Glutaric acid, di(2-(cyclohexyl)ethyl) ester

Inchi: InChI=1S/C21H36O4/c22-20(24-16-14-18-8-3-1-4-9-18)12-7-13-21(23)25-17-15-19-10-5
InchiKey: HRIWWELDHYHGDO-UHFFFAOYSA-N
Formula: C21H36O4
SMILES: O=C(CCCC(=O)OCCC1CCCCC1)OCCC1CCCCC1
Mol. weight [g/mol]: 352.51

Physical Properties

Property code	Value	Unit	Source
gf	-293.00	kJ/mol	Joback Method
hf	-857.73	kJ/mol	Joback Method
hfus	39.39	kJ/mol	Joback Method
hvap	81.51	kJ/mol	Joback Method
log10ws	-5.64		Crippen Method
logp	5.184		Crippen Method
mcvol	299.910	ml/mol	McGowan Method
pc	1339.80	kPa	Joback Method
rinpol	2617.00		NIST Webbook
rinpol	2617.00		NIST Webbook
tb	871.56	K	Joback Method
tc	1084.97	K	Joback Method
tf	485.51	K	Joback Method
vc	1.125	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1024.74	J/mol×K	871.56	Joback Method
cpg	1044.41	J/mol×K	907.13	Joback Method
cpg	1062.40	J/mol×K	942.70	Joback Method
cpg	1078.74	J/mol×K	978.26	Joback Method
cpg	1093.46	J/mol×K	1013.83	Joback Method
cpg	1106.60	J/mol×K	1049.40	Joback Method
cpg	1118.20	J/mol×K	1084.97	Joback Method
dvisc	0.0009695	Pa×s	485.51	Joback Method

dvisc	0.0004405	Pa×s	549.85	Joback Method
dvisc	0.0002361	Pa×s	614.19	Joback Method
dvisc	0.0001425	Pa×s	678.53	Joback Method
dvisc	0.0000938	Pa×s	742.88	Joback Method
dvisc	0.0000660	Pa×s	807.22	Joback Method
dvisc	0.0000490	Pa×s	871.56	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U405425&Units=SI

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