1-Propene, 3,3,3-trichloro-

Other names:	3,3,3-Dichloro-1-propene
	3,3,3-Trichloro-1-propene
	3,3,3-Trichloropropene
	CH2=CHCCl3
	Propene, 3,3,3-trichloro-
Inchi:	InChI=1S/C3H3Cl3/c1-2-3(4,5)6/h2H,1H2
InchiKey:	VKEIPALYOJMDAC-UHFFFAOYSA-N
Formula:	C3H3Cl3
SMILES:	C=CC(Cl)(Cl)Cl
Mol. weight [g/mol]:	145.41
CAS:	2233-00-3

Physical Properties

Property code	Value	Unit	Source
gf	29.27	kJ/mol	Joback Method
hf	-35.79	kJ/mol	Joback Method
hfus	7.42	kJ/mol	Joback Method
hvap	33.46	kJ/mol	Joback Method
log10ws	-2.49		Crippen Method
logp	2.543		Crippen Method
mcvol	85.550	ml/mol	McGowan Method
pc	4130.29	kPa	Joback Method
tb	373.78	K	Joback Method
tc	583.74	K	Joback Method
tf	213.99	K	Joback Method
vc	0.321	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	118.61	J/mol×K	373.78	Joback Method
cpg	124.58	J/mol×K	408.77	Joback Method
cpg	129.99	J/mol×K	443.77	Joback Method
cpg	134.90	J/mol×K	478.76	Joback Method

cpg	139.33	J/mol×K	513.75	Joback Method
cpg	143.33	J/mol×K	548.74	Joback Method
cpg	146.93	J/mol×K	583.74	Joback Method
dvisc	0.0058212	Pa×s	213.99	Joback Method
dvisc	0.0029991	Pa×s	240.62	Joback Method
dvisc	0.0017635	Pa×s	267.25	Joback Method
dvisc	0.0011417	Pa×s	293.88	Joback Method
dvisc	0.0007945	Pa×s	320.52	Joback Method
dvisc	0.0005845	Pa×s	347.15	Joback Method
dvisc	0.0004493	Pa×s	373.78	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.34973e+01
Coeff. B	-3.08054e+03
Coeff. C	-4.89170e+01
Temperature range (K), min.	282.12
Temperature range (K), max.	425.24

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2233003&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

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

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
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume