1,1,2,2-Tetrachloro-3,3,4,4-tetrafluoro cyclobutane

Other names: 1,1,2,2-Tetrachlorotetrafluorocyclobutane
Inchi: InChI=1S/C4Cl4F4/c5-1(6)2(7,8)4(11,12)3(1,9)10
InchiKey: ZWDCJLJWIQMWBE-UHFFFAOYSA-N
Formula: C4Cl4F4
SMILES: FC1(F)C(F)(F)C(Cl)(Cl)C1(Cl)Cl
Mol. weight [g/mol]: 265.85
CAS: 336-50-5

Physical Properties

Property code	Value	Unit	Source
gf	-840.60	kJ/mol	Joback Method
hf	-906.71	kJ/mol	Joback Method
hfus	9.28	kJ/mol	Joback Method
hvap	33.32	kJ/mol	Joback Method
log10ws	-3.85		Crippen Method
logp	3.618		Crippen Method
mcvol	112.400	ml/mol	McGowan Method
pc	3484.76	kPa	Joback Method
tb	404.80	K	NIST Webbook
tb	404.70	K	NIST Webbook
tc	647.43	K	Joback Method
tf	354.18	K	Joback Method
vc	0.466	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	207.53	J/mol×K	435.68	Joback Method
cpg	215.45	J/mol×K	470.97	Joback Method
cpg	221.66	J/mol×K	506.26	Joback Method
cpg	226.52	J/mol×K	541.55	Joback Method
cpg	230.34	J/mol×K	576.85	Joback Method
cpg	233.48	J/mol×K	612.14	Joback Method
cpg	236.25	J/mol×K	647.43	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C336505&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

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