Ethanol, 2-(1,1-dimethylethoxy)-

Other names:	Ethanol, 2-tert-butoxy-
	Ethylene glycol mono-tert-butyl ether
	2-tert-Butoxyethanol
	Swasolve etb
Inchi:	InChI=1S/C6H14O2/c1-6(2,3)8-5-4-7/h7H,4-5H2,1-3H3
InchiKey:	BDLXTDLGTWNUFM-UHFFFAOYSA-N
Formula:	C6H14O2
SMILES:	CC(C)(C)OCCO
Mol. weight [g/mol]:	118.17
CAS:	7580-85-0

Physical Properties

Property code	Value	Unit	Source
gf	-239.34	kJ/mol	Joback Method
hf	-460.37	kJ/mol	Joback Method
hfus	9.16	kJ/mol	Joback Method
hvap	46.74	kJ/mol	Joback Method
log10ws	-0.80		Crippen Method
logp	0.794		Crippen Method
mcvol	107.140	ml/mol	McGowan Method
pc	3460.21	kPa	Joback Method
tb	448.05	K	Joback Method
tc	618.94	K	Joback Method
tf	242.85	K	Joback Method
vc	0.398	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	288.52	J/mol×K	618.94	Joback Method
cpg	280.27	J/mol×K	590.46	Joback Method
cpg	271.62	J/mol×K	561.97	Joback Method
cpg	262.58	J/mol×K	533.49	Joback Method
cpg	253.13	J/mol×K	505.01	Joback Method

cpg	243.25	J/mol×K	476.53	Joback Method
cpg	232.93	J/mol×K	448.05	Joback Method
dvisc	0.0527584	Pa×s	242.85	Joback Method
dvisc	0.0001995	Pa×s	448.05	Joback Method
dvisc	0.0003442	Pa×s	413.85	Joback Method
dvisc	0.0006553	Pa×s	379.65	Joback Method
dvisc	0.0014170	Pa×s	345.45	Joback Method
dvisc	0.0036303	Pa×s	311.25	Joback Method
dvisc	0.0117321	Pa×s	277.05	Joback Method
hfust	11.40	kJ/mol	223.10	NIST Webbook

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=C7580850&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
hfust: Enthalpy of fusion at a given temperature
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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