Cyclopentane, 1-bromo-2-chloro-, cis-

Other names:	cis-2-Chlorocyclopentyl Bromide
	1-Bromo-2-chlorocyclopentane, (Z)-
Inchi:	InChI=1S/C5H8BrCl/c6-4-2-1-3-5(4)7/h4-5H,1-3H2/t4-,5+/m0/s1
InchiKey:	KMVDKCXPHPPHOI-CRCLSJGQSA-N
Formula:	C5H8BrCl
SMILES:	ClC1CCCC1Br
Mol. weight [g/mol]:	183.47
CAS:	37722-39-7

Physical Properties

Property code	Value	Unit	Source
gf	22.45	kJ/mol	Joback Method
hf	-95.80	kJ/mol	Joback Method
hfus	13.19	kJ/mol	Joback Method
hvap	37.49	kJ/mol	Joback Method
ie	10.13 ± 0.02	eV	NIST Webbook
log10ws	-2.62		Crippen Method
logp	2.541		Crippen Method
mcvol	100.190	ml/mol	McGowan Method
pc	4333.96	kPa	Joback Method
tb	428.00	K	Joback Method
tc	655.09	K	Joback Method
tf	242.49	K	Joback Method
vc	0.366	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	166.67	J/mol×K	428.00	Joback Method
cpg	178.87	J/mol×K	465.85	Joback Method
cpg	190.30	J/mol×K	503.70	Joback Method
cpg	200.99	J/mol×K	541.54	Joback Method
cpg	210.99	J/mol×K	579.39	Joback Method
cpg	220.31	J/mol×K	617.24	Joback Method

cpg	229.00	J/mol×K	655.09	Joback Method
dvisc	0.0024293	Pa×s	242.49	Joback Method
dvisc	0.0015962	Pa×s	273.41	Joback Method
dvisc	0.0011422	Pa×s	304.33	Joback Method
dvisc	0.0008694	Pa×s	335.25	Joback Method
dvisc	0.0006930	Pa×s	366.16	Joback Method
dvisc	0.0005722	Pa×s	397.08	Joback Method
dvisc	0.0004857	Pa×s	428.00	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C37722397&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
ie: Ionization energy
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

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