Diethylene glycol monolaurate

Other names:	Dodecanoic acid, 2-(2-hydroxyethoxy)ethyl ester
	Atlas G-2124
	Diethylene glycol laurate
	Diethylene glycol lauric acid monoester
	Diethylene glycol sesquilaurate
	Diglycol laurate
	Diglycol monolaurate
	Emcol RDC-D
	Ethanol, 2-(2-hydroxyethoxy)-, laurate
	G 2124
	Glaurin
	Lauric acid, 2-(2-hydroxyethoxy)ethyl ester
	Lauro-Sebum
	Nonex 413
	Pegosperse 100 LN
	Pegosperse 100L
	PEG-2 Laurate
	2-(2-Hydroxyethoxy)ethyl laurate
	2,2'-Dihydroxyethyl ether monododecanoate
	NSC 3868
Inchi:	InChI=1S/C16H32O4/c1-2-3-4-5-6-7-8-9-10-11-16(18)20-15-14-19-13-12-17/h17H,2-15H
InchiKey:	WGIMXKDCVCTHGW-UHFFFAOYSA-N
Formula:	C16H32O4
SMILES:	CCCCCCCCCCCC(=O)OCCOCCO
Mol. weight [g/mol]:	288.42
CAS:	141-20-8

Physical Properties

Property code	Value	Unit	Source
gf	-391.90	kJ/mol	Joback Method
hf	-902.82	kJ/mol	Joback Method
hfus	45.26	kJ/mol	Joback Method
hvap	79.45	kJ/mol	Joback Method
log10ws	-3.73		Crippen Method
logp	3.459		Crippen Method
mcvol	255.480	ml/mol	McGowan Method
pc	1442.44	kPa	Joback Method

tb	756.37	K	Joback Method
tc	929.85	K	Joback Method
tf	425.29	K	Joback Method
vc	0.993	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	779.92	J/mol×K	756.37	Joback Method
cpg	851.36	J/mol×K	900.94	Joback Method
cpg	838.61	J/mol×K	872.02	Joback Method
cpg	825.10	J/mol×K	843.11	Joback Method
cpg	810.82	J/mol×K	814.20	Joback Method
cpg	795.76	J/mol×K	785.28	Joback Method
cpg	863.37	J/mol×K	929.85	Joback Method
dvisc	0.0000185	Pa×s	756.37	Joback Method
dvisc	0.0000281	Pa×s	701.19	Joback Method
dvisc	0.0000459	Pa×s	646.01	Joback Method
dvisc	0.0000822	Pa×s	590.83	Joback Method
dvisc	0.0001660	Pa×s	535.65	Joback Method
dvisc	0.0003936	Pa×s	480.47	Joback Method
dvisc	0.0011676	Pa×s	425.29	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=C141208&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