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

Inchi: InChI=1S/C18H30O4/c1-4-15(12(2)3)21-17(19)6-5-7-18(20)22-16-11-13-8-9-14(16)10-13

InchiKey: ZWCDULJEMCKNMS-UHFFFAOYSA-N

Formula: C18H30O4

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

Mol. weight [g/mol]: 310.43

Physical Properties

Property code	Value	Unit	Source
gf	-270.35	kJ/mol	Joback Method
hf	-795.91	kJ/mol	Joback Method
hfus	36.14	kJ/mol	Joback Method
hvap	72.89	kJ/mol	Joback Method
log10ws	-4.37		Crippen Method
logp	3.866		Crippen Method
mcvol	257.640	ml/mol	McGowan Method
pc	1495.35	kPa	Joback Method
rinpol	2092.00		NIST Webbook
rinpol	2092.00		NIST Webbook
tb	776.02	K	Joback Method
tc	975.38	K	Joback Method
tf	435.06	K	Joback Method
vc	0.985	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	826.50	J/mol×K	776.02	Joback Method
cpg	845.22	J/mol×K	809.25	Joback Method
cpg	862.81	J/mol×K	842.47	Joback Method
cpg	879.29	J/mol×K	875.70	Joback Method
cpg	894.72	J/mol×K	908.93	Joback Method
cpg	909.14	J/mol×K	942.15	Joback Method
cpg	922.61	J/mol×K	975.38	Joback Method
dvisc	0.0026635	Pa×s	435.06	Joback Method

dvisc	0.0016729	Pa×s	491.89	Joback Method
dvisc	0.0011569	Pa×s	548.71	Joback Method
dvisc	0.0008575	Pa×s	605.54	Joback Method
dvisc	0.0006690	Pa×s	662.37	Joback Method
dvisc	0.0005429	Pa×s	719.19	Joback Method
dvisc	0.0004542	Pa×s	776.02	Joback Method

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
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=U405487&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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