3,6,9,12,15-Pentaoxanonadecan-1-ol

Other names:	2-(2-(2-(2-Butoxy-ethoxy)-ethoxy)-ethoxy)-ethoxy)-ethanol
	Pentaethylene glycol, butyl ether
	Pentaethylene glycol monobutyl ether
	2-[2-[2-[2-(2-Butoxyethoxy)ethoxy]ethoxy]ethoxy]ethanol
Inchi:	InChI=1S/C14H30O6/c1-2-3-5-16-7-9-18-11-13-20-14-12-19-10-8-17-6-4-15/h15H,2-14H
InchiKey:	AZYICGMHYYVGBY-UHFFFAOYSA-N
Formula:	C14H30O6
SMILES:	CCCCOCCOCCOCCOCCOCCO
Mol. weight [g/mol]:	294.38
CAS:	1786-94-3

Physical Properties

Property code	Value	Unit	Source
gf	-594.82	kJ/mol	Joback Method
hf	-1145.62	kJ/mol	Joback Method
hfus	42.04	kJ/mol	Joback Method
hvap	75.49	kJ/mol	Joback Method
log10ws	-0.38		Crippen Method
logp	0.862		Crippen Method
mcvol	243.340	ml/mol	McGowan Method
pc	1531.86	kPa	Joback Method
rinpol	2028.00		NIST Webbook
rinpol	2034.10		NIST Webbook
rinpol	2034.10		NIST Webbook
rinpol	2028.00		NIST Webbook
tb	724.00	K	Joback Method
tc	890.93	K	Joback Method
tf	419.51	K	Joback Method
vc	0.928	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	731.43	J/mol×K	724.00	Joback Method

cpg	802.01	J/mol×K	863.11	Joback Method
cpg	789.37	J/mol×K	835.29	Joback Method
cpg	775.98	J/mol×K	807.47	Joback Method
cpg	761.84	J/mol×K	779.64	Joback Method
cpg	746.99	J/mol×K	751.82	Joback Method
cpg	813.88	J/mol×K	890.93	Joback Method
dvisc	0.0000119	Pa×s	724.00	Joback Method
dvisc	0.0000179	Pa×s	673.25	Joback Method
dvisc	0.0000289	Pa×s	622.50	Joback Method
dvisc	0.0000509	Pa×s	571.75	Joback Method
dvisc	0.0000998	Pa×s	521.01	Joback Method
dvisc	0.0002267	Pa×s	470.26	Joback Method
dvisc	0.0006276	Pa×s	419.51	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1786943&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

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