2-Butoxy-1-propanol

Other names: Butoxypropanol
2-Butoxypropanol
butoxypropan-1-ol
Inchi: InChI=1S/C7H16O2/c1-3-4-5-9-7(2)6-8/h7-8H,3-6H2,1-2H3
InchiKey: WGKZYJXRTIPTCV-UHFFFAOYSA-N
Formula: C7H16O2
SMILES: CCCCOC(C)CO
Mol. weight [g/mol]: 132.20
CAS: 29387-86-8

Physical Properties

Property code	Value	Unit	Source
gf	-236.20	kJ/mol	Joback Method
hf	-477.54	kJ/mol	Joback Method
hfus	15.64	kJ/mol	Joback Method
hvap	49.88	kJ/mol	Joback Method
log10ws	-1.22		Crippen Method
logp	1.184		Crippen Method
mcvol	121.230	ml/mol	McGowan Method
pc	3062.55	kPa	Joback Method
rinpol	934.00		NIST Webbook
rinpol	934.00		NIST Webbook
rinpol	951.00		NIST Webbook
rinpol	951.00		NIST Webbook
ripol	1350.00		NIST Webbook
ripol	1422.20		NIST Webbook
ripol	1350.00		NIST Webbook
tb	473.72	K	Joback Method
tc	637.45	K	Joback Method
tf	236.70	K	Joback Method
vc	0.459	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	271.52	J/mol×K	473.72	Joback Method
cpg	321.47	J/mol×K	610.16	Joback Method
cpg	312.18	J/mol×K	582.87	Joback Method
cpg	302.54	J/mol×K	555.59	Joback Method
cpg	292.56	J/mol×K	528.30	Joback Method
cpg	282.22	J/mol×K	501.01	Joback Method
cpg	330.41	J/mol×K	637.45	Joback Method
dvisc	0.0001517	Pa×s	473.72	Joback Method
dvisc	0.0002622	Pa×s	434.22	Joback Method
dvisc	0.0005057	Pa×s	394.71	Joback Method
dvisc	0.0011285	Pa×s	355.21	Joback Method
dvisc	0.0030786	Pa×s	315.71	Joback Method
dvisc	0.0111917	Pa×s	276.20	Joback Method
dvisc	0.0625947	Pa×s	236.70	Joback Method

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=C29387868&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
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