1-tert-Butoxy-2-methoxyethane

Other names:	Ethylene glycol methyl-tert-butyl ether Propane, 2-(2-methoxyethoxy)-2-methyl- 1,1-Dimethyl-1-(2-methoxyethoxy)ethane 2-(2-methoxyethoxy)-2-methylpropane
Inchi:	InChI=1S/C7H16O2/c1-7(2,3)9-6-5-8-4/h5-6H2,1-4H3
InchiKey:	FQQBAHSCHMASLR-UHFFFAOYSA-N
Formula:	C7H16O2
SMILES:	COCCOC(C)(C)C
Mol. weight [g/mol]:	132.20
CAS:	66728-50-5

Physical Properties

Property code	Value	Unit	Source
gf	-199.10	kJ/mol	Joback Method
hf	-461.00	kJ/mol	Joback Method
hfus	8.85	kJ/mol	Joback Method
hvap	34.70	kJ/mol	Joback Method
log10ws	-1.04		Crippen Method
logp	1.448		Crippen Method
mcvol	121.230	ml/mol	McGowan Method
pc	2755.56	kPa	Joback Method
rinpol	844.00		NIST Webbook
tb	401.17	K	Joback Method
tc	576.64	K	Joback Method
tf	215.53	K	Joback Method
vc	0.453	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	243.99	J/mol×K	401.17	Joback Method
cpg	302.58	J/mol×K	547.40	Joback Method
cpg	291.74	J/mol×K	518.15	Joback Method
cpg	280.46	J/mol×K	488.91	Joback Method

cpg	268.75	J/mol×K	459.66	Joback Method
cpg	256.60	J/mol×K	430.42	Joback Method
cpg	312.99	J/mol×K	576.64	Joback Method
dvisc	0.0002179	Pa×s	401.17	Joback Method
dvisc	0.0002950	Pa×s	370.23	Joback Method
dvisc	0.0004220	Pa×s	339.29	Joback Method
dvisc	0.0006488	Pa×s	308.35	Joback Method
dvisc	0.0010979	Pa×s	277.41	Joback Method
dvisc	0.0021202	Pa×s	246.47	Joback Method
dvisc	0.0049459	Pa×s	215.53	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C66728505&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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