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

Other names: 1-(2-Methoxy-1-methylethoxy)-2-propanol
34590-94-8
1-(2-methoxy-1-methylethoxy)propan-2-ol
Inchi: InChI=1S/C7H16O3/c1-6(8)4-10-7(2)5-9-3/h6-8H,4-5H2,1-3H3
InchiKey: WGYZMNBUZFHYRX-UHFFFAOYSA-N
Formula: C7H16O3
SMILES: COCC(C)OCC(C)O
Mol. weight [g/mol]: 148.20
CAS: 20324-32-7

Physical Properties

Property code	Value	Unit	Source
gf	-343.64	kJ/mol	Joback Method
hf	-615.04	kJ/mol	Joback Method
hfus	13.30	kJ/mol	Joback Method
hvap	51.90	kJ/mol	Joback Method
log10ws	-0.41		Crippen Method
logp	0.419		Crippen Method
mcvol	127.100	ml/mol	McGowan Method
pc	3032.27	kPa	Joback Method
rinpol	981.00		NIST Webbook
ripol	1478.00		NIST Webbook
tb	495.70	K	Joback Method
tc	662.51	K	Joback Method
tf	243.93	K	Joback Method
vc	0.470	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	295.34	J/mol×K	495.70	Joback Method
cpg	306.21	J/mol×K	523.50	Joback Method
cpg	316.74	J/mol×K	551.30	Joback Method
cpg	326.93	J/mol×K	579.11	Joback Method

cpg	336.78	J/mol×K	606.91	Joback Method
cpg	346.28	J/mol×K	634.71	Joback Method
cpg	355.43	J/mol×K	662.51	Joback Method
dvisc	0.0562449	Pa×s	243.93	Joback Method
dvisc	0.0091999	Pa×s	285.89	Joback Method
dvisc	0.0023920	Pa×s	327.85	Joback Method
dvisc	0.0008443	Pa×s	369.81	Joback Method
dvisc	0.0003685	Pa×s	411.78	Joback Method
dvisc	0.0001875	Pa×s	453.74	Joback Method
dvisc	0.0001069	Pa×s	495.70	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=C20324327&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
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume