

# 1-Propylpiperidine

<b>Other names:</b>	N-Propylpiperidine Piperidine, 1-propyl- Piperidine, N-propyl- Propylpiperidine
<b>Inchi:</b>	InChI=1S/C8H17N/c1-2-6-9-7-4-3-5-8-9/h2-8H2,1H3
<b>InchiKey:</b>	VTDIWMPYBAVEDY-UHFFFAOYSA-N
<b>Formula:</b>	C8H17N
<b>SMILES:</b>	CCCN1CCCCC1
<b>Mol. weight [g/mol]:</b>	127.23
<b>CAS:</b>	5470-02-0

## Physical Properties

Property code	Value	Unit	Source
chl	-5430.60 ± 3.30	kJ/mol	NIST Webbook
hfl	-147.00 ± 3.30	kJ/mol	NIST Webbook
hvap	44.90 ± 0.40	kJ/mol	NIST Webbook
log10ws	-1.64		Crippen Method
logp	1.882		Crippen Method
mcvol	122.700	ml/mol	McGowan Method
rinpol	930.00		NIST Webbook
rinpol	930.00		NIST Webbook
rinpol	930.00		NIST Webbook
rinpol	932.00		NIST Webbook
rinpol	930.00		NIST Webbook
ripol	1054.00		NIST Webbook
ripol	1057.00		NIST Webbook
tb	425.25 ± 0.30	K	NIST Webbook

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	45.20 ± 0.40	kJ/mol	294.50	NIST Webbook

# Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.43127e+01
Coeff. B	-3.54858e+03
Coeff. C	-5.92030e+01
Temperature range (K), min.	312.22
Temperature range (K), max.	453.44

## Sources

McGowan Method:	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
NIST Webbook:	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C5470020&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C5470020&amp;Units=SI</a>
The Yaws Handbook of Vapor Pressure:	<a href="https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure">https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure</a>
Crippen Method:	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
Crippen Method:	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>

## Legend

<b>chl:</b>	Standard liquid enthalpy of combustion
<b>hfl:</b>	Liquid phase enthalpy of formation at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>hvapt:</b>	Enthalpy of vaporization at a given temperature
<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>pvap:</b>	Vapor pressure
<b>rinpolar:</b>	Non-polar retention indices
<b>ripolar:</b>	Polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature

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