Ethanol, 2-(hexyloxy)-

Other names:	2-(Hexyloxy)ethanol
	2-Hexoxyethanol
	2-hexyloxyethanol
	3-oxa-1-nonanol
	Cellosolve, n-hexyl-
	Ethylene glycol mono-n-hexyl ether
	Ethylene glycol monohexyl ether
	Ethylene glycol n-hexyl ether
	Glycol monohexyl ether
	Hexyl cellosolve
	ethanol, 2-hexyloxy-
	ethyleneglycol, hexyl ether
	hexylglycol
	n-Hexyl Cellosolve
Inchi:	InChI=1S/C8H18O2/c1-2-3-4-5-7-10-8-6-9/h9H,2-8H2,1H3
InchiKey:	UPGSWASWQBLSKZ-UHFFFAOYSA-N
Formula:	C8H18O2
SMILES:	CCCCCCOCCO
Mol. weight [g/mol]:	146.23
CAS:	112-25-4

Physical Properties

Property code	Value	Unit	Source
gf	-225.34	kJ/mol	Joback Method
hf	-492.90	kJ/mol	Joback Method
hfus	21.75	kJ/mol	Joback Method
hvap	52.49	kJ/mol	Joback Method
log10ws	-1.52		Crippen Method
logp	1.576		Crippen Method
mcvol	135.320	ml/mol	McGowan Method
pc	2738.28	kPa	Joback Method
rinpol	1090.00		NIST Webbook
rinpol	1106.00		NIST Webbook
rinpol	1090.00		NIST Webbook
rinpol	1106.00		NIST Webbook
tb	532.25	K	NIST Webbook
tb	481.20	K	NIST Webbook

tc	656.87	K	Joback Method
tf	232.95	K	NIST Webbook
vc	0.520	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	314.61	J/mol×K	497.04	Joback Method
cpg	325.99	J/mol×K	523.68	Joback Method
cpg	337.00	J/mol×K	550.32	Joback Method
cpg	347.62	J/mol×K	576.95	Joback Method
cpg	357.88	J/mol×K	603.59	Joback Method
cpg	367.76	J/mol×K	630.23	Joback Method
cpg	377.28	J/mol×K	656.87	Joback Method
dvisc	0.0241515	Pa×s	262.97	Joback Method
dvisc	0.0057953	Pa×s	301.98	Joback Method
dvisc	0.0019277	Pa×s	340.99	Joback Method
dvisc	0.0008038	Pa×s	380.00	Joback Method
dvisc	0.0003945	Pa×s	419.02	Joback Method
dvisc	0.0002185	Pa×s	458.03	Joback Method
dvisc	0.0001328	Pa×s	497.04	Joback Method
hvapt	54.60	kJ/mol	423.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.62888e+01
Coeff. B	-4.74063e+03
Coeff. C	-7.49930e+01
Temperature range (K), min.	371.26
Temperature range (K), max.	506.85

Sources

The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Mutual Solubility and Lower Critical Solution Temperature for Water + Glycol Ether Systems:	https://www.doi.org/10.1021/je049635u
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=C112254&Units=SI

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
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume