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

Inchi: InChI=1S/C15H28O6/c1-10(18-5)12(3)20-14(16)8-7-9-15(17)21-13(4)11(2)19-6/h10-13H
InchiKey: WADRIZWFKOCMFR-UHFFFAOYSA-N
Formula: C15H28O6
SMILES: COC(C)C(C)OC(=O)CCCC(=O)OC(C)C(C)OC
Mol. weight [g/mol]: 304.38

Physical Properties

Property code	Value	Unit	Source
gf	-612.18	kJ/mol	Joback Method
hf	-1128.09	kJ/mol	Joback Method
hfus	28.46	kJ/mol	Joback Method
hvap	70.56	kJ/mol	Joback Method
log10ws	-2.45		Crippen Method
logp	2.090		Crippen Method
mcvol	248.830	ml/mol	McGowan Method
pc	1516.39	kPa	Joback Method
rinpol	1684.00		NIST Webbook
tb	738.26	K	Joback Method
tc	923.66	K	Joback Method
tf	387.59	K	Joback Method
vc	0.935	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	738.27	J/mol×K	738.26	Joback Method
cpg	754.75	J/mol×K	769.16	Joback Method
cpg	770.29	J/mol×K	800.06	Joback Method
cpg	784.88	J/mol×K	830.96	Joback Method
cpg	798.52	J/mol×K	861.86	Joback Method
cpg	811.18	J/mol×K	892.76	Joback Method
cpg	822.85	J/mol×K	923.66	Joback Method
dvisc	0.0014663	Pa×s	387.59	Joback Method
dvisc	0.0005585	Pa×s	446.04	Joback Method

dvisc	0.0002661	Pa×s	504.48	Joback Method
dvisc	0.0001479	Pa×s	562.92	Joback Method
dvisc	0.0000918	Pa×s	621.37	Joback Method
dvisc	0.0000618	Pa×s	679.82	Joback Method
dvisc	0.0000443	Pa×s	738.26	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=R541834&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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