Ethanol, 2-(2-chloroethoxy)-

Other names:	Diglycol chlorohydrin
	2-(2-Chloroethoxy)ethanol
	2-Chloroethyl 2-hydroxyethyl ether
	Diethylene glycol monochlorohydrin
	Diglycol chlorhydrin
	2-(2'-Chloroethoxy)ethanol
Inchi:	InChI=1S/C4H9ClO2/c5-1-3-7-4-2-6/h6H,1-4H2
InchiKey:	LECMBPWEOVZHKN-UHFFFAOYSA-N
Formula:	C4H9ClO2
SMILES:	OCCOCCCl
Mol. weight [g/mol]:	124.57
CAS:	628-89-7

Physical Properties

Property code	Value	Unit	Source
gf	-270.95	kJ/mol	Joback Method
hf	-426.08	kJ/mol	Joback Method
hfus	15.59	kJ/mol	Joback Method
hvap	47.97	kJ/mol	Joback Method
log10ws	-8.09e-04		Crippen Method
logp	0.234		Crippen Method
mcvol	91.200	ml/mol	McGowan Method
pc	4088.15	kPa	Joback Method
tb	442.95	K	Joback Method
tc	612.25	K	Joback Method
tf	247.81	K	Joback Method
vc	0.345	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	176.84	J/mol×K	442.95	Joback Method
cpg	183.60	J/mol×K	471.17	Joback Method
cpg	190.14	J/mol×K	499.38	Joback Method

cpg	196.48	J/mol×K	527.60	Joback Method
cpg	202.60	J/mol×K	555.82	Joback Method
cpg	208.51	J/mol×K	584.04	Joback Method
cpg	214.21	J/mol×K	612.25	Joback Method
dvisc	0.0291766	Pa×s	247.81	Joback Method
dvisc	0.0082423	Pa×s	280.33	Joback Method
dvisc	0.0030283	Pa×s	312.86	Joback Method
dvisc	0.0013435	Pa×s	345.38	Joback Method
dvisc	0.0006856	Pa×s	377.90	Joback Method
dvisc	0.0003892	Pa×s	410.43	Joback Method
dvisc	0.0002401	Pa×s	442.95	Joback Method
hvapt	59.80	kJ/mol	397.50	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	353.20	K	0.70	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=C628897&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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume