1-tert-Butoxy-2-ethoxyethane

Other names:	Propane, 2-(2-ethoxyethoxy)-2-methyl- 2-(2-ethoxyethoxy)-2-methylpropane
Inchi:	InChI=1S/C8H18O2/c1-5-9-6-7-10-8(2,3)4/h5-7H2,1-4H3
InchiKey:	NUNQKTCKURIZQX-UHFFFAOYSA-N
Formula:	C8H18O2
SMILES:	CCOCCOC(C)(C)C
Mol. weight [g/mol]:	146.23
CAS:	51422-54-9

Physical Properties

Property code	Value	Unit	Source
gf	-190.68	kJ/mol	Joback Method
hf	-481.64	kJ/mol	Joback Method
hfus	11.44	kJ/mol	Joback Method
hvap	36.93	kJ/mol	Joback Method
log10ws	-1.46		Crippen Method
logp	1.838		Crippen Method
mcvol	135.320	ml/mol	McGowan Method
pc	2497.50	kPa	Joback Method
tb	421.20	K	NIST Webbook
tc	598.52	K	Joback Method
tf	226.80	K	Joback Method
vc	0.508	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	284.39	J/mol×K	424.05	Joback Method
cpg	298.15	J/mol×K	453.13	Joback Method
cpg	311.41	J/mol×K	482.21	Joback Method
cpg	324.16	J/mol×K	511.28	Joback Method
cpg	336.43	J/mol×K	540.36	Joback Method
cpg	348.21	J/mol×K	569.44	Joback Method
cpg	359.52	J/mol×K	598.52	Joback Method

dvisc	0.0048563	Pa×s	226.80	Joback Method
dvisc	0.0020461	Pa×s	259.68	Joback Method
dvisc	0.0010469	Pa×s	292.55	Joback Method
dvisc	0.0006133	Pa×s	325.43	Joback Method
dvisc	0.0003964	Pa×s	358.30	Joback Method
dvisc	0.0002756	Pa×s	391.18	Joback Method
dvisc	0.0002028	Pa×s	424.05	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C51422549&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

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

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