Butane, 1-bromo-2-methyl-, (S)-

Other names:	(S)-1-Bromo-2-methylbutane
	(S)-(+)-1-Bromo-2-methylbutane
	(+)-(S)-1-Bromo-2-methylbutane
	(+)-1-Bromo-2-methylbutane
	Butane, 1-bromo-2-methyl-, (S)-(+)-
	(S)-2-Methyl-1-bromobutane
	(S)-(+)-2-Methyl-1-bromobutane
	(+)-2-Methyl-1-bromobutane
	(+)-2-Methylbutyl bromide
	1-Bromo-2-methylbutane, (S)-
	Butane, 1-bromo-2-methyl-, (2S)-
Inchi:	InChI=1S/C5H11Br/c1-3-5(2)4-6/h5H,3-4H2,1-2H3/t5-/m1/s1
InchiKey:	XKVLZBNEPALHIO-RXMQYKEDSA-N
Formula:	C5H11Br
SMILES:	CCC(C)CBr
Mol. weight [g/mol]:	151.04
CAS:	534-00-9

Physical Properties

Property code	Value	Unit	Source
gf	3.10	kJ/mol	Joback Method
hf	-125.48	kJ/mol	Joback Method
hfus	10.47	kJ/mol	Joback Method
hvap	32.77	kJ/mol	Joback Method
log10ws	-2.11		Crippen Method
logp	2.427		Crippen Method
mcvol	98.810	ml/mol	McGowan Method
pc	3805.69	kPa	Joback Method
tb	394.80	K	NIST Webbook
tc	568.83	K	Joback Method
tf	190.91	K	Joback Method
vc	0.371	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	161.30	J/mol×K	379.52	Joback Method
cpg	170.96	J/mol×K	411.07	Joback Method
cpg	180.18	J/mol×K	442.62	Joback Method
cpg	188.97	J/mol×K	474.18	Joback Method
cpg	197.35	J/mol×K	505.73	Joback Method
cpg	205.34	J/mol×K	537.28	Joback Method
cpg	212.94	J/mol×K	568.83	Joback Method
dvisc	0.0061616	Pa×s	190.91	Joback Method
dvisc	0.0027207	Pa×s	222.34	Joback Method
dvisc	0.0014710	Pa×s	253.78	Joback Method
dvisc	0.0009108	Pa×s	285.21	Joback Method
dvisc	0.0006202	Pa×s	316.65	Joback Method
dvisc	0.0004527	Pa×s	348.08	Joback Method
dvisc	0.0003481	Pa×s	379.52	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C534009&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume