

Cyclohexane, 1-bromo-2-(trichloromethyl), cis

Inchi:	InChI=1S/C7H10BrCl3/c8-6-4-2-1-3-5(6)7(9,10)11/h5-6H,1-4H2/t5-,6+/m1/s1
InchiKey:	YHUWUUJETKWTKY-RITPCOANSA-N
Formula:	C7H10BrCl3
SMILES:	C1C(C1)(Cl)C(Cl)C(Cl)C(Cl)C1Br
Mol. weight [g/mol]:	280.42

Physical Properties

Property code	Value	Unit	Source
gf	6.17	kJ/mol	Joback Method
hf	-183.47	kJ/mol	Joback Method
hfus	17.25	kJ/mol	Joback Method
hvap	49.59	kJ/mol	Joback Method
log10ws	-4.51		Crippen Method
logp	4.310		Crippen Method
mvol	152.850	ml/mol	McGowan Method
pc	3299.15	kPa	Joback Method
rinpol	1525.00		NIST Webbook
tb	549.66	K	Joback Method
tc	805.47	K	Joback Method
tf	323.77	K	Joback Method
vc	0.557	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	304.18	J/molxK	549.66	Joback Method
cpg	318.96	J/molxK	592.29	Joback Method
cpg	332.45	J/molxK	634.93	Joback Method
cpg	344.74	J/molxK	677.56	Joback Method
cpg	355.91	J/molxK	720.20	Joback Method
cpg	366.04	J/molxK	762.83	Joback Method
cpg	375.23	J/molxK	805.47	Joback Method
dvisc	0.0036780	Paxs	323.77	Joback Method
dvisc	0.0020052	Paxs	361.42	Joback Method

dvisc	0.0012258	Paxs	399.07	Joback Method
dvisc	0.0008157	Paxs	436.71	Joback Method
dvisc	0.0005791	Paxs	474.36	Joback Method
dvisc	0.0004323	Paxs	512.01	Joback Method
dvisc	0.0003359	Paxs	549.66	Joback Method

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=R515261&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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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