2-Propanol, 1-(1-methylethoxy)-

Other names: 2-Propanol, 1-isopropoxy-
1-Isopropoxy-2-propanol
1-isopropoxypropan-2-ol
Inchi: InChI=1S/C6H14O2/c1-5(2)8-4-6(3)7/h5-7H,4H2,1-3H3
InchiKey: AFHJYKBGDDJSRR-UHFFFAOYSA-N
Formula: C6H14O2
SMILES: CC(O)COC(C)C
Mol. weight [g/mol]: 118.17
CAS: 3944-36-3

Physical Properties

Property code	Value	Unit	Source
gf	-247.06	kJ/mol	Joback Method
hf	-462.18	kJ/mol	Joback Method
hfus	9.53	kJ/mol	Joback Method
hvap	47.26	kJ/mol	Joback Method
log10ws	-0.91		Crippen Method
logp	0.792		Crippen Method
mcvol	107.140	ml/mol	McGowan Method
pc	3448.03	kPa	Joback Method
rinpol	814.00		NIST Webbook
rinpol	814.00		NIST Webbook
tb	450.40	K	Joback Method
tc	618.48	K	Joback Method
tf	210.43	K	Joback Method
vc	0.397	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	230.45	J/mol×K	450.40	Joback Method
cpg	240.36	J/mol×K	478.41	Joback Method
cpg	249.93	J/mol×K	506.43	Joback Method
cpg	259.19	J/mol×K	534.44	Joback Method

cpg	268.11	J/mol×K	562.45	Joback Method
cpg	276.72	J/mol×K	590.46	Joback Method
cpg	285.01	J/mol×K	618.48	Joback Method
dvisc	0.2052897	Pa×s	210.43	Joback Method
dvisc	0.0246519	Pa×s	250.43	Joback Method
dvisc	0.0053072	Pa×s	290.42	Joback Method
dvisc	0.0016571	Pa×s	330.41	Joback Method
dvisc	0.0006653	Pa×s	370.41	Joback Method
dvisc	0.0003191	Pa×s	410.40	Joback Method
dvisc	0.0001744	Pa×s	450.40	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=C3944363&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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

Latest version available from: