Cyclohexanol, 4-chloro-, trans-

Other names: trans-4-Chlorocyclohexanol
Inchi: InChI=1S/C6H11ClO/c7-5-1-3-6(8)4-2-5/h5-6,8H,1-4H2/t5-,6-
InchiKey: HVPIAXWCSPHTAY-IZLXSQMJSA-N
Formula: C6H11ClO
SMILES: OC1CCC(Cl)CC1
Mol. weight [g/mol]: 134.60
CAS: 29538-77-0

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
mcvol	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	251.26	K	Joback Method
vc	0.371	m3/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	Pa×s	251.26	Joback Method
dvisc	0.0087916	Pa×s	289.58	Joback Method
dvisc	0.0030260	Pa×s	327.90	Joback Method
dvisc	0.0013020	Pa×s	366.22	Joback Method
dvisc	0.0006572	Pa×s	404.53	Joback Method
dvisc	0.0003734	Pa×s	442.85	Joback Method
dvisc	0.0002322	Pa×s	481.17	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C29538770&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
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