1-Methyl-2-methoxyethyl nonadecanoate

Inchi: InChI=1S/C23H46O3/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-23(24)26-22(2)2
InchiKey: XIGKFMDAXBUJFP-UHFFFAOYSA-N
Formula: C23H46O3
SMILES: CCCCCCCCCCCCCCCCCCC(=O)OC(C)COC
Mol. weight [g/mol]: 370.61

Physical Properties

Property code	Value	Unit	Source
gf	-198.58	kJ/mol	Joback Method
hf	-900.35	kJ/mol	Joback Method
hfus	55.78	kJ/mol	Joback Method
hvap	77.97	kJ/mol	Joback Method
log10ws	-7.51		Crippen Method
logp	7.216		Crippen Method
mcvol	348.240	ml/mol	McGowan Method
pc	870.68	kPa	Joback Method
rinpol	2491.00		NIST Webbook
rinpol	2491.00		NIST Webbook
tb	823.91	K	Joback Method
tc	1008.87	K	Joback Method
tf	428.36	K	Joback Method
vc	1.359	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1127.94	J/mol×K	823.91	Joback Method
cpg	1221.44	J/mol×K	978.05	Joback Method
cpg	1205.00	J/mol×K	947.22	Joback Method
cpg	1187.46	J/mol×K	916.39	Joback Method
cpg	1168.79	J/mol×K	885.56	Joback Method
cpg	1148.95	J/mol×K	854.74	Joback Method
cpg	1236.79	J/mol×K	1008.87	Joback Method
dvisc	0.0000332	Pa×s	823.91	Joback Method

dvisc	0.0000455	Pa×s	757.98	Joback Method
dvisc	0.0000664	Pa×s	692.06	Joback Method
dvisc	0.0001049	Pa×s	626.13	Joback Method
dvisc	0.0001845	Pa×s	560.21	Joback Method
dvisc	0.0003772	Pa×s	494.28	Joback Method
dvisc	0.0009612	Pa×s	428.36	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=R540173&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