«alpha»,«alpha»-Dichloromethyl methyl ether

Other names:	(Dichloromethyl)methyl ether
	CH3OCHCl2
	1,1-Dichloromethylmethyl ether
	Methane, dichloromethoxy-
	Dichloromethoxymethane
	Ether, dichloromethyl methyl
	«alpha»,«alpha»-Dichloromethyl ether
	Methyl dichloromethyl ether
Inchi:	InChI=1S/C2H4Cl2O/c1-5-2(3)4/h2H,1H3
InchiKey:	GRTGGSXWHGKRSB-UHFFFAOYSA-N
Formula:	C2H4Cl2O
SMILES:	COC(Cl)Cl
Mol. weight [g/mol]:	114.96
CAS:	4885-02-3

Physical Properties

Property code	Value	Unit	Source
gf	-165.34	kJ/mol	Joback Method
hf	-253.59	kJ/mol	Joback Method
hfus	7.00	kJ/mol	Joback Method
hvap	30.84	kJ/mol	Joback Method
log10ws	-1.16		Crippen Method
logp	1.394		Crippen Method
mcvol	69.390	ml/mol	McGowan Method
pc	4486.22	kPa	Joback Method
tb	342.00	K	Joback Method
tc	530.03	K	Joback Method
tf	179.37	K	Joback Method
vc	0.258	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	98.92	J/mol×K	342.00	Joback Method

cpg	117.99	J/mol×K	498.69	Joback Method
cpg	114.38	J/mol×K	467.35	Joback Method
cpg	110.66	J/mol×K	436.02	Joback Method
cpg	106.84	J/mol×K	404.68	Joback Method
cpg	102.92	J/mol×K	373.34	Joback Method
cpg	121.50	J/mol×K	530.03	Joback Method
dvisc	0.0003110	Pa×s	342.00	Joback Method
dvisc	0.0004002	Pa×s	314.89	Joback Method
dvisc	0.0005399	Pa×s	287.79	Joback Method
dvisc	0.0007752	Pa×s	260.69	Joback Method
dvisc	0.0012106	Pa×s	233.58	Joback Method
dvisc	0.0021252	Pa×s	206.47	Joback Method
dvisc	0.0044225	Pa×s	179.37	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=C4885023&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume