Tetrahydrofurfuryl oleate

Other names: 9-Octadecenoic acid (Z)-, (tetrahydro-3-furanyl)methyl ester
(tetrahydro-3-furyl)methyl oleate
Inchi: InChI=1S/C23H42O3/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-23(24)26-21-22-18-19
InchiKey: NSMHOFMBVBYNJX-KTKRTIGZSA-N
Formula: C23H42O3
SMILES: CCCCCCCCC=CCCCCCCCC(=O)OCC1CCOC1
Mol. weight [g/mol]: 366.58
CAS: 150-81-2

Physical Properties

Property code	Value	Unit	Source
gf	-60.49	kJ/mol	Joback Method
hf	-717.15	kJ/mol	Joback Method
hfus	60.23	kJ/mol	Joback Method
hvap	80.67	kJ/mol	Joback Method
log10ws	-6.91		Crippen Method
logp	6.604		Crippen Method
mcvol	333.080	ml/mol	McGowan Method
pc	1003.35	kPa	Joback Method
tb	848.32	K	Joback Method
tc	1042.07	K	Joback Method
tf	453.52	K	Joback Method
vc	1.290	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1100.17	J/mol×K	848.32	Joback Method
cpg	1120.45	J/mol×K	880.61	Joback Method
cpg	1139.56	J/mol×K	912.90	Joback Method
cpg	1157.55	J/mol×K	945.20	Joback Method
cpg	1174.48	J/mol×K	977.49	Joback Method
cpg	1190.39	J/mol×K	1009.78	Joback Method
cpg	1205.36	J/mol×K	1042.07	Joback Method

dvisc	0.0011199	Pa×s	453.52	Joback Method
dvisc	0.0004900	Pa×s	519.32	Joback Method
dvisc	0.0002582	Pa×s	585.12	Joback Method
dvisc	0.0001549	Pa×s	650.92	Joback Method
dvisc	0.0001020	Pa×s	716.72	Joback Method
dvisc	0.0000721	Pa×s	782.52	Joback Method
dvisc	0.0000538	Pa×s	848.32	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=C150812&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume