2-Butanol, 1-chloro-

Other names: «alpha»-Butylene chlorohydrin
1-Chloro-2-butanol
Inchi: InChI=1S/C4H9ClO/c1-2-4(6)3-5/h4,6H,2-3H2,1H3
InchiKey: VNBFUGOVQMFIRN-UHFFFAOYSA-N
Formula: C4H9ClO
SMILES: CCC(O)CCl
Mol. weight [g/mol]: 108.57
CAS: 1873-25-2

Physical Properties

Property code	Value	Unit	Source
gf	-168.39	kJ/mol	Joback Method
hf	-299.14	kJ/mol	Joback Method
hfus	10.88	kJ/mol	Joback Method
hvap	45.17	kJ/mol	Joback Method
log10ws	-1.03		Crippen Method
logp	0.996		Crippen Method
mcvol	85.330	ml/mol	McGowan Method
pc	4222.04	kPa	Joback Method
tb	420.09	K	Joback Method
tc	593.20	K	Joback Method
tf	210.58	K	Joback Method
vc	0.322	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	156.93	J/mol×K	420.09	Joback Method
cpg	189.63	J/mol×K	564.35	Joback Method
cpg	183.64	J/mol×K	535.50	Joback Method
cpg	177.38	J/mol×K	506.65	Joback Method
cpg	170.85	J/mol×K	477.79	Joback Method
cpg	164.04	J/mol×K	448.94	Joback Method
cpg	195.36	J/mol×K	593.20	Joback Method

dvisc	0.0003069	Pa×s	420.09	Joback Method
dvisc	0.0005398	Pa×s	385.17	Joback Method
dvisc	0.0010623	Pa×s	350.25	Joback Method
dvisc	0.0024290	Pa×s	315.33	Joback Method
dvisc	0.0068239	Pa×s	280.42	Joback Method
dvisc	0.0257191	Pa×s	245.50	Joback Method
dvisc	0.1505149	Pa×s	210.58	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=C1873252&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume