Cinnamyl linoleate

Inchi: InChI=1S/C27H40O2/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-19-24-27(28)29-25-20-23-26
InchiKey: PFBHGAJSRPDNRW-LRMMBRELSA-N
Formula: C27H40O2
SMILES: CCCCCC=CCC=CCCCCCCCC(=O)OCC=Cc1ccccc1
Mol. weight [g/mol]: 396.61

Physical Properties

Property code	Value	Unit	Source
gf	295.61	kJ/mol	Joback Method
hf	-257.22	kJ/mol	Joback Method
hfus	63.12	kJ/mol	Joback Method
hvap	87.00	kJ/mol	Joback Method
log10ws	-8.82		Crippen Method
logp	8.056		Crippen Method
mcvol	362.070	ml/mol	McGowan Method
pc	931.21	kPa	Joback Method
rinpol	3061.70		NIST Webbook
tb	932.61	K	Joback Method
tc	1143.51	K	Joback Method
tf	477.39	K	Joback Method
vc	1.403	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1173.77	J/mol×K	932.61	Joback Method
cpg	1192.87	J/mol×K	967.76	Joback Method
cpg	1211.00	J/mol×K	1002.91	Joback Method
cpg	1228.25	J/mol×K	1038.06	Joback Method
cpg	1244.74	J/mol×K	1073.21	Joback Method
cpg	1260.58	J/mol×K	1108.36	Joback Method
cpg	1275.87	J/mol×K	1143.51	Joback Method
dvisc	0.0004793	Pa×s	477.39	Joback Method
dvisc	0.0001921	Pa×s	553.26	Joback Method

dvisc	0.0000960	Pa×s	629.13	Joback Method
dvisc	0.0000557	Pa×s	705.00	Joback Method
dvisc	0.0000359	Pa×s	780.87	Joback Method
dvisc	0.0000250	Pa×s	856.74	Joback Method
dvisc	0.0000185	Pa×s	932.61	Joback Method

Sources

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=U413727&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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