

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:

Cl/C=C(\Cl)CCl

Mol. weight [g/mol]:

145.42

Physical Properties

Property code	Value	Unit	Source
af	0.2616		Cheméo Relay (1.0)
gf	10.26	kJ/mol	Joback Method
hf	-51.17	kJ/mol	Cheméo Relay (1.0)
hfus	15.01	kJ/mol	Joback Method
hvap	42.22	kJ/mol	Cheméo Relay (1.0)
ie	9.60	eV	Cheméo Relay (1.0)
log10ws	-2.63		Cheméo Relay (1.0)
logp	2.544		Crippen Method
mcvol	85.550	ml/mol	McGowan Method
pc	4109.14	kPa	Joback Method
tb	415.71	K	Cheméo Relay (1.0)
tc	641.60	K	Cheméo Relay (1.0)
tf	233.16	K	Cheméo Relay (1.0)
vc	0.297	m3/kmol	Cheméo Relay (1.0)

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

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C13116579&Units=SI
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

af:	Acentric Factor
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
ie:	Ionization energy
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

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