Glutaric acid, di(hexa-1,5-dien-3-yl) ester

Inchi: InChI=1S/C17H24O4/c1-5-10-14(7-3)20-16(18)12-9-13-17(19)21-15(8-4)11-6-2/h5-8,14-
InchiKey: QLLHSTAIPKHPMR-UHFFFAOYSA-N
Formula: C17H24O4
SMILES: C=CCC(C=C)OC(=O)CCCC(=O)OC(C=C)CC=C
Mol. weight [g/mol]: 292.37

Physical Properties

Property code	Value	Unit	Source
gf	-29.10	kJ/mol	Joback Method
hf	-392.65	kJ/mol	Joback Method
hfus	33.19	kJ/mol	Joback Method
hvap	68.29	kJ/mol	Joback Method
log10ws	-4.30		Crippen Method
logp	3.504		Crippen Method
mcvol	248.070	ml/mol	McGowan Method
pc	1509.33	kPa	Joback Method
rinpol	1783.00		NIST Webbook
rinpol	1783.00		NIST Webbook
tb	726.78	K	Joback Method
tc	914.57	K	Joback Method
tf	388.63	K	Joback Method
vc	0.948	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	692.22	J/mol×K	726.78	Joback Method
cpg	760.28	J/mol×K	883.28	Joback Method
cpg	748.29	J/mol×K	851.98	Joback Method
cpg	735.52	J/mol×K	820.68	Joback Method
cpg	721.93	J/mol×K	789.38	Joback Method
cpg	707.51	J/mol×K	758.08	Joback Method
cpg	771.50	J/mol×K	914.57	Joback Method
dvisc	0.0000868	Pa×s	726.78	Joback Method

dvisc	0.0001153	Pa×s	670.42	Joback Method
dvisc	0.0001616	Pa×s	614.06	Joback Method
dvisc	0.0002423	Pa×s	557.70	Joback Method
dvisc	0.0003981	Pa×s	501.35	Joback Method
dvisc	0.0007417	Pa×s	444.99	Joback Method
dvisc	0.0016549	Pa×s	388.63	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=U405292&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