 and applying the temperature-dependence equation from their Tab. 3, it seems that the value of 7 M/atm refers to 298 K, not 250 K.
- 142)** Dubik et al. (1987) measured the solubility in concentrated salt solutions (natural brines).
- 143)** Value given here as quoted by McCoy et al. (1990).
- 144)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-148.75612 + 9709.79389/T + 19.53402 \ln(T))$ mol/(m³ Pa) with T in K.
- 145)** $H'_s = 8.2 \times 10^9 \times \exp\left(10000 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 146)** $H'_s = 1.3 \times 10^{10} \times \exp\left(10000 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 147)** $H'_s = 7.0 \times 10^9 \times \exp\left(10000 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 148)** Chameides and Stelson (1992) give a value of $H'_s = 7.1 \times 10^9 \times \exp\left(6100 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$. They refer to Jacob (1986) and Chameides (1984) as the source but this value cannot be found there.
- 149)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-60.28318 + 2830.41867/T + 8.66642 \ln(T))$ mol/(m³ Pa) with T in K.
- 150)** The value is from Table 1 of the paper. However, *J. Geophys. Res.* forgot to print the tables and I received them directly from the author.
- 151)** The value presented for HOBr is incorrect. A corrected version was later published by Burkholder et al. (2019).
- 152)** Fickert (1998) extracted a value from wetted-wall flow tube experiments. However, it was later discovered that under the experimental conditions no evaluation of H_s is possible (J. Crowley, pers. comm., 1999).
- 153)** Value at $T = 275 \text{ K}$.
- 154)** Value at $T = 290 \text{ K}$.
- 155)** Calculated using data from Wagman et al. (1982) and the aqueous-phase equilibrium $\text{Cl}_2 + \text{Br}_2 \rightleftharpoons 2 \text{BrCl}$ from Wang et al. (1994).
- 156)** Thompson and Zafiriou (1983) quote a paper as the source that gives only the solubility but not the Henry's law constant.
- 157)** Calculated from the free energy of solution by Schwarz and Bielski (1986).
- 158)** $H'_s = 2.5 \times 10^{10} \times \exp\left(9800 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 159)** $H'_s = 2.1 \times 10^{10} \times \exp\left(9800 \text{ K} \left(\frac{1}{T} - \frac{1}{T^\ominus}\right)\right) \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 160)** Saiz-Lopez et al. (2014) refer to Saiz-Lopez et al. (2008) as the source but the quoted value cannot be found there.
- 161)** It is unclear to which isomer the value of the Henry's law constant refers to.
- 162)** Assumed to be infinity by analogy with INO₃.
- 163)** Thompson and Zafiriou (1983) assume that $H_s^{cp}(\text{HOI})$ is between $4.4 \times 10^{-1} \text{ mol}/(\text{m}^3 \text{ Pa})$ and $4.4 \times 10^2 \text{ mol}/(\text{m}^3 \text{ Pa})$.
- 164)** Badia et al. (2019) assume that INO₂ has the same Henry's law constant as BrNO₂.
- 165)** Data taken from the AGRITOX database file agritox-20210608.zip.



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- 166) Fogg and Young (1988) provide two different fitting functions: One for $T < 283.2$ K and one for $T > 283.2$ K. At $T = 283.2$ K, the functions have different values and different slopes. Here, only the function that is valid at T^\ominus is used.
- 167) The data from Clarke and Glew (1971) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-133.37135 + 7422.07576/T + 17.82903 \ln(T))$ mol/(m³ Pa) with T in K.
- 168) The data from Schoenfeld (1855) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(98.96644 - 3021.28876/T - 16.78233 \ln(T))$ mol/(m³ Pa) with T in K.
- 169) The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-122.57010 + 6962.28299/T + 16.20245 \ln(T))$ mol/(m³ Pa) with T in K.
- 170) The parameter fit for the temperature dependence is incorrect. A corrected version was later presented by Iliuta and Larachi (2007).
- 171) The data from Clarke and Glew (1971) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-152.96053 + 8324.82999/T + 20.73129 \ln(T))$ mol/(m³ Pa) with T in K.
- 172) Obtained with D₂O as solvent.
- 173) Value at $T = 353$ K.
- 174) The data from Schoenfeld (1855) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(265.79241 - 9131.99684/T - 42.01987 \ln(T))$ mol/(m³ Pa) with T in K.
- 175) Value given here as quoted by Rodríguez-Sevilla et al. (2002).
- 176) The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(153.05871 - 4328.05304/T - 25.05397 \ln(T))$ mol/(m³ Pa) with T in K.
- 177) Marti et al. (1997) give partial pressures of H₂SO₄ over a concentrated solution (e.g., 2.6×10^{-9} Pa for 54.1 weight-percent at 298 K). Extrapolating this to dilute solutions can only be considered an order-of-magnitude approximation for H_s .
- 178) Ayers et al. (1980) give partial pressures of H₂SO₄ over concentrated solutions at high temperatures. Extrapolating this to dilute solutions can only be considered an order-of-magnitude approximation for H_s .
- 179) Gmitro and Vermeulen (1964) give partial pressures of H₂SO₄ over a concentrated solution (e.g., 10^{-7} mmHg for 70 weight-percent at 298 K). Extrapolating this to dilute solutions can only be

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- considered an order-of-magnitude approximation for H_s .
- 180) Clegg et al. (1998) estimate a Henry's law constant of 5×10^{11} atm⁻¹ at 303.15 K for the reaction $H_2SO_4(g) \rightleftharpoons 2 H^+(aq) + SO_4^{2-}(aq)$ but don't give a definition for it. Probably it is defined as $x^2(H^+) \times x(SO_4^{2-})/p(H_2SO_4)$, where x is the aqueous-phase mixing ratio.
- 181) The data from Bullister et al. (2002) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-281.50843 + 14256.43847/T + 38.73689 \ln(T))$ mol/(m³ Pa) with T in K.
- 182) The data presented for SF₆ in Tab. II of Shoor et al. (1969) appear to be incorrect and are not reproduced here.
- 183) The data from Ashton et al. (1968) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-431.90650 + 20715.81650/T + 61.33841 \ln(T))$ mol/(m³ Pa) with T in K.
- 184) Value from the validation set for checking whether the model is satisfactory for compounds that are absent from the training set.
- 185) Experimental value, extracted from HENRYWIN.
- 186) Estimation based on the quotient between vapor pressure and water solubility, extracted from HENRYWIN.
- 187) The data presented for helium in Tab. II of Shoor et al. (1969) appear to be incorrect and are not reproduced here.
- 188) The data from Morrison and Johnstone (1954) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-267.15298 + 11440.04263/T + 37.95994 \ln(T))$ mol/(m³ Pa) with T in K.
- 189) The data from Lannung (1930) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(84.35043 - 4135.59197/T - 14.55881 \ln(T))$ mol/(m³ Pa) with T in K.
- 190) Calculated employing molecular force field models for the solutes from Warr et al. (2015).
- 191) The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-153.15219 + 6434.36008/T + 20.89911 \ln(T))$ mol/(m³ Pa) with T in K.
- 192) The data from Morrison and Johnstone (1954) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-171.84866 + 7492.61303/T + 23.58966 \ln(T))$ mol/(m³ Pa) with T in K.
- 193) The data from Lannung (1930) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-40.04033 + 1266.80589/T + 4.12574 \ln(T))$ mol/(m³ Pa) with T in K.



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- 194)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-150.94728 + 6639.96438/T + 20.42365 \ln(T))$ mol/(m³ Pa) with T in K.
- 195)** The data from Rettich et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-178.55165 + 8674.63293/T + 24.26764 \ln(T))$ mol/(m³ Pa) with T in K.
- 196)** The data from Murray and Riley (1970) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-151.84230 + 7548.13106/T + 20.24085 \ln(T))$ mol/(m³ Pa) with T in K.
- 197)** The data from Shoor et al. (1969) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-177.19900 + 8740.49327/T + 23.99118 \ln(T))$ mol/(m³ Pa) with T in K.
- 198)** The data from Ashton et al. (1968) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-160.52023 + 7898.05096/T + 21.56102 \ln(T))$ mol/(m³ Pa) with T in K.
- 199)** The data from Morrison and Johnstone (1954) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-159.49603 + 7859.86242/T + 21.39868 \ln(T))$ mol/(m³ Pa) with T in K.
- 200)** The data from Lannung (1930) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-183.19260 + 8856.79081/T + 24.97248 \ln(T))$ mol/(m³ Pa) with T in K.
- 201)** Calculated employing molecular force field models for the solutes from Vrabec et al. (2001).
- 202)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-143.77232 + 7158.59719/T + 19.05403 \ln(T))$ mol/(m³ Pa) with T in K.
- 203)** The data from Morrison and Johnstone (1954) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-153.87925 + 7855.39037/T + 20.51280 \ln(T))$ mol/(m³ Pa) with T in K.
- 204)** Two series of measurements with considerably different results are presented by von Antropoff (1910) for krypton.
- 205)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-220.92114 + 10903.79433/T + 30.49407 \ln(T))$ mol/(m³ Pa) with T in K.
- 206)** The value b for Xe given by Himmelblau (1960) in their Table III is incorrect. Most likely, only a minus sign is missing.
- 207)** The data from Morrison and Johnstone (1954) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-165.83721 + 8808.62019/T + 22.15186 \ln(T))$ mol/(m³ Pa) with T in K.
- 208)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-199.40126 + 10306.10786/T + 27.18844 \ln(T))$ mol/(m³ Pa) with T in K.
- 209)** The data from Lewis et al. (1987) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(5.03587 + 1555.37916/T - 3.42648 \ln(T))$ mol/(m³ Pa) with T in K.
- 210)** Calculated employing molecular force field models for the solutes from Mick et al. (2016).
- 211)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-240.66156 + 12686.97685/T + 33.12171 \ln(T))$ mol/(m³ Pa) with T in K.
- 212)** The data from Sisi et al. (1971) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-81.82525 + 4954.57763/T + 10.19950 \ln(T))$ mol/(m³ Pa) with T in K.
- 213)** Solubility in natural sea water. Measurements at different salinities were also performed, but only at a fixed temperature of 296.15 K.
- 214)** Temperature dependence calculated using linear free energy relationships (LFER).
- 215)** Petersen et al. (1998) give the invalid unit “mol L⁻¹ ppm⁻¹”. Here, it is assumed that “ppm” is used as a synonym for “10⁻⁶ atm”.
- 216)** Shon et al. (2005) refer to Petersen et al. (1998) as the source but a different value is listed there.
- 217)** Value at $T = 333$ K.
- 218)** Calculated using linear free energy relationships (LFER).
- 219)** More than one reference is given as the source of this value.
- 220)** Hedgecock et al. (2005) refer to Hedgecock and Pirrone (2004) as the source but this value cannot be found there.
- 221)** Clever and Young (1987) recommend the data from Rettich et al. (1981).
- 222)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-133.87728 + 6629.97157/T + 17.62624 \ln(T))$ mol/(m³ Pa) with T in K.
- 223)** The data from Scharlin and Battino (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-206.41168 + 10058.77208/T + 28.34417 \ln(T))$ mol/(m³ Pa) with T in K.



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- 224)** The data from Shoor et al. (1969) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-201.05778 + 9920.37989/T + 27.48020 \ln(T))$ mol/(m³ Pa) with T in K.
- 225)** The same value was also published in McAuliffe (1963).
- 226)** The same value was also published in McAuliffe (1966).
- 227)** The data from Morrison and Billett (1952) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-195.92072 + 9624.37184/T + 26.74976 \ln(T))$ mol/(m³ Pa) with T in K.
- 228)** The data from Winkler (1901) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-203.15902 + 9951.75251/T + 27.82679 \ln(T))$ mol/(m³ Pa) with T in K.
- 229)** Yao et al. (2002) compared two QSPR methods and found that radial basis function networks (RBFNs) are better than multiple linear regression. In their paper, they provide neither a definition nor the unit of their Henry's law constants. Comparing the values with those that they cite from Yaws (1999), it is assumed that they use the variant H_v^{px} and the unit atm.
- 230)** English and Carroll (2001) provide several calculations. Here, the preferred value with explicit inclusion of hydrogen bonding parameters from a neural network is shown.
- 231)** Value from the training dataset.
- 232)** Calculated with a principal component analysis (PCA), see Suzuki et al. (1992) for details.
- 233)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-185.72813 + 9197.97387/T + 25.21142 \ln(T))$ mol/(m³ Pa) with T in K.
- 234)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-109.51433 + 6313.03876/T + 13.60483 \ln(T))$ mol/(m³ Pa) with T in K.
- 235)** The data from Morrison and Billett (1952) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-215.51394 + 10861.98666/T + 29.50128 \ln(T))$ mol/(m³ Pa) with T in K.
- 236)** The data from Winkler (1901) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-277.60377 + 13887.90452/T + 38.63046 \ln(T))$ mol/(m³ Pa) with T in K.
- 237)** Value given here as quoted by Gharagheizi et al. (2010).
- 238)** Calculated using linear free energy relationships (LFER).
- 239)** Calculated using SPARC Performs Automated Reasoning in Chemistry (SPARC).
- 240)** Calculated using COSMOtherm.
- 241)** Temperature is not specified.
- 242)** Value from the training dataset.
- 243)** Calculated using the GROMHE model.
- 244)** Calculated using the SPARC approach.
- 245)** Calculated using the HENRYWIN method.
- 246)** Calculated using a combination of a group contribution method and neural networks.
- 247)** Modarresi et al. (2005) use different descriptors for their calculations. They conclude that COSA and ANN are the best QSPR models, but COSA is not ideal for hydrocarbons with low solubility. Only results obtained with ANN are shown here.
- 248)** Yaffe et al. (2003) present QSPR results calculated with the fuzzy ARTMAP (FAM) and with the back-propagation (BK-Pr) method. They conclude that FAM is better. Only the FAM results are shown here.
- 249)** Value from the training set.
- 250)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-249.13770 + 12672.58357/T + 34.34947 \ln(T))$ mol/(m³ Pa) with T in K.
- 251)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-275.67877 + 14048.75446/T + 38.16041 \ln(T))$ mol/(m³ Pa) with T in K.
- 252)** The data from Morrison and Billett (1952) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-257.69118 + 13189.22089/T + 35.51019 \ln(T))$ mol/(m³ Pa) with T in K.
- 253)** The H298 and A,B,C data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 14 % difference.
- 254)** The H298 and A,B,C data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 14 % difference.
- 255)** The H298 and A,B,C data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 14 % difference.
- 256)** The H298 and A,B,C data listed in Table 5.4 of Sander et al. (2006) are inconsistent, with 14 % difference.
- 257)** The data from Morrison and Billett (1952) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-257.40529 + 13425.82235/T + 35.27658 \ln(T))$ mol/(m³ Pa) with T in K.
- 258)** Value given here as quoted by Dupeux et al. (2022).



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- 259)** Calculated using the COSMO-RS method.
- 260)** Value from the validation dataset.
- 261)** The H298 and A,B,C data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 6 % difference.
- 262)** The H298 and A,B,C data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 6 % difference.
- 263)** The H298 and A,B,C data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 6 % difference.
- 264)** The H298 and A,B,C data listed in Table 5.4 of Sander et al. (2006) are inconsistent, with 6 % difference.
- 265)** Fogg and Sangster (2003) cite an incorrect fitting function from Hayduk (1986).
- 266)** The fitting function and the data in the table on page 34 of Hayduk (1986) are inconsistent by a factor of about three. A comparison with the original measurements by Wetlaufer et al. (1964) shows that the data in the table are correct. Refitting the data suggests that the third fitting parameter should be 52.4651, not 53.4651.
- 267)** Value from the test set.
- 268)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 15 % difference.
- 269)** The data from Jou and Mather (2000) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-400.38105 + 20169.61328/T + 56.35286 \ln(T))$ mol/(m³ Pa) with T in K.
- 270)** Jou and Mather (2000) also contains high-temperature data. However, only data up to 373.2 K were used here to calculate the temperature dependence.
- 271)** Value from the validation dataset.
- 272)** Value from the test set.
- 273)** The data from Shoor et al. (1969) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-311.59148 + 15699.27148/T + 43.32183 \ln(T))$ mol/(m³ Pa) with T in K.
- 274)** Value from the test dataset.
- 275)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 276)** Apparently, the values in Table 2 of Park et al. (1997) show $\log_{10}(K_{aw})$ and not K_{aw} as their figure caption states.
- 277)** Extrapolated from data measured between 40 °C and 80 °C.
- 278)** Data are taken from the report by Howe et al. (1987).
- 279)** Value from the training set.
- 280)** In their Table 8, Staudinger and Roberts (1996) incorrectly cite a value given by Ashworth et al. (1988).
- 281)** The same data were also published in Hansen et al. (1995).
- 282)** Hansen et al. (1993) found that the solubility of 2-methylhexane increases with temperature.
- 283)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 284)** The data from Dohányosová et al. (2004) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-670.94997 + 33188.34075/T + 95.95541 \ln(T))$ mol/(m³ Pa) with T in K.
- 285)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 21 % difference.
- 286)** The data from Dohányosová et al. (2004) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-792.29258 + 38089.35992/T + 114.36667 \ln(T))$ mol/(m³ Pa) with T in K.
- 287)** Data taken from the supplement.
- 288)** Calculated using the EPI Suite (v4.0) method.
- 289)** Calculated using the SPARC (v4.2) method.
- 290)** Calculated using the COSMOtherm (v2.1) method.
- 291)** Calculated using the ABSOLV (ADMEBoxes v4.1) method.
- 292)** Mackay et al. (2006a) list a vapor pressure p , a solubility c , and a Henry's law constant calculated as p/c . However, the data are internally inconsistent and deviate by more than 10 %.
- 293)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 23 % difference.
- 294)** Value at $T = 294$ K.
- 295)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 13 % difference.
- 296)** The data listed in Tabs. 2 and 3 of Dewulf et al. (1999) are inconsistent, with 5 % difference.
- 297)** Value at $T = 301$ K.
- 298)** Value given here as quoted by Staudinger and Roberts (1996).
- 299)** Value from the test set for true external validation.
- 300)** The data from Dohányosová et al. (2004) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-365.40645 + 19821.40051/T + 50.78223 \ln(T))$ mol/(m³ Pa) with T in K.
- 301)** The data from Dohányosová et al. (2004) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-383.72514 + 20514.87228/T + 53.42859 \ln(T))$ mol/(m³ Pa) with T in K.



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- 302)** The data from Dohányosová et al. (2004) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-369.42853 + 19642.40603/T + 51.34116 \ln(T))$ mol/(m³ Pa) with T in K.
- 303)** Haynes (2014) refer to Mackay and Shiu (1981) but that article lists this value for 1,4-dimethylcyclohexane, not for 1,2-dimethylcyclohexane.
- 304)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 305)** The data from Dohányosová et al. (2004) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-346.32561 + 18710.63122/T + 47.87398 \ln(T))$ mol/(m³ Pa) with T in K.
- 306)** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-187.57836 + 9639.75245/T + 25.50544 \ln(T))$ mol/(m³ Pa) with T in K.
- 307)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-166.44394 + 8613.39266/T + 22.39721 \ln(T))$ mol/(m³ Pa) with T in K.
- 308)** The data from Morrison and Billett (1952) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-175.14997 + 9028.26949/T + 23.67675 \ln(T))$ mol/(m³ Pa) with T in K.
- 309)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-221.00286 + 11107.47493/T + 30.50401 \ln(T))$ mol/(m³ Pa) with T in K.
- 310)** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-168.51157 + 9378.22622/T + 22.33127 \ln(T))$ mol/(m³ Pa) with T in K.
- 311)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-241.54655 + 12718.75981/T + 33.18333 \ln(T))$ mol/(m³ Pa) with T in K.
- 312)** The data from Serra and Palavra (2003) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-261.78355 + 13728.91505/T + 36.10688 \ln(T))$ mol/(m³ Pa) with T in K.
- 313)** According to Donahue and Prinn (1993), the value is incorrect.
- 314)** Wang et al. (2017) provide separate data for *cis* and *trans*. However, since both isomers are identified by the same SMILES string in their study, it is unclear how the stereochemistry has been taken into account.
- 315)** Values for the Henry's law constants shown in Fig. 3 of Martins et al. (2017) were obtained from S. Pinho (pers. comm., 2022).
- 316)** Ebert et al. (2023) present "curated experimental" Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from multiple sources and obtained from experimental vapor pressure and water solubility.
- 317)** The data from Dohányosová et al. (2004) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-169.70973 + 10843.51763/T + 21.91320 \ln(T))$ mol/(m³ Pa) with T in K.
- 318)** Ebert et al. (2023) present "curated experimental" Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single database or data collection and obtained from experimental vapor pressure and water solubility.
- 319)** Approximate value extracted from Fig. 1 of Maillard and Rosenthal (1952).
- 320)** The same article was also published in Monatshefte für Chemie 23, 489–501 (1902).
- 321)** Value given here as quoted by Fogg et al. (2001).
- 322)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-143.25283 + 7542.89338/T + 19.33269 \ln(T))$ mol/(m³ Pa) with T in K.
- 323)** Regression and individual data points of Simpson and Lovell (1962) are inconsistent, with 5 % difference.
- 324)** Using the theoretical initial concentration (H0), see Zhang et al. (2013) for details.
- 325)** Average of all duplicates (H1), see Zhang et al. (2013) for details.
- 326)** Sieg et al. (2009) also provide data for supercooled water. Here, only data above 0 °C were used to calculate the temperature dependence.
- 327)** Extrapolated from data above 298 K.
- 328)** It was found that H_s changes with the concentration of the solution.
- 329)** The data from Görgényi et al. (2002) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-346.88030 + 18421.52810/T + 48.91393 \ln(T))$ mol/(m³ Pa) with T in K.
- 330)** Value obtained by applying a modified batch air-stripping method, otherwise called the vapor entry loop (VEL) method, see Kochetkov et al. (2001) for details.
- 331)** Value obtained by applying the static head space (HS) method, see Kochetkov et al. (2001) for details.
- 332)** The data from Khalifaoui and Newsham (1994b) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-129.36095 + 8999.48627/T + 16.29087 \ln(T))$ mol/(m³ Pa) with T in K.



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- 333)** The data from Robbins et al. (1993) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(189.41389 - 5855.10843/T - 30.90289 \ln(T))$ mol/(m³ Pa) with T in K.
- 334)** Value at $T = 302$ K.
- 335)** The data from Cooling et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-231.38331 + 13640.47358/T + 31.46504 \ln(T))$ mol/(m³ Pa) with T in K.
- 336)** Calculated using G_h and H_h from Table 2 in Andon et al. (1954). Note that the thermodynamic functions in that table are not based on their α in Table 1. Instead, the expression $\exp(-G_h/(RT))$ yields the Henry's law constant H_s^{xp} in the unit 1/atm.
- 337)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 11 % difference.
- 338)** Values for salt solutions are also available from this reference.
- 339)** The data from Görgényi et al. (2002) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-468.28203 + 24099.39947/T + 66.85565 \ln(T))$ mol/(m³ Pa) with T in K.
- 340)** Value obtained by applying the EPICS method, see Ayuttaya et al. (2001) for details.
- 341)** Value obtained by applying the static cell (linear form) method, see Ayuttaya et al. (2001) for details.
- 342)** Value obtained by applying the direct phase concentration ratio method, see Ayuttaya et al. (2001) for details.
- 343)** Value obtained by applying the static cell (nonlinear form) method, see Ayuttaya et al. (2001) for details.
- 344)** The data from Robbins et al. (1993) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-573.76928 + 28956.65188/T + 82.51911 \ln(T))$ mol/(m³ Pa) with T in K.
- 345)** The temperature dependence is recalculated using the data in Table 4 of Lamarche and Droste (1989) and not taken from their Table 5.
- 346)** Apparently, the vapor pressure of toluene was used to calculate its Henry's law constant. However, no source is provided.
- 347)** Value given here as quoted by Dewulf et al. (1995).
- 348)** The data from Robbins et al. (1993) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-1350.74178 + 64760.28328/T + 197.85937 \ln(T))$ mol/(m³ Pa) with T in K.
- 349)** The data from Schwardt et al. (2021) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(100.47045 - 2603.76722/T - 17.31043 \ln(T))$ mol/(m³ Pa) with T in K.
- 350)** Value given here as quoted by HSDB (2015).
- 351)** The regression parameters for ethylbenzene in Tab. 1 of Schwardt et al. (2021) are wrong. Corrected values from Schwardt et al. (2022) are used here.
- 352)** The data from Schwardt et al. (2021) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-176.88587 + 11290.74921/T + 23.22869 \ln(T))$ mol/(m³ Pa) with T in K.
- 353)** Different types of Henry's law constants of Ryu and Park (1999) are inconsistent, with 14 % difference.
- 354)** The data from Robbins et al. (1993) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-371.46947 + 20514.07888/T + 51.95086 \ln(T))$ mol/(m³ Pa) with T in K.
- 355)** The value listed as A for diethylbenzene is probably not A but the Henry's law volatility constant H_v^{px} at 298 K.
- 356)** Yaffe et al. (2003) list this species twice in their table, with different values. As it is unclear which is correct, the data are not reproduced here.
- 357)** Erratum for page 365 of Fogg and Sangster (2003): Data from Kondoh and Nakajima (1997) are cited incorrectly, giving the same values at 308.2 K and 318.2 K, respectively.
- 358)** Value from the external prediction set.
- 359)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 8 % difference.
- 360)** Because of discrepancies between the values shown in Tables 4 and 5 of Shiu and Ma (2000), the data are not used here.
- 361)** Effective Henry's law constants at several pH values are provided by van Ruth and Villeneuve (2002). Here, only the value at pH 3 is shown.
- 362)** The values of Dewulf et al. (1999) are not used here because, according to them, the calculated regression does not match the theoretical expectation for this species.
- 363)** Calculated using the COSMO-RS method.
- 364)** Value given here as quoted by Haynes (2014).
- 365)** Ebert et al. (2023) present "curated experimental" Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single database or data collection and measured directly.
- 366)** Literature-derived value.
- 367)** Final adjusted value.
- 368)** Value given here as quoted by Petrasek et al. (1983).
- 369)** Calculated using COSMOtherm.
- 370)** Calculated using the COSMO-RS method.



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- 371)** Ebert et al. (2023) present “curated experimental” Henry’s law constants from the literature but do not provide any references. It is only mentioned that the value is from a single original paper and obtained from experimental vapor pressure and water solubility.
- 372)** Value at $T = 299$ K.
- 373)** Value at $T = 283$ K.
- 374)** Cargill (1990) recommends the data from Rettich et al. (1982).
- 375)** The data from Rettich et al. (1982) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-188.21737 + 8974.05844/T + 25.72558 \ln(T))$ mol/(m³ Pa) with T in K.
- 376)** The data from Douglas (1967) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-180.92848 + 8514.05914/T + 24.68060 \ln(T))$ mol/(m³ Pa) with T in K.
- 377)** Solubility in sea water at 20.99 % chlorinity.
- 378)** The data from Winkler (1901) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-163.07031 + 7890.85881/T + 21.94517 \ln(T))$ mol/(m³ Pa) with T in K.
- 379)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-161.93492 + 7852.78262/T + 21.76812 \ln(T))$ mol/(m³ Pa) with T in K.
- 380)** The data from Zheng et al. (1997) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-144.44443 + 8071.06186/T + 19.20040 \ln(T))$ mol/(m³ Pa) with T in K.
- 381)** The data from Murray and Riley (1971) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-167.86941 + 9146.24434/T + 22.67331 \ln(T))$ mol/(m³ Pa) with T in K.
- 382)** The data from Morrison and Billett (1952) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-126.83009 + 7302.88179/T + 16.55553 \ln(T))$ mol/(m³ Pa) with T in K.
- 383)** The data from Bohr (1899) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-140.70007 + 7951.73013/T + 18.60961 \ln(T))$ mol/(m³ Pa) with T in K.
- 384)** As mentioned by Fogg and Sangster (2003), the fitting equation by Scharlin (1996) is erroneous. It appears that a correction factor of about 10⁶ is necessary for consistency with their own data in Tab. 1.
- 385)** The data from Dean and Lange (1999) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-138.54120 + 7859.16351/T + 18.28486 \ln(T))$ mol/(m³ Pa) with T in K.
- 386)** Keßel et al. (2017) provide data at several pH values. Here, only the value at pH 2 is shown because hydrolyses occurs in more alkaline solutions.
- 387)** The H298 and A,B,C data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 92 % difference.
- 388)** This paper supersedes earlier work with more concentrated solutions (Butler et al., 1933).
- 389)** Value given here as quoted by Gaffney et al. (1987).
- 390)** Value given here as quoted by Hine and Weimar (1965).
- 391)** The H298 and A,B,C data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 10 % difference.
- 392)** The H298 and A,B,C data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 10 % difference.
- 393)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 8 % difference.
- 394)** The H298 and A,B,C data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 10 % difference.
- 395)** Extrapolated from data above 298 K.
- 396)** Koga (1995) found that *tert*-butanol does not obey Henry’s law at $c > 3.8$ mM.
- 397)** Incorrect data are given by Burkholder et al. (2019) for 2-methyl-2-propanol. The correct parameter for the temperature dependence is: $C = 37.98$ (R. E. Huie, pers. comm. 2021).
- 398)** Incorrect data are given by Burkholder et al. (2015) for 2-methyl-2-propanol. The correct parameter for the temperature dependence is: $C = 37.98$ (R. E. Huie, pers. comm. 2021).
- 399)** Calculated for an aqueous solution containing 60 % ethanol by volume as the solvent.
- 400)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 401)** Value obtained by Saxena and Hildemann (1996) using the group contribution method.
- 402)** Value at $T = 300$ K.
- 403)** The error given by Suzuki et al. (1992) is not the difference between the observed and the calculated value, as it should be. It is unclear which of the numbers is wrong.
- 404)** The species is probably 2,3-dimethyl-2-butanol and not 2,3-dimethylbutanol as listed in Hine and Mookerjee (1975).
- 405)** Rumble (2021) refers to Moore et al. (1995) as the source but this value cannot be found there.



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- 406) It is assumed here that entry number 72 in Table 1 of Yaws et al. (1997) refers to 2-methyl-1-heptanol, not 2-methyl-2-heptanol.
- 407) KWAC and KAWp from Table 2 of Lei et al. (2007) are inconsistent, with 10 % difference.
- 408) Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 8 % difference.
- 409) Different types of Henry's law constants of Yaws and Yang (1992) are inconsistent, with 16 % difference.
- 410) Different types of Henry's law constants of Yaws and Yang (1992) are inconsistent, with 10 % difference.
- 411) Value at $T = 307$ K.
- 412) Value given here as quoted by Mackay et al. (1995).
- 413) Calculated using SPARC Performs Automated Reasoning in Chemistry (SPARC). It is assumed here that the value refers to $T = 298.15$ K.
- 414) Value given here as quoted by Hine and Mookerjee (1975).
- 415) Value at $T = 373$ K.
- 416) Value at $T = 281$ K.
- 417) It is assumed here that the thermodynamic data refers to the units $[\text{mol dm}^{-3}]$ and $[\text{atm}]$ as standard states.
- 418) Value given here as quoted by Shiu et al. (1994).
- 419) HSDB (2015) refer to Abraham et al. (1994b) as the source but this value cannot be found there. Maybe the value is taken from Abraham et al. (1990).
- 420) Mackay et al. (2006c) list a vapor pressure p , a solubility c , and a Henry's law constant calculated as p/c . However, the data are internally inconsistent and deviate by more than 10 %.
- 421) Betterton (1992) gives Buttery et al. (1969) as the source. However, no data were found in that reference.
- 422) Intermediate of estimates employing the bond method from the EPI HENRYWIN software.
- 423) Although Mansfield (2020) writes that his "Table 6 summarizes numerical calculations for formaldehyde and acetaldehyde assuming the values given in Tables 4 and 5", different values for the Henry's law constants are shown in these tables.
- 424) Saxena and Hildemann (1996) say that this value is unreliable.
- 425) Calculated using the free energy perturbation (FEP) method.
- 426) Calculated using the thermodynamic integration (TI) method.
- 427) Calculated using the Bennett acceptance ratio (BAR) method.
- 428) Saxena and Hildemann (1996) give a range of $9.9 \times 10^2 \text{ mol}/(\text{m}^3 \text{ Pa}) < H_s^{cp} < 5.9 \times 10^4 \text{ mol}/(\text{m}^3 \text{ Pa})$.
- 429) Saxena and Hildemann (1996) give a range of $5.9 \times 10^6 \text{ mol}/(\text{m}^3 \text{ Pa}) < H_s^{cp} < 3.9 \times 10^9 \text{ mol}/(\text{m}^3 \text{ Pa})$.
- 430) The formula of 1,2-butanediol is incorrectly given as "HOCH(OH)C₂H₅" by Burkholder et al. (2019).
- 431) The formula of 1,2-butanediol is incorrectly given as "HOCH(OH)C₂H₅" by Burkholder et al. (2015).
- 432) Saxena and Hildemann (1996) give a range of $9.9 \times 10^2 \text{ mol}/(\text{m}^3 \text{ Pa}) < H_s^{cp} < 4.9 \times 10^4 \text{ mol}/(\text{m}^3 \text{ Pa})$.
- 433) Saxena and Hildemann (1996) give a range of $3.9 \times 10^2 \text{ mol}/(\text{m}^3 \text{ Pa}) < H_s^{cp} < 3.9 \times 10^4 \text{ mol}/(\text{m}^3 \text{ Pa})$.
- 434) Calculated based on atmospheric measurements.
- 435) Calculated using EPI.
- 436) Calculated using SPARC.
- 437) Henry's law constants calculated using the GROMHE model. Temperature-dependences calculated with the method of Kühne et al. (2005).
- 438) Isaacman-VanWertz et al. (2016) refer to Raventos-Duran et al. (2010) as the source but the quoted value cannot be found there.
- 439) Calculated using GROMHE.
- 440) Isaacman-VanWertz et al. (2016) refer to a paper by Hilal et al. as the source but the quoted value cannot be found there.
- 441) Calculated using SPARC.
- 442) Calculated using the bond contribution of HENRYWIN.
- 443) Compernelle and Müller (2014b) recommend H_s^{cp} for 1,7-heptanediol in the range of $4.5 \times 10^4 \text{ mol}/(\text{m}^3 \text{ Pa}) < H_s^{cp} < 8.3 \times 10^4 \text{ mol}/(\text{m}^3 \text{ Pa})$.
- 444) Compernelle and Müller (2014b) recommend H_s^{cp} for 1,9-nonanediol in the range of $2.4 \times 10^4 \text{ mol}/(\text{m}^3 \text{ Pa}) < H_s^{cp} < 3.9 \times 10^4 \text{ mol}/(\text{m}^3 \text{ Pa})$.
- 445) Compernelle and Müller (2014b) recommend H_s^{cp} for 1,10-decanediol in the range of $2.5 \times 10^4 \text{ mol}/(\text{m}^3 \text{ Pa}) < H_s^{cp} < 3.0 \times 10^4 \text{ mol}/(\text{m}^3 \text{ Pa})$.
- 446) Value given here as quoted by Hilal et al. (2008).
- 447) Calculated using the EPI Suite method (<https://www.epa.gov/tsca-screening-tools/epi-suite-estimation-program-interface>).
- 448) Value for the temperature range from 261 K to 281 K.
- 449) Value at $T = 278$ K.



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450) Leriche et al. (2000) assume

$$H_s(\text{ROO}) = H_s(\text{ROOH}) \times H_s(\text{HO}_2)/H_s(\text{H}_2\text{O}_2).$$

451) Lelieveld and Crutzen (1991) assume $H_s(\text{CH}_3\text{OO}) = H_s(\text{HO}_2)$.

5 452) Jacob (1986) assumes $H_s(\text{CH}_3\text{OO}) = H_s(\text{CH}_3\text{OOH}) \times H_s(\text{HO}_2)/H_s(\text{H}_2\text{O}_2)$.

453) Calculated using EVAPORATION and AIOMFAC.

454) Calculated using the GROMHE model.

455) Effective value that takes into account the hydration of HCHO:

$$H_s = ([\text{HCHO}] + [\text{CH}_2(\text{OH})_2])/p(\text{HCHO})$$

10 456) Data from Table 1 by Zhou and Mopper (1990) were used to redo the regression analysis. The data for acetone in their Table 2 are incorrect.

15 457) Dong and Dasgupta (1986) found that the Henry's law constant for HCHO is not a true constant but increases with increasing concentration. Note that their expression does not converge asymptotically to a constant value at infinite dilution.

20 458) Ledbury and Blair (1925) (and also Blair and Ledbury (1925)) measured the solubility of HCHO at very high concentrations around 5 to 15 M. Their value of H_s increases with HCHO concentration. Lelieveld and Crutzen (1991), Hough (1991), and Pandis and Seinfeld (1989) all use these solubility data but do not specify how they extrapolated to lower concentrations. Since the concentration range is far from typical values in atmospheric chemistry, the value is not reproduced here.

25 459) Value given here as quoted by Möller and Mauersberger (1992).

460) Effective value that takes into account the hydration of the aldehyde:

$$H_s = ([\text{RCHO}] + [\text{RCH}(\text{OH})_2])/p(\text{RCHO})$$

30 461) The data from Wieland et al. (2015) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(25.01220 + 3596.11696/T - 6.81730 \ln(T))$ mol/(m³ Pa) with T in K.

462) Value given here as quoted by Bone et al. (1983).

35 463) Value suitable for the conditions of a case study in Mexico City.

40 464) Volkamer et al. (2009) found average effective Henry's law constants for CHOCHO in the range 1.6×10^6 mol/(m³ Pa) < H_s^{cp} < 5.9×10^6 mol/(m³ Pa) for solutions containing ammonium sulfate and/or fulvic acid. A salting-in effect by fulvic acid was observed even in the absence of sulfate.

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465) Solubility in sulfate aerosol.

466) Woo and McNeill (2015) say that the Henry's law constant was updated based on advances in the literature since McNeill et al. (2012) but do not provide 45 further details.

467) Value at $T = 372$ K.

468) The data from Wieland et al. (2015) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-176.35942 + 12895.73116/T + 22.70566 \ln(T))$ 50 mol/(m³ Pa) with T in K.

469) The formula of propenal is incorrectly given as "CH₂CHO" by Burkholder et al. (2019).

470) The temperature dependence parameter C for 2-butenal is missing in Burkholder et al. (2019). The correct value is: C = 24.42 (R. E. Huie, pers. comm. 55 2021).

471) The data from Buttery et al. (1971) for trans-2-octenal are incorrectly cited by Betterton (1992).

472) Values at 298 K in Table C2 and C5 of Brockbank 60 (2013) are inconsistent, with 6 % difference.

473) Calculated under the assumption that ΔG and ΔH are based on [mol/l] and [atm] as the standard states.

474) Calculated using the experimental value adjusted (EVA) method, see McFall et al. (2020) for details. 65

475) Value at $T = 359$ K.

476) Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.

477) Calculated from the slope of $y_{ac}P$ vs x_{ac} , using data from Tab. VIII in Lichtenbelt and Schram (1985). 70

478) Value at $T = 313$ K.

479) Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.

480) Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 7 % difference. 75

481) Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.

482) Table S2 in the supplement of Wu et al. (2022a) contains incorrect data for 3-octanone. Here, the corrected data (S. Wu, pers. comm. 2022) were used: 80 2.88E-2 and 1.52E-2 at 25 °C and 35 °C, respectively.

483) Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 7 % difference.

484) The value listed as A for 2,6,8-trimethyl-4-nonanone is probably not A but the Henry's law volatility constant H_v^{px} at 298 K. 85

485) The data from Wieland et al. (2015) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(116.85779 - 1341.05519/T - 19.91967 \ln(T))$ 90 mol/(m³ Pa) with T in K.



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- 486)** The data from Wieland et al. (2015) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-74.84087 + 9452.88617/T + 7.41865 \ln(T))$ mol/(m³ Pa) with T in K.
- 487)** The value given here was measured at a liquid phase mixing ratio of 1 μmol/mol. Servant et al. (1991) found that the Henry's law constant changes at higher concentrations.
- 488)** Abraham (1984) smoothed the values from a plot of enthalpy against carbon number.
- 489)** The value of H_s^{\ominus} was taken from Keene and Galloway (1986).
- 490)** Calculated using thermodynamic data from Latimer (1952).
- 491)** Value at pH = 4.
- 492)** Calculated using HENRYWIN 3.2 (bond contribution method).
- 493)** At pH 7.
- 494)** At pH 10.8.
- 495)** Value at $T = 289$ K.
- 496)** Value at $T = 338$ K.
- 497)** Pecsar and Martin (1966) is quoted as the source. However, only activity coefficients and no vapor pressures are listed there.
- 498)** The H298 and A,B,C data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 6 % difference.
- 499)** The formula of methyl ethanoate is incorrectly given as "CH₃C(O)CH₃" by Burkholder et al. (2015).
- 500)** The H298 and A,B data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 74 % difference.
- 501)** The same data were also published in Kieckbusch and King (1979a).
- 502)** The H298 and A,B,C data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 7 % difference.
- 503)** The formula of propyl ethanoate is incorrectly given as "CH₃C(O)C₃H₈" by Burkholder et al. (2019).
- 504)** Katritzky et al. (1998) list this species twice in their table, with different values. As it is unclear which of them is correct, the data are not reproduced here.
- 505)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 506)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 507)** The value listed as A for n-heptyl acetate is probably not A but the Henry's law volatility constant H_s^{px} at 298 K.
- 508)** The value listed as A for n-octyl acetate is probably not A but the Henry's law volatility constant H_s^{px} at 298 K.
- 509)** Betterton (1992) gives Kieckbusch and King (1979b) as the source. However, no data were found in that reference.
- 510)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 511)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 512)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 513)** The data from Wieland et al. (2015) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(34.46832 + 3269.29552/T - 8.76905 \ln(T))$ mol/(m³ Pa) with T in K.
- 514)** Burkholder et al. (2019) refer to Dohnal et al. (2010) but the quoted value cannot be found there.
- 515)** Burkholder et al. (2015) refer to Dohnal et al. (2010) but the quoted value cannot be found there.
- 516)** Dipropyl phthalate is listed twice with different values.
- 517)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 9 % difference.
- 518)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 17 % difference.
- 519)** Hwang et al. (2010) present regression parameters in their Tab. 6 and values extrapolated to 298.15 K in their Tab. 5. However, I was not able to reproduce their calculation. The data shown here are from my own regression of the measured data between 318.15 K and 333.15 K.
- 520)** The data from Haimi et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(752.39274 - 29351.83448/T - 115.55407 \ln(T))$ mol/(m³ Pa) with T in K.
- 521)** Different types of Henry's law constants of Arp and Schmidt (2004) are inconsistent, with 5 % difference.
- 522)** The data from Robbins et al. (1993) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-4264.16032 + 202439.46180/T + 628.54371 \ln(T))$ mol/(m³ Pa) with T in K.
- 523)** The data from Haimi et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(224.10069 - 4205.03828/T - 37.65761 \ln(T))$ mol/(m³ Pa) with T in K.
- 524)** The data from Haimi et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-780.30940 + 40758.59752/T + 112.07468 \ln(T))$ mol/(m³ Pa) with T in K.



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- 525)** The data from Haimi et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-565.00561 + 31411.46240/T + 79.73748 \ln(T))$ mol/(m³ Pa) with T in K.
- 526)** Ebert et al. (2023) present “curated experimental” Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single original paper and obtained from experimental vapor pressure and the infinite-dilution activity coefficient.
- 527)** The data from Haimi et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-1125.52184 + 56732.54277/T + 163.04749 \ln(T))$ mol/(m³ Pa) with T in K.
- 528)** The data from Haimi et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-1315.53726 + 64110.36765/T + 191.89554 \ln(T))$ mol/(m³ Pa) with T in K.
- 529)** The value listed as A for di- n -pentyl ether is probably not A but the Henry's law volatility constant H_v^{px} at 298 K.
- 530)** The value listed as A for di- n -hexyl ether is probably not A but the Henry's law volatility constant H_v^{px} at 298 K.
- 531)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 532)** The data from Wieland et al. (2015) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-157.10556 + 10203.60762/T + 20.42555 \ln(T))$ mol/(m³ Pa) with T in K.
- 533)** Betterton (1992) gives Hine and Weimar (1965) as the source. However, no data were found in that reference.
- 534)** Betterton (1992) gives Vitenberg et al. (1975) as the source. However, no data were found in that reference.
- 535)** Based on gas chromatograph retention indices (GC-RIs).
- 536)** Warneck (2005) refers to Saxena and Hildemann (1996) as the source but the quoted value cannot be found there.
- 537)** The formula of hydroxyethanoic acid is incorrectly given as “HC(OH)C(O)OH” by Burkholder et al. (2019).
- 538)** The formula of hydroxyethanoic acid is incorrectly given as “HC(OH)C(O)OH” by Burkholder et al. (2015).
- 539)** Temperature dependencies in Tabs. 1 and 2 of Ashworth et al. (1988) are inconsistent, with 31 % difference.
- 540)** Compernelle and Müller (2014a) recommend H_s^{cp} for tartaric acid in the range of 6.9×10^{14} mol/(m³ Pa) < H_s^{cp} < 9.2×10^{15} mol/(m³ Pa).
- 541)** Chan et al. (2010) give a range of 1.9×10^5 mol/(m³ Pa) < H_s^{cp} < 9.5×10^6 mol/(m³ Pa).
- 542)** Calculated using the HENRYWIN program and calibration to 1,3-propanediol.
- 543)** The value was chosen for a model study because it gave the best agreement with measurements.
- 544)** Center of the range (2.3...4.0) mol/(m³ Pa).
- 545)** Calculated based on the method by Hine and Mookerjee (1975).
- 546)** Compernelle and Müller (2014a) recommend H_s^{cp} for citric acid in the range of 2.0×10^{14} mol/(m³ Pa) < H_s^{cp} < 5.9×10^{15} mol/(m³ Pa).
- 547)** The data from Wieland et al. (2015) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-96.39127 + 11107.87195/T + 10.76466 \ln(T))$ mol/(m³ Pa) with T in K.
- 548)** In their Fig. 5b, Kish et al. (2013) apply an unspecified factor to the Henry's law constant, and it is not clear if the temperature dependence shown there is correct (Y. Liu, pers. comm. 2014).
- 549)** Calculated using the method from Nguyen (2013).
- 550)** Calculated from the slope of $y_1 P$ vs x_1 , using the tabulated VLE data from Kim et al. (2008) between 40 °C and 100 °C. Only dilute solutions with $x_1 \leq 0.1$ were considered.
- 551)** Value at $T = 309$ K.
- 552)** The data from Christie and Crisp (1967) for dipropylamine are incorrectly cited by Betterton (1992).
- 553)** Value at $T = 323$ K.
- 554)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 555)** Value at $T = 308$ K.
- 556)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 557)** Value at $T = 285$ K.
- 558)** Mackay et al. (2006d) list a vapor pressure p , a solubility c , and a Henry's law constant calculated as p/c . However, the data are internally inconsistent and deviate by more than 10 %.
- 559)** Calculated using $\Delta C_s^{g \rightarrow H_2O}$ and $\Delta H_s^{g \rightarrow H_2O}$ from Table IV of Arnett and Chawla (1979). Since some of the values in this table are taken directly from Andon et al. (1954), it is assumed that the thermodynamic properties are defined in the same way. Since $\Delta H_s^{g \rightarrow H_2O}$ is defined relative to pyridine, a value of -11.93 kcal/mol from Arnett et al. (1977) was added.
- 560)** Due to an apparently incorrect definition of the Henry's law constant by Andon et al. (1954),



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- Staudinger and Roberts (2001) quote incorrect values from that paper.
- 561)** The data from Wieland et al. (2015) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-12.48322 + 7833.96799/T - 2.23379 \ln(T))$ mol/(m³ Pa) with T in K.
- 562)** Value given here as quoted by Feigenbrugel and Le Calvé (2021).
- 563)** Value calculated from the solubility of 9.4×10^{-3} mol/L and the vapor pressure of 0.255 mmHg, as shown on pages 7142-7143 of Arnett and Chawla (1979). It is inconsistent with the entry in Table IV of that paper.
- 564)** Value given here as quoted by Ma et al. (2010a).
- 565)** Nguyen (2013) refer to Kim et al. (2008) as the source but this value cannot be found there.
- 566)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 7 % difference.
- 567)** Value given here as quoted by Goodarzi et al. (2010).
- 568)** Goodarzi et al. (2010) compared several QSPR methods and found that the Levenberg-Marquardt algorithm with Bayesian regularization produces the best results. Values obtained with other methods can be found in their supplement.
- 569)** Value from the validation set.
- 570)** At pH 5.
- 571)** Value from the test set.
- 572)** At pH 10.
- 573)** At pH 9.
- 574)** At pH 5.2.
- 575)** At pH 7.4.
- 576)** At pH 9.3.
- 577)** At pH 4.
- 578)** Kames and Schurath (1992) were unable to assign the values to the isomers.
- 579)** Ebert et al. (2023) present "curated experimental" Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single original paper and measured directly.
- 580)** The same data were also published in Fischer and Ballschmiter (1998a).
- 581)** The formula of 1,3-propanediol dinitrate is incorrectly given as "O₂NO₂CH₂CH₂CH₂ONO₂" by Burkholder et al. (2019).
- 582)** The formula of 1,3-propanediol dinitrate is incorrectly given as "O₂NO₂CH₂CH₂CH₂ONO₂" by Burkholder et al. (2015).
- 583)** Comparing the value with that from the cited publication (Kames and Schurath, 1995), it can be seen that the unit and the temperature listed in Table 3 of Warneck et al. (1996) are incorrect.
- 584)** The data from Kames and Schurath (1995) for peroxyacetyl nitrate are incorrectly cited by Schurath et al. (1996).
- 585)** The data from Kames and Schurath (1995) for peroxypropionyl nitrate are incorrectly cited by Schurath et al. (1996).
- 586)** The data from Kames and Schurath (1995) for peroxy-*n*-butyl nitrate are incorrectly cited by Schurath et al. (1996).
- 587)** The data from Kames and Schurath (1995) for peroxy-methacryloyl nitrate are incorrectly cited by Schurath et al. (1996).
- 588)** The data from Kames and Schurath (1995) for peroxy-*i*-butyl nitrate are incorrectly cited by Schurath et al. (1996).
- 589)** Estimate based on Raventos-Duran et al. (2010).
- 590)** Effective value at pH 3.
- 591)** The value at T^\ominus is the intrinsic Henry's law constant but the temperature dependence refers to the effective Henry's law constant at pH 3.08.
- 592)** Burkholder et al. (2019) refer to Borduas et al. (2016) but the quoted value cannot be found there.
- 593)** The values for nitroethane in Tabs. VI and VIII of Friant and Suffet (1979) differ by a factor of 10. Apparently, the value in Tab. VIII is wrong.
- 594)** The data listed in Tabs. 2 and 3 of Dewulf et al. (1999) are inconsistent, with 27 % difference.
- 595)** Mackay et al. (2006d) list two values for dinoseb which differ by a factor of 1000. It is unclear which number is correct (if any) and the data are not reproduced here.
- 596)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 597)** The data from Glew and Moelwyn-Hughes (1953) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-135.82151 + 7593.40134/T + 18.05983 \ln(T))$ mol/(m³ Pa) with T in K.
- 598)** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-163.70243 + 8973.31702/T + 22.17142 \ln(T))$ mol/(m³ Pa) with T in K.
- 599)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-142.70480 + 8025.53525/T + 19.04459 \ln(T))$ mol/(m³ Pa) with T in K.



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- 600)** The data from Zheng et al. (1997) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-190.61883 + 10088.26604/T + 25.94088 \ln(T))$ mol/(m³ Pa) with T in K.
- 601)** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-177.44258 + 9554.69077/T + 23.94054 \ln(T))$ mol/(m³ Pa) with T in K.
- 602)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-350.64777 + 16708.21486/T + 49.40261 \ln(T))$ mol/(m³ Pa) with T in K.
- 603)** The data from Scharlin and Battino (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-552.21779 + 25529.81258/T + 79.59510 \ln(T))$ mol/(m³ Pa) with T in K.
- 604)** The data from Scharlin and Battino (1994) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-552.21779 + 25529.81258/T + 79.59510 \ln(T))$ mol/(m³ Pa) with T in K.
- 605)** The data from Wen and Muccitelli (1979) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-356.93310 + 16943.80173/T + 50.37092 \ln(T))$ mol/(m³ Pa) with T in K.
- 606)** The data from Ashton et al. (1968) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-320.94892 + 15261.58540/T + 45.04995 \ln(T))$ mol/(m³ Pa) with T in K.
- 607)** The data from Morrison and Johnstone (1954) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-174.44927 + 8434.85415/T + 23.34667 \ln(T))$ mol/(m³ Pa) with T in K.
- 608)** The H298 and A,B data listed in Table 5-7 of Burkholder et al. (2019) are inconsistent, with 8 % difference.
- 609)** The H298 and A,B data listed in Table 5-7 of Burkholder et al. (2015) are inconsistent, with 8 % difference.
- 610)** The data from Zheng et al. (1997) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-203.78636 + 11097.46295/T + 27.89781 \ln(T))$ mol/(m³ Pa) with T in K.
- 611)** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-184.82864 + 10260.68840/T + 25.06659 \ln(T))$ mol/(m³ Pa) with T in K.
- 612)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-175.64793 + 9805.36391/T + 23.71997 \ln(T))$ mol/(m³ Pa) with T in K.
- 613)** The data from Zheng et al. (1997) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-244.13803 + 12963.44791/T + 33.68869 \ln(T))$ mol/(m³ Pa) with T in K.
- 614)** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-225.56576 + 12186.49271/T + 30.88527 \ln(T))$ mol/(m³ Pa) with T in K.
- 615)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-208.89051 + 11387.65726/T + 28.42219 \ln(T))$ mol/(m³ Pa) with T in K.
- 616)** The data from Chang and Criddle (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-1003.84803 + 45506.40253/T + 147.89569 \ln(T))$ mol/(m³ Pa) with T in K.
- 617)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-164.25882 + 9381.26592/T + 21.50848 \ln(T))$ mol/(m³ Pa) with T in K.
- 618)** The data from Wen and Muccitelli (1979) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-499.57565 + 23563.38593/T + 71.28478 \ln(T))$ mol/(m³ Pa) with T in K.
- 619)** Value at $T = 287$ K.
- 620)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-78.74672 + 5836.90728/T + 8.41930 \ln(T))$ mol/(m³ Pa) with T in K.
- 621)** The data from Clever et al. (2005) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-588.11467 + 28143.61522/T + 84.26598 \ln(T))$ mol/(m³ Pa) with T in K.
- 622)** In their Table 13, Clever et al. (2005) list Ostwald coefficients that are probably incorrect by a factor of 100. Therefore, these values are not used. Instead, H_s is calculated using the mol fraction x_1 from the same table.
- 623)** The data from Scharlin and Battino (1994) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-630.69809 + 30309.09484/T + 90.46889 \ln(T))$ mol/(m³ Pa) with T in K.
- 624)** The data from Wen and Muccitelli (1979) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-673.45393 + 31915.35190/T + 97.01332 \ln(T))$ mol/(m³ Pa) with T in K.
- 625)** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-197.14327 + 10473.25304/T + 26.34780 \ln(T))$ mol/(m³ Pa) with T in K.
- 626)** Calculated using the COSMO-RS method.



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- 627) Value given here as quoted by Kanakidou et al. (1995).
- 628) Comparing with Abraham et al. (1994a), it seems that the compound called “trifluoroethanol” by Goss (2005) refers to 2,2,2-trifluoroethanol.
- 629) Comparing with Abraham et al. (1994a), it seems that the compound called “hexafluoropropanol” by Goss (2005) refers to 1,1,1,3,3,3-hexafluoro-2-propanol.
- 630) Value at $T = 284$ K.
- 631) Measured in aqueous hydrochloric acid and extrapolated to pure water as the solvent at 25°C . Measurements were also made at other temperatures, however, those were not extrapolated to pure water as the solvent.
- 632) Calculated using the EPI Suite Bond estimation method.
- 633) Calculated using the new SPARC method, see Arp et al. (2006) for details.
- 634) Calculated using the COSMOtherm method, see Arp et al. (2006) for details.
- 635) A refit yields: $A = -18.99$, $B = 5493$, and $H(298\text{ K}) = 0.57\text{ M/atm}$ (R. E. Huie, pers. comm. 2021).
- 636) A refit yields: $A = -18.99$, $B = 5493$, and $H(298\text{ K}) = 0.57\text{ M/atm}$ (R. E. Huie, pers. comm. 2021).
- 637) A refit yields: $A = -21.67$, $B = 5776$, and $H(298\text{ K}) = 0.10\text{ M/atm}$ (R. E. Huie, pers. comm. 2021).
- 638) The H298 and A,B data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 29 % difference.
- 639) A refit yields: $A = -21.67$, $B = 5776$, and $H(298\text{ K}) = 0.10\text{ M/atm}$ (R. E. Huie, pers. comm. 2021).
- 640) The H298 and A,B data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 29 % difference.
- 641) The H298 and A,B data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 29 % difference.
- 642) The data from Clever et al. (2005) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(289.52696 - 11352.27202/T - 46.16631 \ln(T))$ mol/(m³ Pa) with T in K.
- 643) The Ostwald coefficient given by Clever et al. (2005) at 313.2 K is probably incorrect. Therefore, the Ostwald coefficients are not used. Instead, H_s is calculated using the mol fraction x_1 from the same table.
- 644) Extrapolated based on number of carbons.
- 645) Measured with the wetted-wall column at room temperature.
- 646) The H298 and A,B data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 9 % difference.
- 647) The H298 and A,B data listed in Table 5.4 of Sander et al. (2006) are inconsistent, with 9 % difference.
- 648) The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-251.05500 + 13259.10200/T + 35.01685 \ln(T))$ mol/(m³ Pa) with T in K.
- 649) The same data were also published in McConnell et al. (1975).
- 650) The data from Glew and Moelwyn-Hughes (1953) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-171.13914 + 9743.00524/T + 23.09616 \ln(T))$ mol/(m³ Pa) with T in K.
- 651) Values at different temperatures are from different sources. Thus a temperature dependence was not calculated.
- 652) Chiang et al. (1998) show vinyl chloride in their Table 2 but most probably they meant to refer to dichloromethane instead.
- 653) The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-444.17924 + 22456.73010/T + 63.76504 \ln(T))$ mol/(m³ Pa) with T in K.
- 654) Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 7 % difference.
- 655) The data from Görgényi et al. (2002) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-378.59438 + 20174.67146/T + 53.50889 \ln(T))$ mol/(m³ Pa) with T in K.
- 656) The data from Moore et al. (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(32.52949 + 1878.33965/T - 7.88669 \ln(T))$ mol/(m³ Pa) with T in K.
- 657) The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-109.09283 + 8000.75665/T + 13.39152 \ln(T))$ mol/(m³ Pa) with T in K.
- 658) Probably an interpolation of the data from Balls (1980).
- 659) Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 660) The data from Bullister and Wisegarver (1998) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-704.15798 + 34144.64622/T + 102.06046 \ln(T))$ mol/(m³ Pa) with T in K.
- 661) The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-426.63883 + 22457.44484/T + 60.22986 \ln(T))$ mol/(m³ Pa) with T in K.



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- 662)** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-221.58683 + 12291.19608/T + 30.42274 \ln(T))$ mol/(m³ Pa) with T in K.
- 663)** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-233.85465 + 12927.81251/T + 32.20905 \ln(T))$ mol/(m³ Pa) with T in K.
- 664)** The data from Görgényi et al. (2002) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-372.18420 + 19566.35271/T + 52.67600 \ln(T))$ mol/(m³ Pa) with T in K.
- 665)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-1295.59488 + 61538.96732/T + 190.02999 \ln(T))$ mol/(m³ Pa) with T in K.
- 666)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-309.75754 + 17275.24359/T + 43.35857 \ln(T))$ mol/(m³ Pa) with T in K.
- 667)** The data from Robbins et al. (1993) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(313.50875 - 12121.71831/T - 49.20602 \ln(T))$ mol/(m³ Pa) with T in K.
- 668)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(255.46482 - 8896.18926/T - 40.90189 \ln(T))$ mol/(m³ Pa) with T in K.
- 669)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 5 % difference.
- 670)** The data from Schwardt et al. (2021) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(200.57633 - 7128.32092/T - 31.87111 \ln(T))$ mol/(m³ Pa) with T in K.
- 671)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-304.31063 + 17046.46392/T + 42.59182 \ln(T))$ mol/(m³ Pa) with T in K.
- 672)** The data from Schwardt et al. (2021) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-1784.40256 + 88283.19114/T + 260.26556 \ln(T))$ mol/(m³ Pa) with T in K.
- 673)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(608.52671 - 23622.70039/T - 93.86675 \ln(T))$ mol/(m³ Pa) with T in K.
- 674)** The value for A in the table of Kondoh and Nakajima (1997) is incorrect. Recalculating the regression, it can be seen that it should be 13.95 and not 1.395.
- 675)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(2638.58362 -$

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- $114985.14319/T - 396.08684 \ln(T))$ mol/(m³ Pa) with T in K.
- 676)** The H298 and A,B data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 9 % difference.
- 677)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-573.71583 + 28877.33987/T + 82.70652 \ln(T))$ mol/(m³ Pa) with T in K.
- 678)** The data from Sarraute et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-503.53929 + 28223.72051/T + 70.89539 \ln(T))$ mol/(m³ Pa) with T in K.
- 679)** As explained by Miller and Stuart (2003), the measurements were performed at 296 K.
- 680)** Value for $T = 295 \dots 298$ K.
- 681)** Value for $T = 293 \dots 298$ K.
- 682)** The data from Schwardt et al. (2021) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-20.66741 + 2604.13624/T + 0.71646 \ln(T))$ mol/(m³ Pa) with T in K.
- 683)** Mackay et al. (2006b) list a vapor pressure p , a solubility c , and a Henry's law constant calculated as p/c . However, the data are internally inconsistent and deviate by more than 10 %.
- 684)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 685)** The data from Schwardt et al. (2021) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-214.72727 + 12076.60512/T + 29.20360 \ln(T))$ mol/(m³ Pa) with T in K.
- 686)** A typo in Ashworth et al. (1988) has been corrected, the correct value was presented by Howe et al. (1987).
- 687)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-332.68901 + 17925.88529/T + 46.77838 \ln(T))$ mol/(m³ Pa) with T in K.
- 688)** The data from Schwardt et al. (2021) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-6.68864 + 2211.35284/T - 1.35565 \ln(T))$ mol/(m³ Pa) with T in K.
- 689)** The data from Khalifaoui and Newsham (1994b) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-593.56757 + 30300.79738/T + 85.11672 \ln(T))$ mol/(m³ Pa) with T in K.
- 690)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-294.54970 + 16409.35487/T + 40.82700 \ln(T))$ mol/(m³ Pa) with T in K.



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- 691)** The data from Cooling et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-511.78322 + 26710.11950/T + 72.88403 \ln(T))$ mol/(m³ Pa) with T in K.
- 692)** The data from Schwardt et al. (2021) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-265.05147 + 15058.79780/T + 36.44507 \ln(T))$ mol/(m³ Pa) with T in K.
- 693)** The data from Görgényi et al. (2002) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-480.92432 + 24776.46284/T + 68.60174 \ln(T))$ mol/(m³ Pa) with T in K.
- 694)** The data from Knauss et al. (2000) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-389.28726 + 21123.08804/T + 54.69871 \ln(T))$ mol/(m³ Pa) with T in K.
- 695)** The data from Khalifaoui and Newsham (1994b) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-511.93773 + 26713.30359/T + 72.90551 \ln(T))$ mol/(m³ Pa) with T in K.
- 696)** The data from Robbins et al. (1993) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(176.56015 - 5511.47473/T - 28.96682 \ln(T))$ mol/(m³ Pa) with T in K.
- 697)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(681.41357 - 27448.54898/T - 104.63745 \ln(T))$ mol/(m³ Pa) with T in K.
- 698)** The data from Cooling et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-574.03630 + 29404.80442/T + 82.22224 \ln(T))$ mol/(m³ Pa) with T in K.
- 699)** The data from Schwardt et al. (2021) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-330.94781 + 18207.73829/T + 46.05991 \ln(T))$ mol/(m³ Pa) with T in K.
- 700)** The data from Knauss et al. (2000) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-281.09217 + 15955.08953/T + 38.60107 \ln(T))$ mol/(m³ Pa) with T in K.
- 701)** The data from Robbins et al. (1993) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-1145.60543 + 55089.35358/T + 167.32916 \ln(T))$ mol/(m³ Pa) with T in K.
- 702)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-224.85290 + 13463.70772/T + 30.65123 \ln(T))$ mol/(m³ Pa) with T in K.
- 703)** Henry's law constants were evaluated using data from Florida sandy field soil.
- 704)** According to Thomas et al. (2006), theoretical Henry's law constants were calculated using the "normal boiling point, the critical temperature, and the enthalpy of volatilization at the normal boiling point".
- 705)** Haynes (2014) refer to Mackay and Shiu (1981) but that article lists this value for 1-chloro-2-methylpropane (the saturated compound), not for 1-chloro-2-methylpropene.
- 706)** The regression parameters for chlorobenzene in Tab. 1 of Schwardt et al. (2021) are wrong. Corrected values from Schwardt et al. (2022) are used here.
- 707)** The data from Schwardt et al. (2021) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-266.69788 + 14811.78372/T + 37.00246 \ln(T))$ mol/(m³ Pa) with T in K.
- 708)** The data from Khalifaoui and Newsham (1994b) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-757.46460 + 35956.18738/T + 110.75693 \ln(T))$ mol/(m³ Pa) with T in K.
- 709)** The data from Cooling et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-820.00716 + 38880.20610/T + 120.01460 \ln(T))$ mol/(m³ Pa) with T in K.
- 710)** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 8 % difference.
- 711)** Erratum for page 344 of Fogg and Sangster (2003): Their reference [89] does not contain 1,2-dichlorobenzene.
- 712)** The data listed in Tabs. 2 and 3 of Dewulf et al. (1999) are inconsistent, with 7 % difference.
- 713)** The data listed in Tabs. 2 and 3 of Dewulf et al. (1999) are inconsistent, with 7 % difference.
- 714)** Rumble (2021) refers to Oliver (1985) as the source but this value cannot be found there.
- 715)** Value for $T = 298 \dots 303$ K.
- 716)** Ebert et al. (2023) present "curated experimental" Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from multiple sources and obtained from the experimental octanol/water partition coefficient and the octanol/air partition coefficient.
- 717)** Ebert et al. (2023) present "curated experimental" Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single database or data collection and obtained from the experimental octanol/water partition coefficient and the octanol/air partition coefficient.
- 718)** Odabasi and Adali (2016) provide the parameters A and B for an equation to calculate temperature-dependent Henry's law constants. Values



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calculated with this equation at 298 K are slightly different than those measured at 298 K and given as H in their table 1. Here, the values H and B are used.

- 719) Modified gas-stripping method (MGSM), see Lau et al. (2006) for details.
- 720) Integrated gas-stripping method (IGSM), see Lau et al. (2006) for details.
- 721) Calculated with the principal component regression (PCR) method, see Fang Lee (2007) for details.
- 722) Calculated with the partial least-square regression (PLSR) method, see Fang Lee (2007) for details.
- 723) The same data were also published in Dunnivant et al. (1988).
- 724) Value given here as quoted by Dunnivant et al. (1988).
- 725) Calculated using the EPICS method.
- 726) Calculated using the “Direct” method.
- 727) Westcott et al. (1981) give a range of 1.9×10^{-2} mol/(m³ Pa) < H_s^{cp} < 3.2×10^{-2} mol/(m³ Pa).
- 728) Westcott et al. (1981) give a range of 2.8×10^{-2} mol/(m³ Pa) < H_s^{cp} < 9.0×10^{-2} mol/(m³ Pa).
- 729) Erratum for page 350 of Fogg and Sangster (2003): The equation describing the recommended temperature-dependent data appears to be incorrect and is not used here.
- 730) Value at pH = 4.
- 731) When comparing H in Table 4 with K_{gw} in Table 5 of Pfeifer et al. (2001), it can be seen that the values refer to $K_{gw} \times 100$ and not $K_{gw}/100$.
- 732) Measured at pH 1.
- 733) The same data were also published in Brandsch et al. (1993).
- 734) Erratum for page 376 of Fogg and Sangster (2003): Data from Santl et al. (1994) are cited incorrectly, it should be 3.64, not 3.84.
- 735) Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 8 % difference.
- 736) Although pronamide and propyzamide are the same species, Mackay et al. (2006d) list two different values for them. It is unclear which number is correct (if any) and the data are not reproduced here.
- 737) The value at 20 °C was calculated from published values of vapor pressure and water solubility. Data between 25 °C and 40 °C were calculated from the measured evaporation rate.
- 738) At pH 5.4.
- 739) Ebert et al. (2023) present “curated experimental” Henry’s law constants from the literature but do not provide any references. It is only mentioned that the value is from multiple sources and measured directly.

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- 740) The data from Zheng et al. (1997) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-206.94328 + 11372.60160/T + 28.22232 \ln(T))$ mol/(m³ Pa) with T in K.
- 741) The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-200.57402 + 11192.93914/T + 27.21798 \ln(T))$ mol/(m³ Pa) with T in K.
- 742) The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-208.06388 + 11491.48483/T + 28.35421 \ln(T))$ mol/(m³ Pa) with T in K.
- 743) The data from Chang and Criddle (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-1756.79407 + 80807.02552/T + 259.24906 \ln(T))$ mol/(m³ Pa) with T in K.
- 744) The data from McLinden (1989) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-387.81156 + 19950.78638/T + 54.91348 \ln(T))$ mol/(m³ Pa) with T in K.
- 745) The temperature dependence was recalculated from the data on p. 20 of McLinden (1989).
- 746) The data from McLinden (1989) for HCFC-22 are incorrectly cited by Kanakidou et al. (1995).
- 747) The H298 and A,B data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 5 % difference.
- 748) The H298 and A,B data listed in Table 5-4 of Burkholder et al. (2015) are inconsistent, with 5 % difference.
- 749) The H298 and A,B data listed in Table 5.4 of Sander et al. (2011) are inconsistent, with 5 % difference.
- 750) The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(100.23590 - 3339.68982/T - 17.66849 \ln(T))$ mol/(m³ Pa) with T in K.
- 751) The data from Scharlin and Battino (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-291.40685 + 14224.53456/T + 40.73325 \ln(T))$ mol/(m³ Pa) with T in K.
- 752) The data from Scharlin and Battino (1994) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-291.40685 + 14224.53456/T + 40.73325 \ln(T))$ mol/(m³ Pa) with T in K.
- 753) The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-147.53824 + 8643.05363/T + 18.97752 \ln(T))$ mol/(m³ Pa) with T in K.
- 754) The data from Scharlin and Battino (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$



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- exp(-211.99699 + 11400.41036/T + 28.66283 ln(T))
mol/(m³ Pa) with *T* in K.
- 755** The data from Scharlin and Battino (1994) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-211.99699 + 11400.41036/T + 28.66283 ln(T))
mol/(m³ Pa) with *T* in K.
- 756** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-278.68448 + 15169.41095/T + 38.36974 ln(T))
mol/(m³ Pa) with *T* in K.
- 757** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-129.78084 + 8533.77911/T + 16.20428 ln(T))
mol/(m³ Pa) with *T* in K.
- 758** The data from Bu and Warner (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-415.59157 + 21411.24346/T + 58.50528 ln(T))
mol/(m³ Pa) with *T* in K.
- 759** The data from Reichl (1995) were fitted to the 3-parameter equation:
 $H_s^{cp} = \exp(0.13353 + 5070.08549/T - 4.84639 \ln(T))$
mol/(m³ Pa) with *T* in K.
- 760** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-113.07654 + 6884.36758/T + 13.75470 ln(T))
mol/(m³ Pa) with *T* in K.
- 761** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-149.62353 + 7869.46528/T + 19.40044 ln(T))
mol/(m³ Pa) with *T* in K.
- 762** The data from Chang and Criddle (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-402.28495 + 20229.16189/T + 57.28419 ln(T))
mol/(m³ Pa) with *T* in K.
- 763** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-277.88370 + 14905.51805/T + 38.38688 ln(T))
mol/(m³ Pa) with *T* in K.
- 764** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-195.56650 + 11207.08869/T + 26.12575 ln(T))
mol/(m³ Pa) with *T* in K.
- 765** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-249.15404 + 13774.89590/T + 34.23234 ln(T))
mol/(m³ Pa) with *T* in K.
- 766** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-210.55601 + 11968.42846/T + 28.54087 ln(T))
mol/(m³ Pa) with *T* in K.
- 767** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-155.04312 + 9704.04801/T + 20.06575 ln(T))
mol/(m³ Pa) with *T* in K.
- 768** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-270.78344 + 14413.03953/T + 37.48366 ln(T))
mol/(m³ Pa) with *T* in K.
- 769** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-184.96240 + 10541.13831/T + 24.70437 ln(T))
mol/(m³ Pa) with *T* in K.
- 770** The data from Chang and Criddle (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-190.58060 + 10602.65774/T + 25.66197 ln(T))
mol/(m³ Pa) with *T* in K.
- 771** The data from Maaßen (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-237.50724 + 13032.41274/T + 32.48569 ln(T))
mol/(m³ Pa) with *T* in K.
- 772** The data from Reichl (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-200.95912 + 11406.81841/T + 27.03092 ln(T))
mol/(m³ Pa) with *T* in K.
- 773** The data from Smith et al. (1981b) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(678.00770 - 27346.39638/T - 103.92351 ln(T))
mol/(m³ Pa) with *T* in K.
- 774** Kanakidou et al. (1995) assume $H_s(\text{CClF}_2\text{OONO}_2) = H_s(\text{PAN})$.
- 775** The H298 and A,B data listed in Table 5-4 of Burkholder et al. (2019) are inconsistent, with 11 % difference.
- 776** The data from De Bruyn and Saltzman (1997) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-521.17646 + 25057.64644/T + 75.60914 ln(T))
mol/(m³ Pa) with *T* in K.
- 777** The data from Glew and Moelwyn-Hughes (1953) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-184.73597 + 10636.09284/T + 25.03175 ln(T))
mol/(m³ Pa) with *T* in K.
- 778** Values at 298 K in Table C2 and C5 of Brockbank (2013) are inconsistent, with 6 % difference.
- 779** The data from Moore et al. (1995) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-395.20167 + 20638.03484/T + 56.40082 ln(T))
mol/(m³ Pa) with *T* in K.
- 780** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} =$
exp(-82.06673 + 6867.92071/T + 9.56720 ln(T))
mol/(m³ Pa) with *T* in K.



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- 781)** The data from Moore et al. (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-408.59491 + 21699.59623/T + 58.19801 \ln(T))$ mol/(m³ Pa) with T in K.
- 782)** The data from Wright et al. (1992) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(1124.79951 - 46767.40872/T - 170.54217 \ln(T))$ mol/(m³ Pa) with T in K.
- 783)** Erratum for page 274 of Fogg and Sangster (2003): The value in the table is k_H , not $\ln k_H$.
- 784)** Value at $T = 50$ K.
- 785)** Rumble (2021) refers to Hiatt (2013) as the source but this value cannot be found there.
- 786)** Haynes (2014) refer to Mackay et al. (1993) as the source but this value cannot be found there.
- 787)** The data from Sarraute et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-370.06283 + 22192.71634/T + 51.12683 \ln(T))$ mol/(m³ Pa) with T in K.
- 788)** Erratum for page 321 of Fogg and Sangster (2003): Data from Yates and Gan (1998) are cited with a typo. The value at 313.2 K should probably be 4.78×10^{-6} , not 4.78×10^{-2} .
- 789)** Ebert et al. (2023) present “curated experimental” Henry's law constants from the literature but do not provide any references. It is only mentioned that the value is from a single original paper and obtained from the experimental octanol/water partition coefficient and the octanol/air partition coefficient.
- 790)** Diaz et al. (2005) also cite a Henry's law constant from Pfeifer et al. (2001) even though this species is not mentioned there. There might be a mix up of the different haloanisoles.
- 791)** Erratum for page 285 of Fogg and Sangster (2003): The data in their table look strange (9.70R) and are not used here.
- 792)** The data from Moore et al. (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-76.31131 + 7250.73360/T + 8.15388 \ln(T))$ mol/(m³ Pa) with T in K.
- 793)** The data from Moore et al. (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-265.18008 + 15516.80509/T + 36.54803 \ln(T))$ mol/(m³ Pa) with T in K.
- 794)** The data from Moore et al. (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-229.06923 + 13418.39257/T + 31.15669 \ln(T))$ mol/(m³ Pa) with T in K.
- 795)** The data from Glew and Moelwyn-Hughes (1953) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-384.31677 + 19391.25580/T + 54.93602 \ln(T))$ mol/(m³ Pa) with T in K.
- 796)** The data from Moore et al. (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-247.93525 + 14910.30572/T + 34.08071 \ln(T))$ mol/(m³ Pa) with T in K.
- 797)** The regression given by Fogg and Sangster (2003) does not produce the data in their table. Thus the regression was recalculated.
- 798)** The value listed as A for iodobenzene is probably not A but the Henry's law volatility constant H_v^{px} at 298 K. For the value of B , a minus sign is probably missing.
- 799)** The data from Moore et al. (1995) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-242.58767 + 14043.89458/T + 33.48497 \ln(T))$ mol/(m³ Pa) with T in K.
- 800)** Karagodin-Doyennel et al. (2021) probably assume that CH₂BrI has the same Henry's law constant as CH₂ClI.
- 801)** The data from Haimi et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-266.45850 + 15036.99733/T + 36.80758 \ln(T))$ mol/(m³ Pa) with T in K.
- 802)** Yaws et al. (2003) present Henry's law constants based on water solubility and vapor pressure. The water solubility is calculated using a correlation to the boiling point. For the vapor pressures, no references are provided.
- 803)** The data from Zin et al. (2016) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-419.66332 + 22034.35758/T + 59.55571 \ln(T))$ mol/(m³ Pa) with T in K.
- 804)** The data from Haimi et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-166.97891 + 10357.07398/T + 22.04420 \ln(T))$ mol/(m³ Pa) with T in K.
- 805)** The data from Haimi et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-406.56800 + 21428.82541/T + 57.60207 \ln(T))$ mol/(m³ Pa) with T in K.
- 806)** The data from Zin et al. (2016) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(10.26074 + 2303.75755/T - 4.36399 \ln(T))$ mol/(m³ Pa) with T in K.
- 807)** Presumably, the species called “42-methyl-2-butanethiol” in Table 1 of Yao et al. (2002) should be 2-methyl-2-butanethiol.
- 808)** Schäfer and Lax (1962) present data based on Booth and Jolley (1943). However, these data appear to be incorrect.



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- 809)** Booth and Jolley (1943) converted data from Rex (1906) to another unit. However, this was apparently not done correctly.
- 810)** Booth and Jolley (1943) present data from Chancel and Parmentier (1885). However, in that paper only the solubility at an unknown partial pressure of CS₂ was measured.
- 811)** Value extracted from their Figure 46.
- 812)** The data from Haimi et al. (2006) were fitted to the 3-parameter equation: $H_s^{cp} = \exp(-233.39763 + 13839.16150/T + 31.85189 \ln(T))$ mol/(m³ Pa) with T in K.
- 813)** $H_s' = 6.4 \times 10^{14} \frac{\text{mol}^2}{\text{m}^6 \text{ Pa}}$
- 814)** It is unclear how Fogg and Sangster (2003) obtained the data. Apparently, limiting activity coefficients γ^∞ were taken from Trampe and Eckert (1993) but a source for vapor pressure data is not mentioned. Also, the γ^∞ values listed in the table are different from those found in the original paper.
- 815)** At pH 3.9.
- 816)** At pH 4.8.
- 817)** Mackay et al. (2006d) list two values for thiobencarb which differ by a large factor. It is unclear which number is correct (if any) and the data are not reproduced here.
- 818)** Extrapolated from data at elevated temperatures.
- 819)** Calculated using HENRYWIN 3.21.
- 820)** Calculated using vapor pressures and water solubilities from HENRYWIN 3.21.
- 821)** Calculated using vapor pressures and water solubilities from the EPA Toxicity Estimation Software Tool (TEST).
- 822)** Wilhelm et al. (1977) and Abraham (1979) are quoted as the source. However, the data cannot be found there.
- 823)** Shon et al. (2005) refer to Petersen et al. (1998) as the source but this value cannot be found there.
- 824)** The value from their experiment 7 at 10 °C is not used in the determination of the temperature dependence because of very different ionic strengths and concentrations for that experiment.
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