Octadecanoic acid, 2-hydroxyethyl ester

Other names:	Stearic acid, 2-hydroxyethyl ester
	Emerest 2350
	Empilan 2848
	Ethylene glycol monostearate
	Ethylene glycol stearate
	Glycol monostearate
	Glycol stearate
	Ivorit
	Monthybase
	Monthyle
	Parastarin
	Pegosperse 50 MS
	Prodhybas N
	Prodhybase ethyl
	S 151
	Sedetol
	Tego-stearate
	2-Hydroxyethyl stearate
	Clindrol SEG
	Lipo EGMS
	Stearic acid, monoester with ethylene glycol
	USAF KE-11
	Ablunol EGMS
	Alkamuls EGMS/C
	Alkamuls SEG
	Schercemol EGMS
Inchi:	InChI=1S/C20H40O3/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-20(22)23-19-18-21/h2
InchiKey:	RFVNOJDQRGSOEL-UHFFFAOYSA-N
Formula:	C20H40O3
SMILES:	CCCCCCCCCCCCCCCCCC(=O)OCCO
Mol. weight [g/mol]:	328.53
CAS:	111-60-4

Physical Properties

Property code	Value	Unit	Source
gf	-253.22	kJ/mol	Joback Method

hf	-853.16	kJ/mol	Joback Method
hfus	54.43	kJ/mol	Joback Method
hvap	85.95	kJ/mol	Joback Method
log10ws	-6.32		Crippen Method
logp	5.783		Crippen Method
mcvol	305.970	ml/mol	McGowan Method
pc	1111.11	kPa	Joback Method
rinpol	2403.00		NIST Webbook
rinpol	2436.00		NIST Webbook
tb	825.47	K	Joback Method
tc	1010.61	K	Joback Method
tf	448.14	K	Joback Method
vc	1.198	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	986.88	J/mol×K	825.47	Joback Method
cpg	1005.09	J/mol×K	856.33	Joback Method
cpg	1022.32	J/mol×K	887.18	Joback Method
cpg	1038.58	J/mol×K	918.04	Joback Method
cpg	1053.91	J/mol×K	948.89	Joback Method
cpg	1068.34	J/mol×K	979.75	Joback Method
cpg	1081.90	J/mol×K	1010.61	Joback Method
dvisc	0.0009611	Pa×s	448.14	Joback Method
dvisc	0.0002966	Pa×s	511.03	Joback Method
dvisc	0.0001184	Pa×s	573.92	Joback Method
dvisc	0.0000567	Pa×s	636.80	Joback Method
dvisc	0.0000310	Pa×s	699.69	Joback Method
dvisc	0.0000187	Pa×s	762.58	Joback Method
dvisc	0.0000122	Pa×s	825.47	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=C111604&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