Cyclohexanol, 2-bromo-, cis-

Other names: cis-2-Bromocyclohexanol
2-Bromocyclohexanol, (Z)
Inchi: InChI=1S/C6H11BrO/c7-5-3-1-2-4-6(5)8/h5-6,8H,1-4H2/t5-,6+/m0/s1
InchiKey: AAMCLCZHZXKWRV-NTSWFWBYSA-N
Formula: C6H11BrO
SMILES: OC1CCCCC1Br
Mol. weight [g/mol]: 179.06
CAS: 16536-57-5

Physical Properties

Property code	Value	Unit	Source
gf	-106.12	kJ/mol	Joback Method
hf	-259.09	kJ/mol	Joback Method
hfus	13.57	kJ/mol	Joback Method
hvap	52.18	kJ/mol	Joback Method
log10ws	-2.15		Crippen Method
logp	1.685		Crippen Method
mcvol	107.910	ml/mol	McGowan Method
pc	4684.89	kPa	Joback Method
rinpol	1089.00		NIST Webbook
tb	509.90	K	Joback Method
tc	720.76	K	Joback Method
tf	301.80 ± 0.20	K	NIST Webbook
vc	0.385	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	228.93	J/mol×K	509.90	Joback Method
cpg	241.56	J/mol×K	545.04	Joback Method
cpg	253.47	J/mol×K	580.19	Joback Method
cpg	264.69	J/mol×K	615.33	Joback Method
cpg	275.23	J/mol×K	650.48	Joback Method
cpg	285.13	J/mol×K	685.62	Joback Method

cpg	294.40	J/mol×K	720.76	Joback Method
dvisc	0.0184055	Pa×s	281.14	Joback Method
dvisc	0.0057078	Pa×s	319.27	Joback Method
dvisc	0.0022724	Pa×s	357.39	Joback Method
dvisc	0.0010805	Pa×s	395.52	Joback Method
dvisc	0.0005855	Pa×s	433.65	Joback Method
dvisc	0.0003503	Pa×s	471.77	Joback Method
dvisc	0.0002263	Pa×s	509.90	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	323.00	K	0.10	NIST Webbook

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=C16536575&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
rinpol: Non-polar retention indices

tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume