1,1,2,3,3,3-Hexafluoropropyl methyl ether

Other names: Propane, 1,1,1,2,3,3-hexafluoro-3-methoxy-
1,1,1,2,3,3-Hexafluoro-3-methoxypropane
Inchi: InChI=1S/C4H4F6O/c1-11-4(9,10)2(5)3(6,7)8/h2H,1H3
InchiKey: PKMXTDVNDDDCSY-UHFFFAOYSA-N
Formula: C4H4F6O
SMILES: COC(F)(F)C(F)C(F)(F)F
Mol. weight [g/mol]: 182.06
CAS: 382-34-3

Physical Properties

Property code	Value	Unit	Source
gf	-1287.82	kJ/mol	Joback Method
hf	-1457.55	kJ/mol	Joback Method
hfus	7.43	kJ/mol	Joback Method
hvap	19.03	kJ/mol	Joback Method
log10ws	-2.02		Crippen Method
logp	2.126		Crippen Method
mcvol	83.710	ml/mol	McGowan Method
pc	2944.08	kPa	Joback Method
tb	302.06	K	Joback Method
tc	437.36	K	Joback Method
tf	150.45	K	Joback Method
vc	0.357	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	162.88	J/mol×K	302.06	Joback Method
cpg	171.10	J/mol×K	324.61	Joback Method
cpg	178.95	J/mol×K	347.16	Joback Method
cpg	186.42	J/mol×K	369.71	Joback Method
cpg	193.54	J/mol×K	392.26	Joback Method
cpg	200.31	J/mol×K	414.81	Joback Method
cpg	206.74	J/mol×K	437.36	Joback Method

hvapt	32.40	kJ/mol	307.50	NIST Webbook

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C382343&Units=SI

Legend

cpg:	Ideal gas heat capacity
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
hvapt:	Enthalpy of vaporization at a given temperature
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