Ethyleneglycol bischloro acetate

Other names:	1,2-Bis(chloroacetoxy)ethane
	Ethylene glycol dichloroacetate
	Acetic acid, chloro-, 1,2-ethanediyl ester
	2-[(2-Chloroacetyl)oxy]ethyl chloroacetate
	ethylene bis(chloroacetate)
Inchi:	InChI=1S/C6H8Cl2O4/c7-3-5(9)11-1-2-12-6(10)4-8/h1-4H2
InchiKey:	HIIBHBNRMVLLKH-UHFFFAOYSA-N
Formula:	C6H8Cl2O4
SMILES:	O=C(CCl)OCCOC(=O)CCl
Mol. weight [g/mol]:	215.03
CAS:	6941-69-1

Physical Properties

Property code	Value	Unit	Source
gf	-492.06	kJ/mol	Joback Method
hf	-688.25	kJ/mol	Joback Method
hfus	25.26	kJ/mol	Joback Method
hvap	56.03	kJ/mol	Joback Method
log10ws	-0.37		Crippen Method
logp	0.550		Crippen Method
mcvol	134.760	ml/mol	McGowan Method
pc	3170.40	kPa	Joback Method
tb	564.12	K	Joback Method
tc	761.85	K	Joback Method
tf	361.54	K	Joback Method
vc	0.517	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	281.79	J/mol×K	564.12	Joback Method
cpg	290.27	J/mol×K	597.07	Joback Method
cpg	298.38	J/mol×K	630.03	Joback Method
cpg	306.10	J/mol×K	662.98	Joback Method

cpg	313.43	J/mol×K	695.94	Joback Method
cpg	320.35	J/mol×K	728.89	Joback Method
cpg	326.85	J/mol×K	761.85	Joback Method
dvisc	0.0017983	Pa×s	361.54	Joback Method
dvisc	0.0011333	Pa×s	395.30	Joback Method
dvisc	0.0007680	Pa×s	429.07	Joback Method
dvisc	0.0005508	Pa×s	462.83	Joback Method
dvisc	0.0004134	Pa×s	496.59	Joback Method
dvisc	0.0003217	Pa×s	530.36	Joback Method
dvisc	0.0002581	Pa×s	564.12	Joback Method
hvapt	73.90	kJ/mol	471.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6941691&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
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
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume