2-(2-(2-(2-Pentoxy-ethoxy)-ethoxy)-ethoxy)-ethoxy

Other names: Pentaethylene glycol, pentyl ether
Inchi: InChI=1S/C15H32O6/c1-2-3-4-6-17-8-10-19-12-14-21-15-13-20-11-9-18-7-5-16/h16H,2-1
InchiKey: CHFJFGVAPWOVGG-UHFFFAOYSA-N
Formula: C15H32O6
SMILES: CCCCCOCCOCCOCCOCCOCCO
Mol. weight [g/mol]: 308.41

Physical Properties

Property code	Value	Unit	Source
gf	-586.40	kJ/mol	Joback Method
hf	-1166.26	kJ/mol	Joback Method
hfus	44.63	kJ/mol	Joback Method
hvap	77.71	kJ/mol	Joback Method
log10ws	-0.80		Crippen Method
logp	1.252		Crippen Method
mcvol	257.430	ml/mol	McGowan Method
pc	1422.92	kPa	Joback Method
rinpol	2234.90		NIST Webbook
tb	746.88	K	Joback Method
tc	916.73	K	Joback Method
tf	430.78	K	Joback Method
vc	0.985	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	788.93	J/mol×K	746.88	Joback Method
cpg	861.74	J/mol×K	888.43	Joback Method
cpg	848.81	J/mol×K	860.12	Joback Method
cpg	835.06	J/mol×K	831.81	Joback Method
cpg	820.48	J/mol×K	803.50	Joback Method
cpg	805.10	J/mol×K	775.19	Joback Method
cpg	873.83	J/mol×K	916.73	Joback Method
dvisc	0.0000098	Pa×s	746.88	Joback Method

dvisc	0.0000147	Pa×s	694.20	Joback Method
dvisc	0.0000238	Pa×s	641.51	Joback Method
dvisc	0.0000419	Pa×s	588.83	Joback Method
dvisc	0.0000825	Pa×s	536.15	Joback Method
dvisc	0.0001879	Pa×s	483.46	Joback Method
dvisc	0.0005238	Pa×s	430.78	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=R188344&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