

# 2-Methylpyrrolidine

<b>Other names:</b>	Pyrrolidine, 2-methyl-
<b>Inchi:</b>	InChI=1S/C5H11N/c1-5-3-2-4-6-5/h5-6H,2-4H2,1H3
<b>InchiKey:</b>	RGHPCLZJAFCTIK-UHFFFAOYSA-N
<b>Formula:</b>	C5H11N
<b>SMILES:</b>	CC1CCCN1
<b>Mol. weight [g/mol]:</b>	85.15
<b>CAS:</b>	765-38-8

## Physical Properties

Property code	Value	Unit	Source
gf	115.48	kJ/mol	Joback Method
hf	-48.24	kJ/mol	Joback Method
hfus	12.23	kJ/mol	Joback Method
hvap	33.74	kJ/mol	Joback Method
log10ws	-1.11		Crippen Method
logp	0.758		Crippen Method
mcvol	80.430	ml/mol	McGowan Method
pc	4486.22	kPa	Joback Method
tb	377.63	K	Joback Method
tc	584.50	K	Joback Method
tf	262.04	K	Joback Method
vc	0.293	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	138.31	J/molxK	377.63	Joback Method
cpg	151.20	J/molxK	412.11	Joback Method
cpg	163.51	J/molxK	446.59	Joback Method
cpg	175.25	J/molxK	481.07	Joback Method
cpg	186.42	J/molxK	515.54	Joback Method
cpg	197.05	J/molxK	550.02	Joback Method
cpg	207.14	J/molxK	584.50	Joback Method

# Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.32514e+01
Coeff. B	-2.98284e+03
Coeff. C	-4.43300e+01
Temperature range (K), min.	274.42
Temperature range (K), max.	420.01

## Sources

The Yaws Handbook of Vapor

Pressure:  
Crippen Method:

<https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

Crippen Method:

[https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)

Joback Method:

[https://en.wikipedia.org/wiki/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=C765388&Units=SI>

## 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>pvap:</b>	Vapor pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature

**tf:** Normal melting (fusion) point

**vc:** Critical Volume

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