Glutaric acid, hexa-1,5-dien-3-yl dodec-2-en-1-yl ester

Inchi: InChI=1S/C23H38O4/c1-4-7-8-9-10-11-12-13-14-15-20-26-22(24)18-16-19-23(25)27-21(

InchiKey: DHJVJDLMNDNLQM-CCEZHUSRSA-N

Formula: C23H38O4

SMILES: C=CCC(C=C)OC(=O)CCCC(=O)OCC=CCCCCCCCCC

Mol. weight [g/mol]: 378.55

Physical Properties

Property code	Value	Unit	Source
gf	-71.60	kJ/mol	Joback Method
hf	-644.85	kJ/mol	Joback Method
hfus	55.02	kJ/mol	Joback Method
hvap	83.33	kJ/mol	Joback Method
log10ws	-6.85		Crippen Method
logp	6.071		Crippen Method
mcvol	336.910	ml/mol	McGowan Method
pc	982.69	kPa	Joback Method
rinpol	2523.00		NIST Webbook
rinpol	2523.00		NIST Webbook
tb	875.30	K	Joback Method
tc	1072.28	K	Joback Method
tf	469.69	K	Joback Method
vc	1.308	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1071.55	J/mol×K	875.30	Joback Method
cpg	1150.57	J/mol×K	1039.45	Joback Method
cpg	1136.79	J/mol×K	1006.62	Joback Method
cpg	1122.04	J/mol×K	973.79	Joback Method
cpg	1106.28	J/mol×K	940.96	Joback Method
cpg	1089.47	J/mol×K	908.13	Joback Method
cpg	1163.44	J/mol×K	1072.28	Joback Method
dvisc	0.0000315	Pa×s	875.30	Joback Method

dvisc	0.0000424	Pa×s	807.70	Joback Method
dvisc	0.0000601	Pa×s	740.10	Joback Method
dvisc	0.0000916	Pa×s	672.50	Joback Method
dvisc	0.0001532	Pa×s	604.89	Joback Method
dvisc	0.0002917	Pa×s	537.29	Joback Method
dvisc	0.0006687	Pa×s	469.69	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U405289&Units=SI
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

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