Ethanol, 1-(2-butoxyethoxy)-

Other names: 1-(2-Butoxyethoxy)ethanol
Inchi: InChI=1S/C8H18O3/c1-3-4-5-10-6-7-11-8(2)9/h8-9H,3-7H2,1-2H3
InchiKey: ZNQOETZUGRUONW-UHFFFAOYSA-N
Formula: C8H18O3
SMILES: CCCCOCCOC(C)O
Mol. weight [g/mol]: 162.23
CAS: 54446-78-5

Physical Properties

Property code	Value	Unit	Source
gf	-332.78	kJ/mol	Joback Method
hf	-630.40	kJ/mol	Joback Method
hfus	19.42	kJ/mol	Joback Method
hvap	54.51	kJ/mol	Joback Method
log10ws	-1.22		Crippen Method
logp	1.158		Crippen Method
mcvol	141.190	ml/mol	McGowan Method
pc	2712.67	kPa	Joback Method
rinpol	1187.40		NIST Webbook
ripol	1800.00		NIST Webbook
ripol	1800.00		NIST Webbook
tb	519.02	K	Joback Method
tc	681.80	K	Joback Method
tf	270.20	K	Joback Method
vc	0.532	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	339.43	J/mol×K	519.02	Joback Method
cpg	350.98	J/mol×K	546.15	Joback Method
cpg	362.17	J/mol×K	573.28	Joback Method
cpg	372.99	J/mol×K	600.41	Joback Method
cpg	383.44	J/mol×K	627.54	Joback Method

cpg	393.51	J/mol×K	654.67	Joback Method
cpg	403.21	J/mol×K	681.80	Joback Method
dvisc	0.0214208	Pa×s	270.20	Joback Method
dvisc	0.0047345	Pa×s	311.67	Joback Method
dvisc	0.0014917	Pa×s	353.14	Joback Method
dvisc	0.0005991	Pa×s	394.61	Joback Method
dvisc	0.0002862	Pa×s	436.08	Joback Method
dvisc	0.0001555	Pa×s	477.55	Joback Method
dvisc	0.0000931	Pa×s	519.02	Joback Method

Sources

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=C54446785&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

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