

# Cyclopentane, iodo-

Other names:	Cyclopentyl iodide Iodocyclopentane
Inchi:	InChI=1S/C5H9I/c6-5-3-1-2-4-5/h5H,1-4H2
InchiKey:	PCEBAZIVZVIQEO-UHFFFAOYSA-N
Formula:	C5H9I
SMILES:	IC1CCCC1
Mol. weight [g/mol]:	196.03
CAS:	1556-18-9

## Physical Properties

Property code	Value	Unit	Source
gf	85.89	kJ/mol	Joback Method
hf	-9.18	kJ/mol	Joback Method
hfus	7.05	kJ/mol	Joback Method
hvap	36.35	kJ/mol	Joback Method
ie	9.08	eV	NIST Webbook
ie	9.07	eV	NIST Webbook
ie	9.07	eV	NIST Webbook
log10ws	-2.87		Crippen Method
logp	2.364		Crippen Method
mcvol	96.270	ml/mol	McGowan Method
pc	4216.56	kPa	Joback Method
tb	422.22	K	Joback Method
tc	662.35	K	Joback Method
tf	215.07	K	Joback Method
vc	0.344	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	151.92	J/molxK	422.22	Joback Method
cpg	164.74	J/molxK	462.24	Joback Method
cpg	176.66	J/molxK	502.26	Joback Method
cpg	187.74	J/molxK	542.29	Joback Method

cpg	198.01	J/molxK	582.31	Joback Method
cpg	207.54	J/molxK	622.33	Joback Method
cpg	216.36	J/molxK	662.35	Joback Method
dvisc	0.0054185	Paxs	215.07	Joback Method
dvisc	0.0027623	Paxs	249.59	Joback Method
dvisc	0.0016587	Paxs	284.12	Joback Method
dvisc	0.0011125	Paxs	318.64	Joback Method
dvisc	0.0008067	Paxs	353.17	Joback Method
dvisc	0.0006194	Paxs	387.70	Joback Method
dvisc	0.0004966	Paxs	422.22	Joback Method

## Sources

<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=C1556189&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1556189&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>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<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>ie:</b>	Ionization energy
<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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