Hexaethylene glycol monoethyl ether

Inchi: InChI=1S/C14H30O7/c1-2-16-5-6-18-9-10-20-13-14-21-12-11-19-8-7-17-4-3-15/h15H,2-1
InchiKey: UKXKPKBTMYNOFS-UHFFFAOYSA-N
Formula: C14H30O7
SMILES: CCOCCOCCOCCOCCOCCOCCO
Mol. weight [g/mol]: 310.38

Physical Properties

Property code	Value	Unit	Source
gf	-699.82	kJ/mol	Joback Method
hf	-1277.84	kJ/mol	Joback Method
hfus	43.23	kJ/mol	Joback Method
hvap	77.90	kJ/mol	Joback Method
log10ws	0.53		Crippen Method
logp	0.098		Crippen Method
mcvol	249.210	ml/mol	McGowan Method
pc	1511.67	kPa	Joback Method
rinpol	2118.00		NIST Webbook
rinpol	2118.00		NIST Webbook
tb	746.42	K	Joback Method
tc	916.39	K	Joback Method
tf	441.74	K	Joback Method
vc	0.947	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	761.40	J/mol×K	746.42	Joback Method
cpg	831.23	J/mol×K	888.06	Joback Method
cpg	818.90	J/mol×K	859.73	Joback Method
cpg	805.73	J/mol×K	831.41	Joback Method
cpg	791.75	J/mol×K	803.08	Joback Method
cpg	776.96	J/mol×K	774.75	Joback Method
cpg	842.69	J/mol×K	916.39	Joback Method
dvisc	0.0000085	Pa×s	746.42	Joback Method

dvisc	0.0000127	Pa×s	695.64	Joback Method
dvisc	0.0000201	Pa×s	644.86	Joback Method
dvisc	0.0000345	Pa×s	594.08	Joback Method
dvisc	0.0000656	Pa×s	543.30	Joback Method
dvisc	0.0001423	Pa×s	492.52	Joback Method
dvisc	0.0003688	Pa×s	441.74	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=R178842&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
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