

9-Octadecenoic acid, 2-methoxyethyl ester

Other names:	2-methoxyethyl oleate
Inchi:	InChI=1S/C21H40O3/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-21(22)24-20-19-23-2
InchiKey:	UFARNTYYPHYLGN-ZHACJKMWSA-N
Formula:	C21H40O3
SMILES:	CCCCCCCCC=CCCCCCCCC(=O)OCCOC
Mol. weight [g/mol]:	340.54
CAS:	111-10-4

Physical Properties

Property code	Value	Unit	Source
gf	-132.76	kJ/mol	Joback Method
hf	-736.57	kJ/mol	Joback Method
hfus	54.32	kJ/mol	Joback Method
hvap	73.86	kJ/mol	Joback Method
log10ws	-6.42		Crippen Method
logp	6.214		Crippen Method
mcvol	315.760	ml/mol	McGowan Method
pc	1005.89	kPa	Joback Method
tb	782.75	K	Joback Method
tc	961.80	K	Joback Method
tf	415.74	K	Joback Method
vc	1.234	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	978.45	J/mol×K	782.75	Joback Method
cpg	1065.83	J/mol×K	931.96	Joback Method
cpg	1050.22	J/mol×K	902.12	Joback Method
cpg	1033.70	J/mol×K	872.28	Joback Method
cpg	1016.25	J/mol×K	842.43	Joback Method
cpg	997.84	J/mol×K	812.59	Joback Method
cpg	1080.56	J/mol×K	961.80	Joback Method
dvisc	0.0000419	Paxs	782.75	Joback Method

dvisc	0.0000564	Paxs	721.58	Joback Method
dvisc	0.0000804	Paxs	660.41	Joback Method
dvisc	0.0001230	Paxs	599.24	Joback Method
dvisc	0.0002075	Paxs	538.08	Joback Method
dvisc	0.0004001	Paxs	476.91	Joback Method
dvisc	0.0009358	Paxs	415.74	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=C111104&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/84-773-1/9-Octadecenoic-acid-2-methoxyethyl-ester.pdf>

Generated by Cheméo on 2024-04-26 08:50:51.951186943 +0000 UTC m=+16410700.871764258.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.