2,2,2-Trichloro-1-ethoxy ethanol

Other names: Ethanol, 2,2,2-trichloro-1-ethoxy-
Inchi: InChI=1S/C4H7Cl3O2/c1-2-9-3(8)4(5,6)7/h3,8H,2H2,1H3
InchiKey: DLHWKJDYXPNWAI-UHFFFAOYSA-N
Formula: C4H7Cl3O2
SMILES: CCOC(O)C(Cl)(Cl)Cl
Mol. weight [g/mol]: 193.46
CAS: 515-83-3

Physical Properties

Property code	Value	Unit	Source
gf	-294.41	kJ/mol	Joback Method
hf	-471.59	kJ/mol	Joback Method
hfus	13.05	kJ/mol	Joback Method
hvap	55.06	kJ/mol	Joback Method
log10ws	-2.02		Crippen Method
logp	1.712		Crippen Method
mcvol	115.680	ml/mol	McGowan Method
pc	3853.09	kPa	Joback Method
tb	514.14	K	Joback Method
tc	709.76	K	Joback Method
tf	300.00 ± 1.00	K	NIST Webbook
vc	0.426	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	222.93	J/mol×K	514.14	Joback Method
cpg	253.36	J/mol×K	677.15	Joback Method
cpg	248.06	J/mol×K	644.55	Joback Method
cpg	242.38	J/mol×K	611.95	Joback Method
cpg	236.32	J/mol×K	579.35	Joback Method
cpg	229.84	J/mol×K	546.74	Joback Method
cpg	258.30	J/mol×K	709.76	Joback Method
dvisc	0.0001528	Pa×s	514.14	Joback Method

dvisc	0.0002503	Pa×s	477.63	Joback Method
dvisc	0.0004451	Pa×s	441.12	Joback Method
dvisc	0.0008781	Pa×s	404.61	Joback Method
dvisc	0.0019822	Pa×s	368.09	Joback Method
dvisc	0.0053531	Pa×s	331.58	Joback Method
dvisc	0.0184865	Pa×s	295.07	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=C515833&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