

Cyclohexanol, 2-chloro-, trans-

Other names:	trans-2-Chlorocyclohexanol 2-Chlorocyclohexanol, (E)-
Inchi:	InChI=1S/C6H11ClO/c7-5-3-1-2-4-6(5)8/h5-6,8H,1-4H2/t5-,6-/m1/s1
InchiKey:	NYEWDMNOXFGGDY-PHDIDXHHSA-N
Formula:	C6H11ClO
SMILES:	OC1CCCCC1Cl
Mol. weight [g/mol]:	134.60
CAS:	6628-80-4

Physical Properties

Property code	Value	Unit	Source
gf	-132.37	kJ/mol	Joback Method
hf	-301.16	kJ/mol	Joback Method
hfus	12.49	kJ/mol	Joback Method
hvap	50.13	kJ/mol	Joback Method
log10ws	-1.87		Crippen Method
logp	1.529		Crippen Method
mvol	102.650	ml/mol	McGowan Method
pc	4072.51	kPa	Joback Method
ripol	1636.00		NIST Webbook
tb	481.17	K	Joback Method
tc	681.95	K	Joback Method
tf	300.90 ± 2.00	K	NIST Webbook
vc	0.371	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	216.66	J/mol×K	481.17	Joback Method
cpg	229.30	J/mol×K	514.63	Joback Method
cpg	241.30	J/mol×K	548.10	Joback Method
cpg	252.67	J/mol×K	581.56	Joback Method
cpg	263.43	J/mol×K	615.02	Joback Method
cpg	273.59	J/mol×K	648.48	Joback Method

cpg	283.17	J/mol×K	681.95	Joback Method
dvisc	0.0353626	Paxs	251.26	Joback Method
dvisc	0.0087916	Paxs	289.58	Joback Method
dvisc	0.0030260	Paxs	327.90	Joback Method
dvisc	0.0013020	Paxs	366.22	Joback Method
dvisc	0.0006572	Paxs	404.53	Joback Method
dvisc	0.0003734	Paxs	442.85	Joback Method
dvisc	0.0002322	Paxs	481.17	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6628804&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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