Glutaric acid, cyclopentyl hept-2-yl ester

Inchi: InChI=1S/C17H30O4/c1-3-4-5-9-14(2)20-16(18)12-8-13-17(19)21-15-10-6-7-11-15/h14-1
InchiKey: HSLUTSRUVLAMSU-UHFFFAOYSA-N
Formula: C17H30O4
SMILES: CCCCCC(C)OC(=O)CCCC(=O)OC1CCCC1
Mol. weight [g/mol]: 298.42

Physical Properties

Property code	Value	Unit	Source
gf	-341.47	kJ/mol	Joback Method
hf	-828.61	kJ/mol	Joback Method
hfus	35.77	kJ/mol	Joback Method
hvap	71.62	kJ/mol	Joback Method
log10ws	-4.78		Crippen Method
logp	4.155		Crippen Method
mcvol	254.410	ml/mol	McGowan Method
pc	1514.03	kPa	Joback Method
rinpol	2012.00		NIST Webbook
rinpol	2012.00		NIST Webbook
tb	755.78	K	Joback Method
tc	949.32	K	Joback Method
tf	421.57	K	Joback Method
vc	0.971	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	783.75	J/mol×K	755.78	Joback Method
cpg	801.97	J/mol×K	788.04	Joback Method
cpg	819.09	J/mol×K	820.29	Joback Method
cpg	835.13	J/mol×K	852.55	Joback Method
cpg	850.11	J/mol×K	884.81	Joback Method
cpg	864.05	J/mol×K	917.06	Joback Method
cpg	876.97	J/mol×K	949.32	Joback Method
dvisc	0.0016590	Pa×s	421.57	Joback Method

dvisc	0.0008085	Pa×s	477.27	Joback Method
dvisc	0.0004579	Pa×s	532.97	Joback Method
dvisc	0.0002888	Pa×s	588.67	Joback Method
dvisc	0.0001972	Pa×s	644.38	Joback Method
dvisc	0.0001431	Pa×s	700.08	Joback Method
dvisc	0.0001089	Pa×s	755.78	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=U405392&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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