Cyclopropane, 1,1-dichloro-

Other names: 1,1-dichlorocyclopropane
Inchi: InChI=1S/C3H4Cl2/c4-3(5)1-2-3/h1-2H2
InchiKey: MZJYQXPULRLGCA-UHFFFAOYSA-N
Formula: C3H4Cl2
SMILES: ClC1(Cl)CC1
Mol. weight [g/mol]: 110.97
CAS: 2088-35-9

Physical Properties

Property code	Value	Unit	Source
gf	5.78	kJ/mol	Joback Method
hf	-48.69	kJ/mol	Joback Method
hfus	3.76	kJ/mol	Joback Method
hvap	29.80	kJ/mol	Joback Method
log10ws	-1.89		Crippen Method
logp	1.954		Crippen Method
mcvol	66.750	ml/mol	McGowan Method
pc	5065.79	kPa	Joback Method
tb	349.88	K	Joback Method
tc	559.29	K	Joback Method
tf	225.25	K	Joback Method
vc	0.257	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	91.06	J/mol×K	349.88	Joback Method
cpg	99.37	J/mol×K	384.78	Joback Method
cpg	106.64	J/mol×K	419.68	Joback Method
cpg	112.98	J/mol×K	454.59	Joback Method
cpg	118.51	J/mol×K	489.49	Joback Method
cpg	123.34	J/mol×K	524.39	Joback Method
cpg	127.59	J/mol×K	559.29	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=C2088359&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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