1-Butanol, 4-butoxy-

Other names:	1,4-Tetrabutyleneglycol monobutyl ether
	4-Butoxybutanol
	Butylene glycol monobutyl ether
	4-Butoxy-1-butanol
Inchi:	InChI=1S/C8H18O2/c1-2-3-7-10-8-5-4-6-9/h9H,2-8H2,1H3
InchiKey:	OBXQRJAQMQQZMY-UHFFFAOYSA-N
Formula:	C8H18O2
SMILES:	CCCCOCCCCO
Mol. weight [g/mol]:	146.23
CAS:	4161-24-4

Physical Properties

Property code	Value	Unit	Source
gf	-225.34	kJ/mol	Joback Method
hf	-492.90	kJ/mol	Joback Method
hfus	21.75	kJ/mol	Joback Method
hvap	52.49	kJ/mol	Joback Method
log10ws	-1.52		Crippen Method
logp	1.576		Crippen Method
mcvol	135.320	ml/mol	McGowan Method
pc	2738.28	kPa	Joback Method
ripol	1701.00		NIST Webbook
tb	497.04	K	Joback Method
tc	656.87	K	Joback Method
tf	262.97	K	Joback Method
vc	0.520	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	314.61	J/mol×K	497.04	Joback Method
cpg	325.99	J/mol×K	523.68	Joback Method
cpg	337.00	J/mol×K	550.32	Joback Method
cpg	347.62	J/mol×K	576.95	Joback Method

cpg	357.88	J/mol×K	603.59	Joback Method
cpg	367.76	J/mol×K	630.23	Joback Method
cpg	377.28	J/mol×K	656.87	Joback Method
dvisc	0.0241515	Pa×s	262.97	Joback Method
dvisc	0.0057953	Pa×s	301.98	Joback Method
dvisc	0.0019277	Pa×s	340.99	Joback Method
dvisc	0.0008038	Pa×s	380.00	Joback Method
dvisc	0.0003945	Pa×s	419.02	Joback Method
dvisc	0.0002185	Pa×s	458.03	Joback Method
dvisc	0.0001328	Pa×s	497.04	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C4161244&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
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

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