di-(1-Methyl-2-methoxybutyl)oxalate

Inchi: InChI=1S/C12H22O6/c1-7(15-5)9(3)17-11(13)12(14)18-10(4)8(2)16-6/h7-10H,1-6H3
InchiKey: WOHVUTCPBIZWDN-UHFFFAOYSA-N
Formula: C12H22O6
SMILES: COC(C)C(C)OC(=O)C(=O)OC(C)C(C)OC
Mol. weight [g/mol]: 262.30

Physical Properties

Property code	Value	Unit	Source
gf	-637.44	kJ/mol	Joback Method
hf	-1066.17	kJ/mol	Joback Method
hfus	20.69	kJ/mol	Joback Method
hvap	63.89	kJ/mol	Joback Method
log10ws	-1.19		Crippen Method
logp	0.920		Crippen Method
mcvol	206.560	ml/mol	McGowan Method
pc	1923.67	kPa	Joback Method
rinpol	1375.00		NIST Webbook
rinpol	1375.00		NIST Webbook
tb	669.62	K	Joback Method
tc	857.34	K	Joback Method
tf	353.78	K	Joback Method
vc	0.767	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	572.73	J/mol×K	669.62	Joback Method
cpg	641.17	J/mol×K	826.05	Joback Method
cpg	629.08	J/mol×K	794.76	Joback Method
cpg	616.17	J/mol×K	763.48	Joback Method
cpg	602.46	J/mol×K	732.19	Joback Method
cpg	587.97	J/mol×K	700.91	Joback Method
cpg	652.43	J/mol×K	857.34	Joback Method
dvisc	0.0000677	Pa×s	669.62	Joback Method

dvisc	0.0000939	Pa×s	616.98	Joback Method
dvisc	0.0001385	Pa×s	564.34	Joback Method
dvisc	0.0002214	Pa×s	511.70	Joback Method
dvisc	0.0003941	Pa×s	459.06	Joback Method
dvisc	0.0008143	Pa×s	406.42	Joback Method
dvisc	0.0020884	Pa×s	353.78	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R541854&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
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