Glutaric acid, 2-norbornyl 2-ethylhexyl ester

Inchi: InChI=1S/C20H34O4/c1-3-5-7-15(4-2)14-23-19(21)8-6-9-20(22)24-18-13-16-10-11-17(18
InchiKey: CNRTYRMHGVYABM-UHFFFAOYSA-N
Formula: C20H34O4
SMILES: CCCCC(CC)COC(=O)CCCC(=O)OC1CC2CCC1C2
Mol. weight [g/mol]: 338.48

Physical Properties

Property code	Value	Unit	Source
gf	-251.07	kJ/mol	Joback Method
hf	-831.91	kJ/mol	Joback Method
hfus	44.85	kJ/mol	Joback Method
hvap	77.73	kJ/mol	Joback Method
log10ws	-5.10		Crippen Method
logp	4.648		Crippen Method
mcvol	285.820	ml/mol	McGowan Method
pc	1288.36	kPa	Joback Method
rinpol	2342.00		NIST Webbook
rinpol	2342.00		NIST Webbook
tb	822.22	K	Joback Method
tc	1019.23	K	Joback Method
tf	472.60	K	Joback Method
vc	1.103	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	945.56	J/mol×K	822.22	Joback Method
cpg	1028.88	J/mol×K	986.40	Joback Method
cpg	1014.31	J/mol×K	953.56	Joback Method
cpg	998.75	J/mol×K	920.73	Joback Method
cpg	982.13	J/mol×K	887.89	Joback Method
cpg	964.42	J/mol×K	855.06	Joback Method
cpg	1042.50	J/mol×K	1019.23	Joback Method
dvisc	0.0004023	Pa×s	822.22	Joback Method

dvisc	0.0004800	Pa×s	763.95	Joback Method
dvisc	0.0005895	Pa×s	705.68	Joback Method
dvisc	0.0007514	Pa×s	647.41	Joback Method
dvisc	0.0010047	Pa×s	589.14	Joback Method
dvisc	0.0014320	Pa×s	530.87	Joback Method
dvisc	0.0022274	Pa×s	472.60	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=U405493&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