2-Hydroxyethyl alpha,alpha-dichloro propionate

Inchi: InChI=1S/C5H8Cl2O3/c1-5(6,7)4(9)10-3-2-8/h8H,2-3H2,1H3
InchiKey: YGFNQSRYXGZCGF-UHFFFAOYSA-N
Formula: C5H8Cl2O3
SMILES: CC(Cl)(Cl)C(=O)OCCO
Mol. weight [g/mol]: 187.02
CAS: 90139-63-2

Physical Properties

Property code	Value	Unit	Source
gf	-400.54	kJ/mol	Joback Method
hf	-583.79	kJ/mol	Joback Method
hfus	16.56	kJ/mol	Joback Method
hvap	60.03	kJ/mol	Joback Method
log10ws	-0.95		Crippen Method
logp	0.716		Crippen Method
mcvol	119.100	ml/mol	McGowan Method
pc	3834.03	kPa	Joback Method
tb	553.90	K	Joback Method
tc	746.77	K	Joback Method
tf	341.35	K	Joback Method
vc	0.446	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	251.94	J/mol×K	553.90	Joback Method
cpg	259.37	J/mol×K	586.04	Joback Method
cpg	266.35	J/mol×K	618.19	Joback Method
cpg	272.91	J/mol×K	650.33	Joback Method
cpg	279.06	J/mol×K	682.48	Joback Method
cpg	284.82	J/mol×K	714.62	Joback Method
cpg	290.21	J/mol×K	746.77	Joback Method
dvisc	0.0061695	Pa×s	341.35	Joback Method
dvisc	0.0023839	Pa×s	376.78	Joback Method

dvisc	0.0010847	Pa×s	412.20	Joback Method
dvisc	0.0005590	Pa×s	447.62	Joback Method
dvisc	0.0003175	Pa×s	483.05	Joback Method
dvisc	0.0001949	Pa×s	518.47	Joback Method
dvisc	0.0001273	Pa×s	553.90	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=C90139632&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

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