Cyclohexane, trichloromethyl

Inchi: InChI=1S/C7H11Cl3/c8-7(9,10)6-4-2-1-3-5-6/h6H,1-5H2
InchiKey: ANUMBTODEQDFNN-UHFFFAOYSA-N
Formula: C7H11Cl3
SMILES: ClC(Cl)(Cl)C1CCCCC1
Mol. weight [g/mol]: 201.52

Physical Properties

Property code	Value	Unit	Source
gf	-0.44	kJ/mol	Joback Method
hf	-189.46	kJ/mol	Joback Method
hfus	10.90	kJ/mol	Joback Method
hvap	43.46	kJ/mol	Joback Method
log10ws	-3.97		Crippen Method
logp	3.937		Crippen Method
mcvol	135.350	ml/mol	McGowan Method
pc	3166.83	kPa	Joback Method
rinpol	1224.00		NIST Webbook
rinpol	1224.00		NIST Webbook
rinpol	1224.00		NIST Webbook
tb	488.17	K	Joback Method
tc	727.74	K	Joback Method
tf	268.21	K	Joback Method
vc	0.496	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	263.69	J/mol×K	488.17	Joback Method
cpg	330.99	J/mol×K	687.81	Joback Method
cpg	319.71	J/mol×K	647.88	Joback Method
cpg	307.41	J/mol×K	607.95	Joback Method
cpg	294.02	J/mol×K	568.03	Joback Method
cpg	279.47	J/mol×K	528.10	Joback Method
cpg	341.33	J/mol×K	727.74	Joback Method

dvisc	0.0003409	Pa×s	488.17	Joback Method
dvisc	0.0004636	Pa×s	451.51	Joback Method
dvisc	0.0006657	Pa×s	414.85	Joback Method
dvisc	0.0010253	Pa×s	378.19	Joback Method
dvisc	0.0017325	Pa×s	341.53	Joback Method
dvisc	0.0033213	Pa×s	304.87	Joback Method
dvisc	0.0076066	Pa×s	268.21	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=R514931&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