Methyl pentadecyl ether

Inchi: InChI=1S/C16H34O/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-2/h3-16H2,1-2H3
InchiKey: QTAFOTOCTOIEKW-UHFFFAOYSA-N
Formula: C16H34O
SMILES: CCCCCCCCCCCCCCCOC
Mol. weight [g/mol]: 242.44
CAS: 7307-52-0

Physical Properties

Property code	Value	Unit	Source
gf	-21.16	kJ/mol	Joback Method
hf	-505.79	kJ/mol	Joback Method
hfus	38.38	kJ/mol	Joback Method
hvap	53.62	kJ/mol	Joback Method
log10ws	-5.61		Crippen Method
logp	5.724		Crippen Method
mcvol	242.170	ml/mol	McGowan Method
pc	1302.35	kPa	Joback Method
tb	587.90	K	Joback Method
tc	747.10	K	Joback Method
tf	292.31	K	Joback Method
vc	0.950	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	643.59	J/mol×K	587.90	Joback Method
cpg	662.46	J/mol×K	614.43	Joback Method
cpg	680.61	J/mol×K	640.97	Joback Method
cpg	698.07	J/mol×K	667.50	Joback Method
cpg	714.84	J/mol×K	694.03	Joback Method
cpg	730.94	J/mol×K	720.56	Joback Method
cpg	746.38	J/mol×K	747.10	Joback Method
dvisc	0.0033879	Pa×s	292.31	Joback Method
dvisc	0.0013014	Pa×s	341.57	Joback Method

dvisc	0.0006363	Pa×s	390.84	Joback Method
dvisc	0.0003651	Pa×s	440.11	Joback Method
dvisc	0.0002343	Pa×s	489.37	Joback Method
dvisc	0.0001631	Pa×s	538.63	Joback Method
dvisc	0.0001206	Pa×s	587.90	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7307520&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume