1-Chloro-2-ethoxyethane

Other names:	2-Chloroethyl ethyl ether
	«beta»-Chloroethyl ethyl ether
	2-Chlorodiethyl ether
	Ethane, 1-chloro-2-ethoxy-
	Ether, 2-chloroethyl ethyl
	2-Chloroethoxyethane
	2-Ethoxyethyl chloride
	Ethyl «beta»-chloroethyl ether
Inchi:	InChI=1S/C4H9ClO/c1-2-6-4-3-5/h2-4H2,1H3
InchiKey:	GPTVQTPMFOLLOA-UHFFFAOYSA-N
Formula:	C4H9ClO
SMILES:	CCOCCCl
Mol. weight [g/mol]:	108.57
CAS:	628-34-2

Physical Properties

Property code	Value	Unit	Source
gf	-134.13	kJ/mol	Joback Method
hf	-297.10 ± 2.30	kJ/mol	NIST Webbook
hfl	-335.60 ± 2.30	kJ/mol	NIST Webbook
hfus	11.50	kJ/mol	Joback Method
hvap	34.00	kJ/mol	NIST Webbook
log10ws	-0.74		Crippen Method
logp	1.262		Crippen Method
mcvol	85.330	ml/mol	McGowan Method
pc	3646.53	kPa	Joback Method
rinpol	706.20		NIST Webbook
rinpol	706.00		NIST Webbook
rinpol	706.00		NIST Webbook
rinpol	704.90		NIST Webbook
tb	371.70 ± 0.60	K	NIST Webbook
tb	380.70	K	NIST Webbook
tc	524.29	K	Joback Method
tf	186.99	K	Joback Method
vc	0.327	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	139.39	J/mol×K	350.77	Joback Method
cpg	173.37	J/mol×K	495.37	Joback Method
cpg	166.96	J/mol×K	466.45	Joback Method
cpg	160.36	J/mol×K	437.53	Joback Method
cpg	153.56	J/mol×K	408.61	Joback Method
cpg	146.57	J/mol×K	379.69	Joback Method
cpg	179.58	J/mol×K	524.29	Joback Method
dvisc	0.0002651	Pa×s	350.77	Joback Method
dvisc	0.0003356	Pa×s	323.47	Joback Method
dvisc	0.0004438	Pa×s	296.18	Joback Method
dvisc	0.0006211	Pa×s	268.88	Joback Method
dvisc	0.0009378	Pa×s	241.58	Joback Method
dvisc	0.0015726	Pa×s	214.29	Joback Method
dvisc	0.0030669	Pa×s	186.99	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C628342&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfl: Liquid phase 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