Glutaric acid, cyclopentyl 2-methylpent-3-yl ester

Inchi: InChI=1S/C16H28O4/c1-4-14(12(2)3)20-16(18)11-7-10-15(17)19-13-8-5-6-9-13/h12-14H

InchiKey: PXNJXOUWWXBOTB-UHFFFAOYSA-N

Formula: C16H28O4

SMILES: CCC(OC(=O)CCCC(=O)OC1CCCC1)C(C)C

Mol. weight [g/mol]: 284.39

Physical Properties

Property code	Value	Unit	Source
gf	-352.33	kJ/mol	Joback Method
hf	-813.25	kJ/mol	Joback Method
hfus	29.66	kJ/mol	Joback Method
hvap	69.00	kJ/mol	Joback Method
log10ws	-4.12		Crippen Method
logp	3.620		Crippen Method
mcvol	240.320	ml/mol	McGowan Method
pc	1644.42	kPa	Joback Method
rinpol	1874.00		NIST Webbook
rinpol	1874.00		NIST Webbook
tb	732.46	K	Joback Method
tc	929.63	K	Joback Method
tf	395.30	K	Joback Method
vc	0.908	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	726.45	J/mol×K	732.46	Joback Method
cpg	744.74	J/mol×K	765.32	Joback Method
cpg	761.91	J/mol×K	798.18	Joback Method
cpg	778.00	J/mol×K	831.04	Joback Method
cpg	793.01	J/mol×K	863.91	Joback Method
cpg	806.98	J/mol×K	896.77	Joback Method
cpg	819.90	J/mol×K	929.63	Joback Method
dvisc	0.0022031	Pa×s	395.30	Joback Method

dvisc	0.0009902	Pa×s	451.49	Joback Method
dvisc	0.0005312	Pa×s	507.69	Joback Method
dvisc	0.0003226	Pa×s	563.88	Joback Method
dvisc	0.0002145	Pa×s	620.07	Joback Method
dvisc	0.0001526	Pa×s	676.27	Joback Method
dvisc	0.0001144	Pa×s	732.46	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U405390&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