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

Other names: Hexaethylene glycol, pentyl ether
Inchi: InChI=1S/C17H36O7/c1-2-3-4-6-19-8-10-21-12-14-23-16-17-24-15-13-22-11-9-20-7-5-18
InchiKey: CZCNKIPWHIURMJ-UHFFFAOYSA-N
Formula: C17H36O7
SMILES: CCCCCOCCOCCOCCOCCOCCOCCO
Mol. weight [g/mol]: 352.46

Physical Properties

Property code	Value	Unit	Source
gf	-674.56	kJ/mol	Joback Method
hf	-1339.76	kJ/mol	Joback Method
hfus	51.00	kJ/mol	Joback Method
hvap	84.58	kJ/mol	Joback Method
log10ws	-0.73		Crippen Method
logp	1.269		Crippen Method
mcvol	291.480	ml/mol	McGowan Method
pc	1222.55	kPa	Joback Method
rinpol	2519.20		NIST Webbook
rinpol	2519.20		NIST Webbook
tb	815.06	K	Joback Method
tc	997.96	K	Joback Method
tf	475.55	K	Joback Method
vc	1.115	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	938.24	J/mol×K	815.06	Joback Method
cpg	955.56	J/mol×K	845.54	Joback Method
cpg	971.79	J/mol×K	876.03	Joback Method
cpg	986.90	J/mol×K	906.51	Joback Method
cpg	1000.87	J/mol×K	936.99	Joback Method
cpg	1013.68	J/mol×K	967.48	Joback Method
cpg	1025.31	J/mol×K	997.96	Joback Method

dvisc	0.0002165	Pa×s	475.55	Joback Method
dvisc	0.0000816	Pa×s	532.13	Joback Method
dvisc	0.0000371	Pa×s	588.72	Joback Method
dvisc	0.0000194	Pa×s	645.31	Joback Method
dvisc	0.0000112	Pa×s	701.89	Joback Method
dvisc	0.0000071	Pa×s	758.48	Joback Method
dvisc	0.0000047	Pa×s	815.06	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R188186&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
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