Glutaric acid, 2-norbornyl 3-methylbut-2-yl ester

Inchi: InChI=1S/C17H28O4/c1-11(2)12(3)20-16(18)5-4-6-17(19)21-15-10-13-7-8-14(15)9-13/h1

InchiKey: DWKHCGDPOAMCKH-UHFFFAOYSA-N

Formula: C17H28O4

SMILES: CC(C)C(C)OC(=O)CCCC(=O)OC1CC2CCC1C2

Mol. weight [g/mol]: 296.40

Physical Properties

Property code	Value	Unit	Source
gf	-278.77	kJ/mol	Joback Method
hf	-775.27	kJ/mol	Joback Method
hfus	33.55	kJ/mol	Joback Method
hvap	70.66	kJ/mol	Joback Method
log10ws	-3.95		Crippen Method
logp	3.476		Crippen Method
mcvol	243.550	ml/mol	McGowan Method
pc	1612.88	kPa	Joback Method
rinpol	2010.00		NIST Webbook
rinpol	2010.00		NIST Webbook
tb	753.14	K	Joback Method
tc	953.65	K	Joback Method
tf	423.79	K	Joback Method
vc	0.928	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	768.04	J/mol×K	753.14	Joback Method
cpg	786.61	J/mol×K	786.56	Joback Method
cpg	804.05	J/mol×K	819.98	Joback Method
cpg	820.40	J/mol×K	853.39	Joback Method
cpg	835.71	J/mol×K	886.81	Joback Method
cpg	850.01	J/mol×K	920.23	Joback Method
cpg	863.37	J/mol×K	953.65	Joback Method
dvisc	0.0027657	Pa×s	423.79	Joback Method

dvisc	0.0017662	Pa×s	478.68	Joback Method
dvisc	0.0012369	Pa×s	533.57	Joback Method
dvisc	0.0009258	Pa×s	588.47	Joback Method
dvisc	0.0007280	Pa×s	643.36	Joback Method
dvisc	0.0005946	Pa×s	698.25	Joback Method
dvisc	0.0005001	Pa×s	753.14	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=U405486&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