

2,5,8,11,14-Pentaoxahexadecan-16-ol

Other names:	Pentaethylene glycol monomethyl ether 3,6,9,12,15-Pentaoxahexadecanol 2-[2-[2-[2-(2-Methoxyethoxy)ethoxy]ethoxy]ethoxy]ethanol
Inchi:	InChI=1S/C11H24O6/c1-13-4-5-15-8-9-17-11-10-16-7-6-14-3-2-12/h12H,2-11H2,1H3
InchiKey:	SLNYBUIEAMRFSZ-UHFFFAOYSA-N
Formula:	C11H24O6
SMILES:	COCCOCCOCCOCCOCCO
Mol. weight [g/mol]:	252.30
CAS:	23778-52-1

Physical Properties

Property code	Value	Unit	Source
gf	-620.08	kJ/mol	Joback Method
hf	-1083.70	kJ/mol	Joback Method
hfus	34.27	kJ/mol	Joback Method
hvap	68.81	kJ/mol	Joback Method
log10ws	0.87		Crippen Method
logp	-0.308		Crippen Method
mcvol	201.070	ml/mol	McGowan Method
pc	1945.79	kPa	Joback Method
rinpol	1783.00		NIST Webbook
rinpol	1788.90		NIST Webbook
tb	655.36	K	Joback Method
tc	817.06	K	Joback Method
tf	385.70	K	Joback Method
vc	0.760	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	566.08	J/mol×K	655.36	Joback Method
cpg	579.71	J/mol×K	682.31	Joback Method
cpg	592.85	J/mol×K	709.26	Joback Method
cpg	605.46	J/mol×K	736.21	Joback Method

cpg	617.54	J/mol×K	763.16	Joback Method
cpg	629.07	J/mol×K	790.11	Joback Method
cpg	640.02	J/mol×K	817.06	Joback Method
dvisc	0.0010744	Pa×s	385.70	Joback Method
dvisc	0.0003973	Pa×s	430.64	Joback Method
dvisc	0.0001773	Pa×s	475.59	Joback Method
dvisc	0.0000910	Pa×s	520.53	Joback Method
dvisc	0.0000519	Pa×s	565.47	Joback Method
dvisc	0.0000322	Pa×s	610.42	Joback Method
dvisc	0.0000213	Pa×s	655.36	Joback Method

Sources

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=C23778521&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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

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