Cyclopropene, tetrachloro-

Other names: Tetrachlorocyclopropene
Inchi: InChI=1S/C3Cl4/c4-1-2(5)3(1,6)7
InchiKey: BLZOHTXDDOAASQ-UHFFFAOYSA-N
Formula: C3Cl4
SMILES: ClC1=C(Cl)C1(Cl)Cl
Mol. weight [g/mol]: 177.84
CAS: 6262-42-6

Physical Properties

Property code	Value	Unit	Source
gf	-7.38	kJ/mol	Joback Method
hf	-45.33	kJ/mol	Joback Method
hfus	12.60	kJ/mol	Joback Method
hvap	40.19	kJ/mol	Joback Method
log10ws	-3.04		Crippen Method
logp	2.863		Crippen Method
mcvol	86.930	ml/mol	McGowan Method
pc	4608.87	kPa	Joback Method
tb	400.70	K	NIST Webbook
tc	666.87	K	Joback Method
tf	310.89	K	Joback Method
vc	0.341	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	119.15	J/mol×K	433.86	Joback Method
cpg	122.58	J/mol×K	472.70	Joback Method
cpg	125.28	J/mol×K	511.53	Joback Method
cpg	127.39	J/mol×K	550.37	Joback Method
cpg	129.06	J/mol×K	589.20	Joback Method
cpg	130.43	J/mol×K	628.04	Joback Method
cpg	131.65	J/mol×K	666.87	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6262426&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
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume