Glutaric acid, di(5-methoxy-3-methylpentyl) ester

Inchi: InChI=1S/C19H36O6/c1-16(8-12-22-3)10-14-24-18(20)6-5-7-19(21)25-15-11-17(2)9-13-2

InchiKey: ZZEFWFNNXLNJJI-UHFFFAOYSA-N

Formula: C19H36O6

SMILES: COCCC(C)CCOC(=O)CCCC(=O)OCCC(C)CCOC

Mol. weight [g/mol]: 360.49

Physical Properties

Property code	Value	Unit	Source
gf	-573.62	kJ/mol	Joback Method
hf	-1200.09	kJ/mol	Joback Method
hfus	45.87	kJ/mol	Joback Method
hvap	80.24	kJ/mol	Joback Method
log10ws	-3.19		Crippen Method
logp	3.369		Crippen Method
mcvol	305.190	ml/mol	McGowan Method
pc	1135.20	kPa	Joback Method
rinpol	2466.00		NIST Webbook
rinpol	2466.00		NIST Webbook
tb	830.66	K	Joback Method
tc	1019.18	K	Joback Method
tf	462.67	K	Joback Method
vc	1.171	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	972.42	J/mol×K	830.66	Joback Method
cpg	1048.03	J/mol×K	987.76	Joback Method
cpg	1035.27	J/mol×K	956.34	Joback Method
cpg	1021.33	J/mol×K	924.92	Joback Method
cpg	1006.21	J/mol×K	893.50	Joback Method
cpg	989.90	J/mol×K	862.08	Joback Method
cpg	1059.59	J/mol×K	1019.18	Joback Method
dvisc	0.0000289	Pa×s	830.66	Joback Method

dvisc	0.0000392	Pa×s	769.33	Joback Method
dvisc	0.0000559	Pa×s	708.00	Joback Method
dvisc	0.0000853	Pa×s	646.66	Joback Method
dvisc	0.0001422	Pa×s	585.33	Joback Method
dvisc	0.0002674	Pa×s	524.00	Joback Method
dvisc	0.0005940	Pa×s	462.67	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=U360083&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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