8-Chloro-1-octanol, methyl ether

Other names: 8-Chlorooctyl methyl ether
Inchi: InChI=1S/C9H19ClO/c1-11-9-7-5-3-2-4-6-8-10/h2-9H2,1H3
InchiKey: AGXFBKIMLRSQTG-UHFFFAOYSA-N
Formula: C9H19ClO
SMILES: COCCCCCCCCCl
Mol. weight [g/mol]: 178.70

Physical Properties

Property code	Value	Unit	Source
gf	-92.03	kJ/mol	Joback Method
hf	-377.05	kJ/mol	Joback Method
hfus	24.45	kJ/mol	Joback Method
hvap	42.42	kJ/mol	Joback Method
log10ws	-2.83		Crippen Method
logp	3.212		Crippen Method
mcvol	155.780	ml/mol	McGowan Method
pc	2191.78	kPa	Joback Method
rinpol	1295.80		NIST Webbook
tb	465.17	K	Joback Method
tc	634.82	K	Joback Method
tf	243.34	K	Joback Method
vc	0.607	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	330.22	J/mol×K	465.17	Joback Method
cpg	343.71	J/mol×K	493.44	Joback Method
cpg	356.72	J/mol×K	521.72	Joback Method
cpg	369.26	J/mol×K	549.99	Joback Method
cpg	381.33	J/mol×K	578.27	Joback Method
cpg	392.95	J/mol×K	606.54	Joback Method
cpg	404.10	J/mol×K	634.82	Joback Method
dvisc	0.0038364	Pa×s	243.34	Joback Method

dvisc	0.0017470	Pa×s	280.31	Joback Method
dvisc	0.0009556	Pa×s	317.28	Joback Method
dvisc	0.0005929	Pa×s	354.25	Joback Method
dvisc	0.0004026	Pa×s	391.23	Joback Method
dvisc	0.0002922	Pa×s	428.20	Joback Method
dvisc	0.0002232	Pa×s	465.17	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=U333820&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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