1,2-Propanediol, 3-(tetradecyloxy)-

Other names:	Glycerin 1-tetradecyl ether
	Myristyl glyceryl ether
	3-Tetradecyloxy-1,2-propanediol
Inchi:	InChI=1S/C17H36O3/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-20-16-17(19)15-18/h17-19H,2-1
InchiKey:	JSSKAZULTFHXBH-UHFFFAOYSA-N
Formula:	C17H36O3
SMILES:	CCCCCCCCCCCCCCOCC(O)CO
Mol. weight [g/mol]:	288.47
CAS:	1561-06-4

Physical Properties

Property code	Value	Unit	Source
gf	-288.82	kJ/mol	Joback Method
hf	-836.17	kJ/mol	Joback Method
hfus	45.63	kJ/mol	Joback Method
hvap	88.82	kJ/mol	Joback Method
log10ws	-4.66		Crippen Method
logp	4.057		Crippen Method
mcvol	268.000	ml/mol	McGowan Method
pc	1397.50	kPa	Joback Method
tb	794.70	K	Joback Method
tc	972.95	K	Joback Method
tf	331.00 ± 1.00	K	NIST Webbook
vc	1.038	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	941.98	J/mol×K	972.95	Joback Method
cpg	855.47	J/mol×K	794.70	Joback Method
cpg	871.88	J/mol×K	824.41	Joback Method
cpg	887.46	J/mol×K	854.12	Joback Method
cpg	902.23	J/mol×K	883.83	Joback Method
cpg	916.23	J/mol×K	913.53	Joback Method

cpg	929.47	J/mol×K	943.24	Joback Method
dvisc	0.0000033	Pa×s	794.70	Joback Method
dvisc	0.0021941	Pa×s	410.22	Joback Method
dvisc	0.0003574	Pa×s	474.30	Joback Method
dvisc	0.0000897	Pa×s	538.38	Joback Method
dvisc	0.0000302	Pa×s	602.46	Joback Method
dvisc	0.0000125	Pa×s	666.54	Joback Method
dvisc	0.0000061	Pa×s	730.62	Joback Method
hfust	62.10	kJ/mol	331.30	NIST Webbook

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=C1561064&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
hfust:	Enthalpy of fusion at a given temperature
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