Diethylmalonic acid, di(2-methoxyethyl) ester

Inchi: InChI=1S/C13H24O6/c1-5-13(6-2,11(14)18-9-7-16-3)12(15)19-10-8-17-4/h5-10H2,1-4H3
InchiKey: GTGKJDYHUYAMQT-UHFFFAOYSA-N
Formula: C13H24O6
SMILES: CCC(CC)(C(=O)OCCOC)C(=O)OCCOC
Mol. weight [g/mol]: 276.33

Physical Properties

Property code	Value	Unit	Source
gf	-616.42	kJ/mol	Joback Method
hf	-1074.44	kJ/mol	Joback Method
hfus	29.96	kJ/mol	Joback Method
hvap	66.37	kJ/mol	Joback Method
log10ws	-0.92		Crippen Method
logp	1.172		Crippen Method
mcvol	220.650	ml/mol	McGowan Method
pc	1752.14	kPa	Joback Method
rinpol	1620.00		NIST Webbook
tb	691.03	K	Joback Method
tc	874.39	K	Joback Method
tf	427.47	K	Joback Method
vc	0.837	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	627.24	J/mol×K	691.03	Joback Method
cpg	642.37	J/mol×K	721.59	Joback Method
cpg	656.72	J/mol×K	752.15	Joback Method
cpg	670.27	J/mol×K	782.71	Joback Method
cpg	683.03	J/mol×K	813.27	Joback Method
cpg	694.99	J/mol×K	843.83	Joback Method
cpg	706.15	J/mol×K	874.39	Joback Method
dvisc	0.0007922	Pa×s	427.47	Joback Method
dvisc	0.0004345	Pa×s	471.40	Joback Method

dvisc	0.0002640	Pa×s	515.32	Joback Method
dvisc	0.0001734	Pa×s	559.25	Joback Method
dvisc	0.0001211	Pa×s	603.18	Joback Method
dvisc	0.0000888	Pa×s	647.10	Joback Method
dvisc	0.0000678	Pa×s	691.03	Joback Method

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U370685&Units=SI

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