Ether, hexyl isopropyl

Other names: 1-methylethyl hexyl ether
Inchi: InChI=1S/C9H20O/c1-4-5-6-7-8-10-9(2)3/h9H,4-8H2,1-3H3
InchiKey: RFMZJYFXGWPOSR-UHFFFAOYSA-N
Formula: C9H20O
SMILES: CCCCCCOC(C)C
Mol. weight [g/mol]: 144.25
CAS: 18636-65-2

Physical Properties

Property code	Value	Unit	Source
gf	-82.54	kJ/mol	Joback Method
hf	-366.59	kJ/mol	Joback Method
hfus	16.73	kJ/mol	Joback Method
hvap	37.65	kJ/mol	Joback Method
log10ws	-2.79		Crippen Method
logp	2.992		Crippen Method
mcvol	143.540	ml/mol	McGowan Method
pc	2287.14	kPa	Joback Method
tb	427.30	K	Joback Method
tc	594.17	K	Joback Method
tf	198.42	K	Joback Method
vc	0.551	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	298.83	J/mol×K	427.30	Joback Method
cpg	313.00	J/mol×K	455.11	Joback Method
cpg	326.70	J/mol×K	482.92	Joback Method
cpg	339.94	J/mol×K	510.74	Joback Method
cpg	352.71	J/mol×K	538.55	Joback Method
cpg	365.04	J/mol×K	566.36	Joback Method
cpg	376.92	J/mol×K	594.17	Joback Method
dvisc	0.0071547	Pa×s	198.42	Joback Method

dvisc	0.0024518	Pa×s	236.57	Joback Method
dvisc	0.0011312	Pa×s	274.71	Joback Method
dvisc	0.0006303	Pa×s	312.86	Joback Method
dvisc	0.0003988	Pa×s	351.01	Joback Method
dvisc	0.0002760	Pa×s	389.15	Joback Method
dvisc	0.0002040	Pa×s	427.30	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=C18636652&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume