1-Bromo-2-butanol

Inchi: InChI=1S/C4H9BrO/c1-2-4(6)3-5/h4,6H,2-3H2,1H3
InchiKey: DMRXISNUOWIOKV-UHFFFAOYSA-N
Formula: C4H9BrO
SMILES: CCC(O)CBr
Mol. weight [g/mol]: 153.02
CAS: 2482-57-7

Physical Properties

Property code	Value	Unit	Source
gf	-142.14	kJ/mol	Joback Method
hf	-257.07	kJ/mol	Joback Method
hfus	11.97	kJ/mol	Joback Method
hvap	47.22	kJ/mol	Joback Method
log10ws	-1.30		Crippen Method
logp	1.152		Crippen Method
mcvol	90.590	ml/mol	McGowan Method
pc	4869.76	kPa	Joback Method
tb	448.82	K	Joback Method
tc	632.13	K	Joback Method
tf	240.46	K	Joback Method
vc	0.335	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	203.81	J/mol×K	632.13	Joback Method
cpg	165.40	J/mol×K	448.82	Joback Method
cpg	172.61	J/mol×K	479.37	Joback Method
cpg	179.48	J/mol×K	509.92	Joback Method
cpg	186.02	J/mol×K	540.48	Joback Method
cpg	192.25	J/mol×K	571.03	Joback Method
cpg	198.17	J/mol×K	601.58	Joback Method
dvisc	0.0002989	Pa×s	448.82	Joback Method
dvisc	0.0580626	Pa×s	240.46	Joback Method

dvisc	0.0138627	Pa×s	275.19	Joback Method
dvisc	0.0045625	Pa×s	309.91	Joback Method
dvisc	0.0018786	Pa×s	344.64	Joback Method
dvisc	0.0009099	Pa×s	379.37	Joback Method
dvisc	0.0004977	Pa×s	414.09	Joback Method
hvapt	58.40	kJ/mol	357.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2482577&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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
hvapt: Enthalpy of vaporization at a given temperature
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