Glutaric acid, decyl 2-methoxyethyl ester

Inchi: InChI=1S/C18H34O5/c1-3-4-5-6-7-8-9-10-14-22-17(19)12-11-13-18(20)23-16-15-21-2/h3
InchiKey: VCAJATMBZKGXPJ-UHFFFAOYSA-N
Formula: C18H34O5
SMILES: CCCCCCCCCCOC(=O)CCCC(=O)OCCOC
Mol. weight [g/mol]: 330.46

Physical Properties

Property code	Value	Unit	Source
gf	-472.16	kJ/mol	Joback Method
hf	-1036.67	kJ/mol	Joback Method
hfus	49.14	kJ/mol	Joback Method
hvap	76.38	kJ/mol	Joback Method
log10ws	-4.17		Crippen Method
logp	4.030		Crippen Method
mcvol	285.230	ml/mol	McGowan Method
pc	1213.20	kPa	Joback Method
rinpol	2328.00		NIST Webbook
tb	786.24	K	Joback Method
tc	967.32	K	Joback Method
tf	459.17	K	Joback Method
vc	1.109	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	880.48	J/mol×K	786.24	Joback Method
cpg	897.68	J/mol×K	816.42	Joback Method
cpg	913.92	J/mol×K	846.60	Joback Method
cpg	929.18	J/mol×K	876.78	Joback Method
cpg	943.48	J/mol×K	906.96	Joback Method
cpg	956.81	J/mol×K	937.14	Joback Method
cpg	969.19	J/mol×K	967.32	Joback Method
dvisc	0.0007129	Pa×s	459.17	Joback Method
dvisc	0.0003677	Pa×s	513.68	Joback Method

dvisc	0.0002154	Pa×s	568.19	Joback Method
dvisc	0.0001386	Pa×s	622.71	Joback Method
dvisc	0.0000957	Pa×s	677.22	Joback Method
dvisc	0.0000698	Pa×s	731.73	Joback Method
dvisc	0.0000532	Pa×s	786.24	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360107&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

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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