Triethylene glycol, hexyl ether

Other names:	Triethylene glycol, monohexyl ether
	ethanol, 2-[2-[2-(hexyloxy)ethoxy]ethoxy]-
	triethylene glycol mono-n-hexyl ether
	triethylene glycol monohexyl ether
Inchi:	InChI=1S/C12H26O4/c1-2-3-4-5-7-14-9-11-16-12-10-15-8-6-13/h13H,2-12H2,1H3
InchiKey:	RGICCULPCWNRAB-UHFFFAOYSA-N
Formula:	C12H26O4
SMILES:	CCCCCCOCCOCCOCCO
Mol. weight [g/mol]:	234.33

Physical Properties

Property code	Value	Unit	Source
gf	-401.66	kJ/mol	Joback Method
hf	-839.90	kJ/mol	Joback Method
hfus	34.49	kJ/mol	Joback Method
hvap	66.22	kJ/mol	Joback Method
log10ws	-1.37		Crippen Method
logp	1.609		Crippen Method
mcvol	203.420	ml/mol	McGowan Method
pc	1843.58	kPa	Joback Method
rinpol	1631.00		NIST Webbook
tb	633.40	K	Joback Method
tc	793.43	K	Joback Method
tf	352.51	K	Joback Method
vc	0.780	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	562.91	J/mol×K	633.40	Joback Method
cpg	577.24	J/mol×K	660.07	Joback Method
cpg	591.04	J/mol×K	686.74	Joback Method
cpg	604.30	J/mol×K	713.41	Joback Method
cpg	617.04	J/mol×K	740.08	Joback Method

cpg	629.23	J/mol×K	766.75	Joback Method
cpg	640.89	J/mol×K	793.43	Joback Method
dvisc	0.0028368	Pa×s	352.51	Joback Method
dvisc	0.0008781	Pa×s	399.32	Joback Method
dvisc	0.0003476	Pa×s	446.14	Joback Method
dvisc	0.0001641	Pa×s	492.95	Joback Method
dvisc	0.0000882	Pa×s	539.77	Joback Method
dvisc	0.0000524	Pa×s	586.59	Joback Method
dvisc	0.0000336	Pa×s	633.40	Joback Method

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=R120066&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Effect of the ethoxy groups distribution on the phase behaviour of the binary systems carbon dioxide CO2 with industrial non-ionic surfactants (CxEOy):	https://www.doi.org/10.1016/j.jct.2012.09.001
Mutual Solubility and Lower Critical Solution Temperature for Water + Glycol Ether Systems:	https://www.doi.org/10.1021/je049635u

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