2,5,8,11,14,17-Hexaoxaoctadecane

Other names: Pentaethyleneglycol dimethyl ether
Inchi: InChI=1S/C12H26O6/c1-13-3-5-15-7-9-17-11-12-18-10-8-16-6-4-14-2/h3-12H2,1-2H3
InchiKey: DMDPGPKXQDIQQG-UHFFFAOYSA-N
Formula: C12H26O6
SMILES: COCCOCCOCCOCCOCCOC
Mol. weight [g/mol]: 266.33
CAS: 1191-87-3

Physical Properties

Property code	Value	Unit	Source
gf	-579.84	kJ/mol	Joback Method
hf	-1084.33	kJ/mol	Joback Method
hfus	33.96	kJ/mol	Joback Method
hvap	56.77	kJ/mol	Joback Method
log10ws	0.63		Crippen Method
logp	0.346		Crippen Method
mcvol	215.160	ml/mol	McGowan Method
pc	1636.45	kPa	Joback Method
tb	608.48	K	Joback Method
tc	770.48	K	Joback Method
tf	358.38	K	Joback Method
vc	0.816	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	579.52	J/mol×K	608.48	Joback Method
cpg	595.23	J/mol×K	635.48	Joback Method
cpg	610.44	J/mol×K	662.48	Joback Method
cpg	625.14	J/mol×K	689.48	Joback Method
cpg	639.29	J/mol×K	716.48	Joback Method
cpg	652.88	J/mol×K	743.48	Joback Method
cpg	665.89	J/mol×K	770.48	Joback Method
dvisc	0.0006768	Pa×s	358.38	Joback Method

dvisc	0.0003598	Pa×s	400.06	Joback Method
dvisc	0.0002155	Pa×s	441.75	Joback Method
dvisc	0.0001410	Pa×s	483.43	Joback Method
dvisc	0.0000987	Pa×s	525.11	Joback Method
dvisc	0.0000728	Pa×s	566.80	Joback Method
dvisc	0.0000560	Pa×s	608.48	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1191873&Units=SI

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume