Methyl hexadecyl ether

Inchi: InChI=1S/C17H36O/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-2/h3-17H2,1-2H3
InchiKey: YOTHBMSACCHRLC-UHFFFAOYSA-N
Formula: C17H36O
SMILES: CCCCCCCCCCCCCCCCCOC
Mol. weight [g/mol]: 256.47
CAS: 7307-53-1

Physical Properties

Property code	Value	Unit	Source
gf	-12.74	kJ/mol	Joback Method
hf	-526.43	kJ/mol	Joback Method
hfus	40.97	kJ/mol	Joback Method
hvap	55.85	kJ/mol	Joback Method
log10ws	-6.03		Crippen Method
logp	6.114		Crippen Method
mcvol	256.260	ml/mol	McGowan Method
pc	1216.59	kPa	Joback Method
tb	610.78	K	Joback Method
tc	770.13	K	Joback Method
tf	303.58	K	Joback Method
vc	1.006	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	699.43	J/mol×K	610.78	Joback Method
cpg	788.91	J/mol×K	743.57	Joback Method
cpg	772.45	J/mol×K	717.01	Joback Method
cpg	755.28	J/mol×K	690.45	Joback Method
cpg	737.40	J/mol×K	663.90	Joback Method
cpg	718.79	J/mol×K	637.34	Joback Method
cpg	804.69	J/mol×K	770.13	Joback Method
dvisc	0.0001078	Pa×s	610.78	Joback Method
dvisc	0.0001462	Pa×s	559.58	Joback Method

dvisc	0.0002108	Pa×s	508.38	Joback Method
dvisc	0.0003299	Pa×s	457.18	Joback Method
dvisc	0.0005781	Pa×s	405.98	Joback Method
dvisc	0.0011910	Pa×s	354.78	Joback Method
dvisc	0.0031310	Pa×s	303.58	Joback Method

Sources

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=C7307531&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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