Cyclohexane, 1,4-dichloro-

Other names:	1,4-Dichlorocyclohexane
	1,4-Dichlorocyclohexane,c&t
Inchi:	InChI=1S/C6H10Cl2/c7-5-1-2-6(8)4-3-5/h5-6H,1-4H2
InchiKey:	WQTINZDWAXJLGH-UHFFFAOYSA-N
Formula:	C6H10Cl2
SMILES:	ClC1CCC(Cl)CC1
Mol. weight [g/mol]:	153.05
CAS:	19398-57-3

Physical Properties

Property code	Value	Unit	Source
gf	-7.48	kJ/mol	Joback Method
hf	-164.67	kJ/mol	Joback Method
hfus	12.60	kJ/mol	Joback Method
hvap	37.84	kJ/mol	Joback Method
log10ws	-2.76		Crippen Method
logp	2.775		Crippen Method
mcvol	109.020	ml/mol	McGowan Method
pc	3476.55	kPa	Joback Method
tb	426.42	K	Joback Method
tc	646.96	K	Joback Method
tf	220.36	K	Joback Method
vc	0.402	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	267.11	J/mol×K	646.96	Joback Method
cpg	192.32	J/mol×K	426.42	Joback Method
cpg	206.66	J/mol×K	463.18	Joback Method
cpg	220.23	J/mol×K	499.93	Joback Method
cpg	233.04	J/mol×K	536.69	Joback Method
cpg	245.11	J/mol×K	573.44	Joback Method
cpg	256.46	J/mol×K	610.20	Joback Method

dvisc	0.0003626	Pa×s	426.42	Joback Method
dvisc	0.0039986	Pa×s	220.36	Joback Method
dvisc	0.0020466	Pa×s	254.70	Joback Method
dvisc	0.0012282	Pa×s	289.05	Joback Method
dvisc	0.0008215	Pa×s	323.39	Joback Method
dvisc	0.0005936	Pa×s	357.73	Joback Method
dvisc	0.0004540	Pa×s	392.08	Joback Method
hvapt	47.80	kJ/mol	379.50	NIST Webbook

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C19398573&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:
https://www.chemeo.com/cid/76-831-5/Cyclohexane-1-4-dichloro.pdf
Generated by Cheméo on 2024-04-27 21:36:05.608938909 +0000 UTC m=+16543014.529516224.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.