1-Propene, 2-methoxy-

Other names:	Ether, isopropenyl methyl
	Isopropenyl methyl ether
	Methyl isopropenyl ether
	2-Methoxy-1-propene
	CH2=C(CH3)OCH3
	2-Methoxypropene
Inchi:	InChI=1S/C4H8O/c1-4(2)5-3/h1H2,2-3H3
InchiKey:	YOWQWFMSQCOSBA-UHFFFAOYSA-N
Formula:	C4H8O
SMILES:	C=C(C)OC
Mol. weight [g/mol]:	72.11
CAS:	116-11-0

Physical Properties

Property code	Value	Unit	Source
affp	894.90	kJ/mol	NIST Webbook
basg	866.10	kJ/mol	NIST Webbook
gf	-42.91	kJ/mol	Joback Method
hf	-148.60	kJ/mol	NIST Webbook
hfus	4.71	kJ/mol	Joback Method
hvap	26.32	kJ/mol	Joback Method
ie	8.64	eV	NIST Webbook
log10ws	-0.93		Crippen Method
logp	1.166		Crippen Method
mcvol	68.790	ml/mol	McGowan Method
pc	4046.64	kPa	Joback Method
rinpol	482.00		NIST Webbook
rinpol	483.00		NIST Webbook
rinpol	482.00		NIST Webbook
tb	308.20	K	NIST Webbook
tc	480.47	K	Joback Method
tf	141.35	K	Joback Method
vc	0.260	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	104.86	J/mol×K	309.90	Joback Method
cpg	111.42	J/mol×K	338.33	Joback Method
cpg	117.81	J/mol×K	366.76	Joback Method
cpg	124.02	J/mol×K	395.18	Joback Method
cpg	130.06	J/mol×K	423.61	Joback Method
cpg	135.93	J/mol×K	452.04	Joback Method
cpg	141.63	J/mol×K	480.47	Joback Method
cpl	162.20	J/mol×K	301.50	NIST Webbook
hvapt	28.30 ± 0.10	kJ/mol	295.00	NIST Webbook

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=C116110&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Legend

affp: Proton affinity
basg: Gas basicity
cpg: Ideal gas heat capacity
cpl: Liquid phase 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
ie: Ionization energy
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