Glutaric acid, 2-norbornyl cyclohexylmethyl ester

Inchi: InChI=1S/C19H30O4/c20-18(22-13-14-5-2-1-3-6-14)7-4-8-19(21)23-17-12-15-9-10-16(17

InchiKey: KFNJIXRVVFADOD-UHFFFAOYSA-N

Formula: C19H30O4

SMILES: O=C(CCCC(=O)OC1CC2CCC1C2)OCC1CCCCC1

Mol. weight [g/mol]: 322.44

Physical Properties

Property code	Value	Unit	Source
gf	-232.60	kJ/mol	Joback Method
hf	-751.67	kJ/mol	Joback Method
hfus	37.62	kJ/mol	Joback Method
hvap	76.32	kJ/mol	Joback Method
log10ws	-4.57		Crippen Method
logp	4.012		Crippen Method
mcvol	260.870	ml/mol	McGowan Method
pc	1609.00	kPa	Joback Method
rinpol	2434.00		NIST Webbook
rinpol	2434.00		NIST Webbook
tb	819.33	K	Joback Method
tc	1034.92	K	Joback Method
tf	483.71	K	Joback Method
vc	0.986	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	881.47	J/mol×K	819.33	Joback Method
cpg	901.38	J/mol×K	855.26	Joback Method
cpg	919.84	J/mol×K	891.19	Joback Method
cpg	936.92	J/mol×K	927.13	Joback Method
cpg	952.68	J/mol×K	963.06	Joback Method
cpg	967.19	J/mol×K	998.99	Joback Method
cpg	980.52	J/mol×K	1034.92	Joback Method
dvisc	0.0025906	Pa×s	483.71	Joback Method

dvisc	0.0017263	Pa×s	539.65	Joback Method
dvisc	0.0012415	Pa×s	595.58	Joback Method
dvisc	0.0009448	Pa×s	651.52	Joback Method
dvisc	0.0007508	Pa×s	707.46	Joback Method
dvisc	0.0006170	Pa×s	763.39	Joback Method
dvisc	0.0005209	Pa×s	819.33	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U405494&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