Glutaric acid, 1-cyclopentylethyl dodec-2-en-1-yl ester

Inchi: InChI=1S/C24H42O4/c1-3-4-5-6-7-8-9-10-11-14-20-27-23(25)18-15-19-24(26)28-21(2)22

InchiKey: QVGQCOSZJYIANS-SDNWHVSQSA-N

Formula: C24H42O4

SMILES: CCCCCCCCCC=CCOC(=O)CCCC(=O)OC(C)C1CCCC1

Mol. weight [g/mol]: 394.59

Physical Properties

Property code	Value	Unit	Source
gf	-202.31	kJ/mol	Joback Method
hf	-855.87	kJ/mol	Joback Method
hfus	54.10	kJ/mol	Joback Method
hvap	87.16	kJ/mol	Joback Method
log10ws	-7.21		Crippen Method
logp	6.519		Crippen Method
mcvol	348.740	ml/mol	McGowan Method
pc	982.69	kPa	Joback Method
rinpol	2750.00		NIST Webbook
rinpol	2750.00		NIST Webbook
tb	920.10	K	Joback Method
tc	1127.22	K	Joback Method
tf	495.38	K	Joback Method
vc	1.343	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1183.52	J/mol×K	920.10	Joback Method
cpg	1266.31	J/mol×K	1092.70	Joback Method
cpg	1252.24	J/mol×K	1058.18	Joback Method
cpg	1236.98	J/mol×K	1023.66	Joback Method
cpg	1220.47	J/mol×K	989.14	Joback Method
cpg	1202.67	J/mol×K	954.62	Joback Method
cpg	1279.26	J/mol×K	1127.22	Joback Method
dvisc	0.0000354	Pa×s	920.10	Joback Method

dvisc	0.0000475	Pa×s	849.31	Joback Method
dvisc	0.0000671	Pa×s	778.53	Joback Method
dvisc	0.0001017	Pa×s	707.74	Joback Method
dvisc	0.0001689	Pa×s	636.95	Joback Method
dvisc	0.0003185	Pa×s	566.17	Joback Method
dvisc	0.0007200	Pa×s	495.38	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=U405471&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