Glutaric acid, di(5-methoxy-3-methylpent-2-yl) ester

Inchi: InChI=1S/C19H36O6/c1-14(10-12-22-5)16(3)24-18(20)8-7-9-19(21)25-17(4)15(2)11-13-2
InchiKey: NOSJUDZCWKZBHB-UHFFFAOYSA-N
Formula: C19H36O6
SMILES: COCCC(C)C(C)OC(=O)CCCC(=O)OC(C)C(C)CCOC
Mol. weight [g/mol]: 360.49

Physical Properties

Property code	Value	Unit	Source
gf	-578.50	kJ/mol	Joback Method
hf	-1210.65	kJ/mol	Joback Method
hfus	38.82	kJ/mol	Joback Method
hvap	79.47	kJ/mol	Joback Method
log10ws	-3.42		Crippen Method
logp	3.365		Crippen Method
mcvol	305.190	ml/mol	McGowan Method
pc	1147.54	kPa	Joback Method
rinpol	2323.00		NIST Webbook
rinpol	2323.00		NIST Webbook
tb	829.78	K	Joback Method
tc	1019.91	K	Joback Method
tf	432.67	K	Joback Method
vc	1.159	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	973.40	J/mol×K	829.78	Joback Method
cpg	991.02	J/mol×K	861.47	Joback Method
cpg	1007.43	J/mol×K	893.16	Joback Method
cpg	1022.62	J/mol×K	924.85	Joback Method
cpg	1036.59	J/mol×K	956.53	Joback Method
cpg	1049.33	J/mol×K	988.22	Joback Method
cpg	1060.83	J/mol×K	1019.91	Joback Method
dvisc	0.0008685	Pa×s	432.67	Joback Method

dvisc	0.0003224	Pa×s	498.86	Joback Method
dvisc	0.0001510	Pa×s	565.04	Joback Method
dvisc	0.0000829	Pa×s	631.22	Joback Method
dvisc	0.0000510	Pa×s	697.41	Joback Method
dvisc	0.0000341	Pa×s	763.60	Joback Method
dvisc	0.0000243	Pa×s	829.78	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=U358444&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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