Glutaric acid, dec-2-yl 2,4-dimethylpent-3-yl ester

Inchi: InChI=1S/C22H42O4/c1-7-8-9-10-11-12-14-19(6)25-20(23)15-13-16-21(24)26-22(17(2)3

InchiKey: STYRZMHPAPLZQY-UHFFFAOYSA-N

Formula: C22H42O4

SMILES: CCCCCCCCC(C)OC(=O)CCCC(=O)OC(C(C)C)C(C)C

Mol. weight [g/mol]: 370.57

Physical Properties

Property code	Value	Unit	Source
gf	-343.24	kJ/mol	Joback Method
hf	-1008.13	kJ/mol	Joback Method
hfus	44.22	kJ/mol	Joback Method
hvap	81.33	kJ/mol	Joback Method
log10ws	-6.50		Crippen Method
logp	6.063		Crippen Method
mcvol	335.720	ml/mol	McGowan Method
pc	972.91	kPa	Joback Method
rinpol	2279.00		NIST Webbook
tb	853.58	K	Joback Method
tc	1046.48	K	Joback Method
tf	422.02	K	Joback Method
vc	1.292	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1093.89	J/mol×K	853.58	Joback Method
cpg	1113.12	J/mol×K	885.73	Joback Method
cpg	1131.10	J/mol×K	917.88	Joback Method
cpg	1147.86	J/mol×K	950.03	Joback Method
cpg	1163.41	J/mol×K	982.18	Joback Method
cpg	1177.78	J/mol×K	1014.33	Joback Method
cpg	1191.00	J/mol×K	1046.48	Joback Method
dvisc	0.0014060	Pa×s	422.02	Joback Method
dvisc	0.0004550	Pa×s	493.95	Joback Method

dvisc	0.0001962	Pa×s	565.87	Joback Method
dvisc	0.0001022	Pa×s	637.80	Joback Method
dvisc	0.0000608	Pa×s	709.73	Joback Method
dvisc	0.0000398	Pa×s	781.65	Joback Method
dvisc	0.0000280	Pa×s	853.58	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=U393482&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