

2-Hydroxyethyl pentadecanoate

Inchi:	InChI=1S/C17H34O3/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-17(19)20-16-15-18/h18H,2-16H
InchiKey:	ZLTSCGXRCRJPMR-UHFFFAOYSA-N
Formula:	C17H34O3
SMILES:	CCCCCCCCCCCCC(=O)OCCO
Mol. weight [g/mol]:	286.45

Physical Properties

Property code	Value	Unit	Source
gf	-278.48	kJ/mol	Joback Method
hf	-791.24	kJ/mol	Joback Method
hfus	46.66	kJ/mol	Joback Method
hvap	79.27	kJ/mol	Joback Method
log10ws	-5.06		Crippen Method
logp	4.613		Crippen Method
mcvol	263.700	ml/mol	McGowan Method
pc	1359.63	kPa	Joback Method
rinqol	2115.00		NIST Webbook
tb	756.83	K	Joback Method
tc	930.14	K	Joback Method
tf	414.33	K	Joback Method
vc	1.030	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	807.68	J/molxK	756.83	Joback Method
cpg	882.15	J/molxK	901.26	Joback Method
cpg	868.77	J/molxK	872.37	Joback Method
cpg	854.66	J/molxK	843.49	Joback Method
cpg	839.78	J/molxK	814.60	Joback Method
cpg	824.13	J/molxK	785.72	Joback Method
cpg	894.81	J/molxK	930.14	Joback Method
dvisc	0.0000213	Paxs	756.83	Joback Method
dvisc	0.0000328	Paxs	699.75	Joback Method

dvisc	0.0000544	Paxs	642.66	Joback Method
dvisc	0.0000998	Paxs	585.58	Joback Method
dvisc	0.0002087	Paxs	528.50	Joback Method
dvisc	0.0005217	Paxs	471.41	Joback Method
dvisc	0.0016789	Paxs	414.33	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R540524&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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

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