2-Propanol, 1-methoxy-2-methyl-

Other names: 1,1-Dimethyl-2-methoxyethanol
Inchi: InChI=1S/C5H12O2/c1-5(2,6)4-7-3/h6H,4H2,1-3H3
InchiKey: MXUXZWFVAPTPAG-UHFFFAOYSA-N
Formula: C5H12O2
SMILES: COCC(C)(C)O
Mol. weight [g/mol]: 104.15
CAS: 3587-64-2

Physical Properties

Property code	Value	Unit	Source
gf	-247.76	kJ/mol	Joback Method
hf	-439.73	kJ/mol	Joback Method
hfus	6.57	kJ/mol	Joback Method
hvap	44.52	kJ/mol	Joback Method
log10ws	-0.38		Crippen Method
logp	0.404		Crippen Method
mcvol	93.050	ml/mol	McGowan Method
pc	3886.79	kPa	Joback Method
tb	425.17	K	Joback Method
tc	597.13	K	Joback Method
tf	231.58	K	Joback Method
vc	0.342	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	193.76	J/mol×K	425.17	Joback Method
cpg	235.93	J/mol×K	568.47	Joback Method
cpg	228.23	J/mol×K	539.81	Joback Method
cpg	220.17	J/mol×K	511.15	Joback Method
cpg	211.75	J/mol×K	482.49	Joback Method
cpg	202.95	J/mol×K	453.83	Joback Method
cpg	243.28	J/mol×K	597.13	Joback Method
dvisc	0.0002452	Pa×s	425.17	Joback Method

dvisc	0.0004263	Pa×s	392.90	Joback Method
dvisc	0.0008183	Pa×s	360.64	Joback Method
dvisc	0.0017854	Pa×s	328.38	Joback Method
dvisc	0.0046174	Pa×s	296.11	Joback Method
dvisc	0.0150652	Pa×s	263.85	Joback Method
dvisc	0.0683378	Pa×s	231.58	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3587642&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