(9Z,12Z)-1,3-Dimethoxypropan-2-yl octadeca-9,12-dienoate

Inchi: InChI=1S/C23H42O4/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-23(24)27-22(20-25
InchiKey: VUFWEVFHGYJUSE-MURFETPASA-N
Formula: C23H42O4
SMILES: CCCCCC=CCC=CCCCCCCCC(=O)OC(COC)COC
Mol. weight [g/mol]: 382.58

Physical Properties

Property code	Value	Unit	Source
gf	-143.14	kJ/mol	Joback Method
hf	-798.13	kJ/mol	Joback Method
hfus	57.37	kJ/mol	Joback Method
hvap	80.30	kJ/mol	Joback Method
log10ws	-6.31		Crippen Method
logp	6.005		Crippen Method
mcvol	345.510	ml/mol	McGowan Method
pc	917.16	kPa	Joback Method
rinpol	2598.60		NIST Webbook
rinpol	2598.60		NIST Webbook
tb	854.65	K	Joback Method
tc	1046.80	K	Joback Method
tf	440.43	K	Joback Method
vc	1.337	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1109.83	J/mol×K	854.65	Joback Method
cpg	1129.43	J/mol×K	886.68	Joback Method
cpg	1147.88	J/mol×K	918.70	Joback Method
cpg	1165.22	J/mol×K	950.73	Joback Method
cpg	1181.49	J/mol×K	982.75	Joback Method
cpg	1196.71	J/mol×K	1014.78	Joback Method
cpg	1210.94	J/mol×K	1046.80	Joback Method
dvisc	0.0005551	Pa×s	440.43	Joback Method

dvisc	0.0002153	Pa×s	509.47	Joback Method
dvisc	0.0001046	Pa×s	578.50	Joback Method
dvisc	0.0000593	Pa×s	647.54	Joback Method
dvisc	0.0000375	Pa×s	716.58	Joback Method
dvisc	0.0000257	Pa×s	785.61	Joback Method
dvisc	0.0000187	Pa×s	854.65	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U412791&Units=SI

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