

Cyclopropane, 1-chloro, 2-trichloromethyl, trans

Inchi:	InChI=1S/C4H4Cl4/c5-3-1-2(3)4(6,7)8/h2-3H,1H2/t2-,3-/m1/s1
InchiKey:	LGCBYXXHZRLIRT-PWNYCUMCSA-N
Formula:	C4H4Cl4
SMILES:	C1C1CC1C(Cl)(Cl)Cl
Mol. weight [g/mol]:	193.89

Physical Properties

Property code	Value	Unit	Source
gf	-9.04	kJ/mol	Joback Method
hf	-145.14	kJ/mol	Joback Method
hfus	14.70	kJ/mol	Joback Method
hvap	40.35	kJ/mol	Joback Method
log10ws	-2.98		Crippen Method
logp	2.984		Crippen Method
mcvol	105.320	ml/mol	McGowan Method
pc	3745.38	kPa	Joback Method
rinpol	1406.00		NIST Webbook
tb	439.48	K	Joback Method
tc	668.63	K	Joback Method
tf	270.64	K	Joback Method
vc	0.401	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	172.70	J/molxK	439.48	Joback Method
cpg	209.62	J/molxK	630.44	Joback Method
cpg	203.72	J/molxK	592.25	Joback Method
cpg	197.15	J/molxK	554.05	Joback Method
cpg	189.84	J/molxK	515.86	Joback Method
cpg	181.71	J/molxK	477.67	Joback Method
cpg	214.92	J/molxK	668.63	Joback Method
dvisc	0.0007123	Paxs	439.48	Joback Method
dvisc	0.0008130	Paxs	411.34	Joback Method

dvisc	0.0009461	Paxs	383.20	Joback Method
dvisc	0.0011277	Paxs	355.06	Joback Method
dvisc	0.0013856	Paxs	326.92	Joback Method
dvisc	0.0017697	Paxs	298.78	Joback Method
dvisc	0.0023784	Paxs	270.64	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R515350&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
mccvol:	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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