Cyclohexane, 1,2-dimethoxy-, cis-

Other names:	cis-1,2-Dimethoxycyclohexane
	(Z)-1,2-Dimethoxycyclohexane
Inchi:	InChI=1S/C8H16O2/c1-9-7-5-3-4-6-8(7)10-2/h7-8H,3-6H2,1-2H3/t7-,8+
InchiKey:	BSGBGTJQKZSUTQ-OCAPTIKFSA-N
Formula:	C8H16O2
SMILES:	COC1CCCCC1OC
Mol. weight [g/mol]:	144.21
CAS:	30363-80-5

Physical Properties

Property code	Value	Unit	Source
gf	-176.78	kJ/mol	Joback Method
hf	-438.91	kJ/mol	Joback Method
hfus	11.76	kJ/mol	Joback Method
hvap	38.34	kJ/mol	Joback Method
ie	8.60	eV	NIST Webbook
ie	9.24	eV	NIST Webbook
log10ws	-1.46		Crippen Method
logp	1.590		Crippen Method
mcvol	124.460	ml/mol	McGowan Method
pc	2928.17	kPa	Joback Method
tb	442.16	K	Joback Method
tc	640.94	K	Joback Method
tf	227.52	K	Joback Method
vc	0.452	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	265.22	J/mol×K	442.16	Joback Method
cpg	282.04	J/mol×K	475.29	Joback Method
cpg	298.26	J/mol×K	508.42	Joback Method
cpg	313.85	J/mol×K	541.55	Joback Method
cpg	328.82	J/mol×K	574.68	Joback Method

cpg	343.15	J/mol×K	607.81	Joback Method
cpg	356.83	J/mol×K	640.94	Joback Method
dvisc	0.0026727	Pa×s	227.52	Joback Method
dvisc	0.0013175	Pa×s	263.29	Joback Method
dvisc	0.0007692	Pa×s	299.07	Joback Method
dvisc	0.0005038	Pa×s	334.84	Joback Method
dvisc	0.0003581	Pa×s	370.61	Joback Method
dvisc	0.0002703	Pa×s	406.39	Joback Method
dvisc	0.0002135	Pa×s	442.16	Joback Method

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=C30363805&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
ie: Ionization energy
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