Ethanol, 2-(dodecyloxy)-

Other names:	Ethylene glycol monododecyl ether
	Ethylene glycol monolauryl ether
	Laureth-1
	Lauryl alcohol oxy ethanol
	Lauryl ethoxylate
	Lauryl monoethoxylate
	Lipocol L-1
	2-(Dodecyloxy)ethanol
	Ethylene glycol mono-n-dodecyl ether
	2-Hydroxyethyl lauryl ether
Inchi:	InChI=1S/C14H30O2/c1-2-3-4-5-6-7-8-9-10-11-13-16-14-12-15/h15H,2-14H2,1H3
InchiKey:	SFNALCNOMXIBKG-UHFFFAOYSA-N
Formula:	C14H30O2
SMILES:	CCCCCCCCCCCCOCCO
Mol. weight [g/mol]:	230.39
CAS:	4536-30-5

Physical Properties

Property code	Value	Unit	Source
gf	-174.82	kJ/mol	Joback Method
hf	-616.74	kJ/mol	Joback Method
hfus	37.29	kJ/mol	Joback Method
hvap	65.85	kJ/mol	Joback Method
log10ws	-4.03		Crippen Method
logp	3.916		Crippen Method
mcvol	219.860	ml/mol	McGowan Method
pc	1616.77	kPa	Joback Method
tb	634.32	K	Joback Method
tc	793.46	K	Joback Method
tf	330.59	K	Joback Method
vc	0.857	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	612.24	J/mol×K	634.32	Joback Method
cpg	627.96	J/mol×K	660.84	Joback Method
cpg	643.05	J/mol×K	687.37	Joback Method
cpg	657.54	J/mol×K	713.89	Joback Method
cpg	671.44	J/mol×K	740.41	Joback Method
cpg	684.76	J/mol×K	766.94	Joback Method
cpg	697.51	J/mol×K	793.46	Joback Method
dvisc	0.0066460	Pa×s	330.59	Joback Method
dvisc	0.0016488	Pa×s	381.21	Joback Method
dvisc	0.0005672	Pa×s	431.83	Joback Method
dvisc	0.0002441	Pa×s	482.45	Joback Method
dvisc	0.0001233	Pa×s	533.08	Joback Method
dvisc	0.0000701	Pa×s	583.70	Joback Method
dvisc	0.0000436	Pa×s	634.32	Joback Method
hvapt	71.50	kJ/mol	440.50	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C4536305&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

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
hvapt: Enthalpy of vaporization at a given temperature
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