1-Propene, 1,2,3-trichloro-, (Z)-

Other names: cis-1,2,3-Trichloro-1-propene
1,2,3-Trichloropropene, Z-
(1Z)-1,2,3-Trichloro-1-propene
cis-1,2,3-Trichloropropene
Inchi: InChI=1S/C3H3Cl3/c4-1-3(6)2-5/h1H,2H2/b3-1-
InchiKey: HIILBTHBHCLUER-IWQZZHSRSA-N
Formula: C3H3Cl3
SMILES: ClC=C(Cl)CCl
Mol. weight [g/mol]: 145.41
CAS: 13116-57-9

Physical Properties

Property code	Value	Unit	Source
gf	10.26	kJ/mol	Joback Method
hf	-45.04	kJ/mol	Joback Method
hfus	15.01	kJ/mol	Joback Method
hvap	35.47	kJ/mol	Joback Method
log10ws	-2.38		Crippen Method
logp	2.544		Crippen Method
mcvol	85.550	ml/mol	McGowan Method
pc	4109.14	kPa	Joback Method
tb	384.37	K	Joback Method
tc	590.66	K	Joback Method
tf	194.29	K	Joback Method
vc	0.332	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	114.82	J/mol×K	384.37	Joback Method
cpg	119.89	J/mol×K	418.75	Joback Method
cpg	124.59	J/mol×K	453.13	Joback Method
cpg	128.93	J/mol×K	487.51	Joback Method
cpg	132.94	J/mol×K	521.89	Joback Method

cpg	136.65	J/mol×K	556.28	Joback Method
cpg	140.07	J/mol×K	590.66	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C13116579&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