Ether, bis(1-chloroethyl)

Inchi: InChI=1S/C4H8Cl2O/c1-3(5)7-4(2)6/h3-4H,1-2H3
InchiKey: OBQPKGCVMCIETH-UHFFFAOYSA-N
Formula: C4H8Cl2O
SMILES: CC(Cl)OC(C)Cl
Mol. weight [g/mol]: 143.01
CAS: 6986-48-7

Physical Properties

Property code	Value	Unit	Source
gf	-150.94	kJ/mol	Joback Method
hf	-300.15	kJ/mol	Joback Method
hfus	8.65	kJ/mol	Joback Method
hvap	34.90	kJ/mol	Joback Method
log10ws	-2.10		Crippen Method
logp	2.173		Crippen Method
mcvol	97.570	ml/mol	McGowan Method
pc	3555.77	kPa	Joback Method
rinpol	775.00		NIST Webbook
rinpol	772.00		NIST Webbook
tb	387.32	K	Joback Method
tc	578.45	K	Joback Method
tf	186.91	K	Joback Method
vc	0.363	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	161.61	J/mol×K	387.32	Joback Method
cpg	169.28	J/mol×K	419.18	Joback Method
cpg	176.67	J/mol×K	451.03	Joback Method
cpg	183.80	J/mol×K	482.89	Joback Method
cpg	190.66	J/mol×K	514.74	Joback Method
cpg	197.25	J/mol×K	546.60	Joback Method
cpg	203.57	J/mol×K	578.45	Joback Method

dvisc	0.0086517	Pa×s	186.91	Joback Method
dvisc	0.0031967	Pa×s	220.31	Joback Method
dvisc	0.0015352	Pa×s	253.71	Joback Method
dvisc	0.0008744	Pa×s	287.12	Joback Method
dvisc	0.0005601	Pa×s	320.52	Joback Method
dvisc	0.0003902	Pa×s	353.92	Joback Method
dvisc	0.0002893	Pa×s	387.32	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=C6986487&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