1,1,2,2,3-pentachloropropane

Inchi: InChI=1S/C3H3Cl5/c4-1-3(7,8)2(5)6/h2H,1H2
InchiKey: IYFMQUDCYNWFTL-UHFFFAOYSA-N
Formula: C3H3Cl5
SMILES: ClCC(Cl)(Cl)C(Cl)Cl
Mol. weight [g/mol]: 216.32
CAS: 16714-68-4

Physical Properties

Property code	Value	Unit	Source
gf	-84.87	kJ/mol	Joback Method
hf	-197.98	kJ/mol	Joback Method
hfus	13.57	kJ/mol	Joback Method
hvap	42.51	kJ/mol	Joback Method
log10ws	-3.06		Crippen Method
logp	3.203		Crippen Method
mcvol	114.330	ml/mol	McGowan Method
pc	3611.55	kPa	Joback Method
tb	451.52	K	Joback Method
tc	677.69	K	Joback Method
tf	260.59	K	Joback Method
vc	0.431	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	199.09	J/mol×K	677.69	Joback Method
cpg	171.76	J/mol×K	451.52	Joback Method
cpg	177.65	J/mol×K	489.22	Joback Method
cpg	182.95	J/mol×K	526.91	Joback Method
cpg	187.69	J/mol×K	564.61	Joback Method
cpg	191.94	J/mol×K	602.30	Joback Method
cpg	195.72	J/mol×K	640.00	Joback Method
dvisc	0.0004208	Pa×s	451.52	Joback Method
dvisc	0.0069460	Pa×s	260.59	Joback Method

dvisc	0.0033757	Pa×s	292.41	Joback Method
dvisc	0.0018901	Pa×s	324.23	Joback Method
dvisc	0.0011739	Pa×s	356.06	Joback Method
dvisc	0.0007884	Pa×s	387.88	Joback Method
dvisc	0.0005624	Pa×s	419.70	Joback Method
hvapt	46.30	kJ/mol	406.00	NIST Webbook

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=C16714684&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
hvapt:	Enthalpy of vaporization at a given temperature
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