

# Cyclopentene, 1,2-dichloro-3,3,4,4,5,5-hexafluoro-

<b>Other names:</b>	Cyclopentene, 1,2-dichlorohexafluoro- 1,2-Dichlorohexafluoro-1-cyclopentene 1,2-Dichlorohexafluorocyclopentene 1,2-Dichloroperfluorocyclopentene 1,2-Dichlorohexafluorocyclopentene-1 Hexafluoro-1,2-dichloro-1-cyclopentene
<b>Inchi:</b>	InChI=1S/C5Cl2F6/c6-1-2(7)4(10,11)5(12,13)3(1,8)9
<b>InchiKey:</b>	ABPBVCKGWWGZDP-UHFFFAOYSA-N
<b>Formula:</b>	C5Cl2F6
<b>SMILES:</b>	FC1(F)C(Cl)=C(Cl)C(F)(F)C1(F)F
<b>Mol. weight [g/mol]:</b>	244.95
<b>CAS:</b>	706-79-6

## Physical Properties

Property code	Value	Unit	Source
gf	-1186.14	kJ/mol	Joback Method
hf	-1254.31	kJ/mol	Joback Method
hfus	13.21	kJ/mol	Joback Method
hvap	36.50	kJ/mol	NIST Webbook
log10ws	-3.90		Crippen Method
logp	3.595		Crippen Method
mcvol	101.250	ml/mol	McGowan Method
pc	3131.49	kPa	Joback Method
tb	363.00	K	NIST Webbook
tb	363.75 ± 0.50	K	NIST Webbook
tc	578.37	K	Joback Method
tf	309.41	K	Joback Method
vc	0.441	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	198.34	J/mol×K	400.06	Joback Method
cpg	206.79	J/mol×K	429.78	Joback Method

cpg	214.09	J/mol×K	459.50	Joback Method
cpg	220.38	J/mol×K	489.21	Joback Method
cpg	225.81	J/mol×K	518.93	Joback Method
cpg	230.52	J/mol×K	548.65	Joback Method
cpg	234.67	J/mol×K	578.37	Joback Method

## Sources

<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C706796&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C706796&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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