Glutaric acid, di(2-methoxyethyl) ester

Inchi: InChI=1S/C11H20O6/c1-14-6-8-16-10(12)4-3-5-11(13)17-9-7-15-2/h3-9H2,1-2H3
InchiKey: WJASGJGCRFUEGM-UHFFFAOYSA-N
Formula: C11H20O6
SMILES: COCCOC(=O)CCCC(=O)OCCOC
Mol. weight [g/mol]: 248.27

Physical Properties

Property code	Value	Unit	Source
gf	-636.10	kJ/mol	Joback Method
hf	-1024.41	kJ/mol	Joback Method
hfus	32.20	kJ/mol	Joback Method
hvap	63.21	kJ/mol	Joback Method
log10ws	-0.33		Crippen Method
logp	0.536		Crippen Method
mcvol	192.470	ml/mol	McGowan Method
pc	2036.39	kPa	Joback Method
rinpol	1773.00		NIST Webbook
tb	648.50	K	Joback Method
tc	826.29	K	Joback Method
tf	402.51	K	Joback Method
vc	0.736	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	518.26	J/mol×K	648.50	Joback Method
cpg	531.93	J/mol×K	678.13	Joback Method
cpg	545.01	J/mol×K	707.76	Joback Method
cpg	557.49	J/mol×K	737.39	Joback Method
cpg	569.34	J/mol×K	767.02	Joback Method
cpg	580.56	J/mol×K	796.66	Joback Method
cpg	591.13	J/mol×K	826.29	Joback Method
dvisc	0.0009290	Pa×s	402.51	Joback Method
dvisc	0.0005444	Pa×s	443.51	Joback Method

dvisc	0.0003492	Pa×s	484.51	Joback Method
dvisc	0.0002401	Pa×s	525.50	Joback Method
dvisc	0.0001743	Pa×s	566.50	Joback Method
dvisc	0.0001321	Pa×s	607.50	Joback Method
dvisc	0.0001037	Pa×s	648.50	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=U360116&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

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