

# 1-Phenyl-1-cyclopropanecarbonitrile

<b>Other names:</b>	Cyclopropanecarbonitrile, 1-phenyl- 1-Phenyl-cyclopropanecarbonitrile
<b>Inchi:</b>	InChI=1S/C10H9N/c11-8-10(6-7-10)9-4-2-1-3-5-9/h1-5H,6-7H2
<b>InchiKey:</b>	ZHFURHRJUWYDKG-UHFFFAOYSA-N
<b>Formula:</b>	C10H9N
<b>SMILES:</b>	<chem>N#CC1(c2ccccc2)CC1</chem>
<b>Mol. weight [g/mol]:</b>	143.19
<b>CAS:</b>	935-44-4

## Physical Properties

Property code	Value	Unit	Source
gf	334.17	kJ/mol	Joback Method
hf	239.72	kJ/mol	Joback Method
hfus	9.04	kJ/mol	Joback Method
hvap	49.37	kJ/mol	Joback Method
log10ws	-2.55		Crippen Method
logp	2.242		Crippen Method
mvol	118.520	ml/mol	McGowan Method
pc	3472.45	kPa	Joback Method
tb	563.94	K	Joback Method
tc	815.04	K	Joback Method
tf	335.71	K	Joback Method
vc	0.469	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	272.11	J/molxK	563.94	Joback Method
cpg	284.73	J/molxK	605.79	Joback Method
cpg	296.22	J/molxK	647.64	Joback Method
cpg	306.83	J/molxK	689.49	Joback Method
cpg	316.77	J/molxK	731.34	Joback Method
cpg	326.28	J/molxK	773.19	Joback Method
cpg	335.59	J/molxK	815.04	Joback Method

# Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	408.20	K	4.00	NIST Webbook

## Sources

<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</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>
<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=C935444&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C935444&amp;Units=SI</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>tbrp:</b>	Boiling point at reduced pressure
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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