Diethylmalonic acid, monochloride, 2-ethoxylethyl ester

Inchi: InChI=1S/C11H19ClO4/c1-4-11(5-2,9(12)13)10(14)16-8-7-15-6-3/h4-8H2,1-3H3
InchiKey: UXDKYJTWVBMUJP-UHFFFAOYSA-N
Formula: C11H19ClO4
SMILES: CCOCCOC(=O)C(CC)(CC)C(=O)Cl
Mol. weight [g/mol]: 250.72

Physical Properties

Property code	Value	Unit	Source
gf	-435.19	kJ/mol	Joback Method
hf	-784.46	kJ/mol	Joback Method
hfus	26.60	kJ/mol	Joback Method
hvap	61.48	kJ/mol	Joback Method
log10ws	-2.06		Crippen Method
logp	2.138		Crippen Method
mcvol	192.970	ml/mol	McGowan Method
pc	2066.12	kPa	Joback Method
rinpol	1409.00		NIST Webbook
tb	637.86	K	Joback Method
tc	829.59	K	Joback Method
tf	390.39	K	Joback Method
vc	0.738	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	496.77	J/mol×K	637.86	Joback Method
cpg	558.10	J/mol×K	797.63	Joback Method
cpg	547.25	J/mol×K	765.68	Joback Method
cpg	535.70	J/mol×K	733.72	Joback Method
cpg	523.45	J/mol×K	701.77	Joback Method
cpg	510.48	J/mol×K	669.81	Joback Method
cpg	568.26	J/mol×K	829.59	Joback Method
dvisc	0.0001367	Pa×s	637.86	Joback Method
dvisc	0.0001791	Pa×s	596.61	Joback Method

dvisc	0.0002444	Pa×s	555.37	Joback Method
dvisc	0.0003504	Pa×s	514.12	Joback Method
dvisc	0.0005350	Pa×s	472.88	Joback Method
dvisc	0.0008856	Pa×s	431.63	Joback Method
dvisc	0.0016310	Pa×s	390.39	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U370619&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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