

Cyclohexane, 1,4-dichloro-, cis-

Other names:	cis-1,4-Dichlorocyclohexane (Z)-1,4-Dichlorocyclohexane
Inchi:	InChI=1S/C6H10Cl2/c7-5-1-2-6(8)4-3-5/h5-6H,1-4H2/t5-,6+
InchiKey:	WQTINZDWAXJLGH-OLQVQODUSA-N
Formula:	C6H10Cl2
SMILES:	C1C1CCC(Cl)CC1
Mol. weight [g/mol]:	153.05
CAS:	16749-11-4

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
mvol	109.020	ml/mol	McGowan Method
pc	3476.55	kPa	Joback Method
rinpol	1084.00		NIST Webbook
rinpol	1106.00		NIST Webbook
rinpol	1106.00		NIST Webbook
rinpol	1084.00		NIST Webbook
rinpol	1084.00		NIST Webbook
tb	426.42	K	Joback Method
tc	646.96	K	Joback Method
tf	291.00 ± 3.00	K	NIST Webbook
vc	0.402	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	192.32	J/mol×K	426.42	Joback Method
cpg	256.46	J/mol×K	610.20	Joback Method

cpg	245.11	J/mol×K	573.44	Joback Method
cpg	233.04	J/mol×K	536.69	Joback Method
cpg	220.23	J/mol×K	499.93	Joback Method
cpg	206.66	J/mol×K	463.18	Joback Method
cpg	267.11	J/mol×K	646.96	Joback Method
dvisc	0.0003626	Paxs	426.42	Joback Method
dvisc	0.0004540	Paxs	392.08	Joback Method
dvisc	0.0005936	Paxs	357.73	Joback Method
dvisc	0.0008215	Paxs	323.39	Joback Method
dvisc	0.0012282	Paxs	289.05	Joback Method
dvisc	0.0020466	Paxs	254.70	Joback Method
dvisc	0.0039986	Paxs	220.36	Joback Method

Sources

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=C16749114&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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