

# 1-Naphthalenol, 1,2,3,4-tetrahydro-

<b>Other names:</b>	1-Naphthol, 1,2,3,4-tetrahydro- «alpha»-Tetralol Tetrahydro-1-naphthol Tetralin-1-ol 1-Tetralol 1,2,3,4-Tetrahydro-1-naphthol 1,2,3,4-Tetrahydro-«alpha»-naphthol 1,2,3,4-Tetrahydro-1-naphthalenol 1-Hydroxytetralin NSC 5172 1,2,3,4-tetrahydronaphthalen-1-ol
<b>Inchi:</b>	InChI=1S/C10H12O/c11-10-7-3-5-8-4-1-2-6-9(8)10/h1-2,4,6,10-11H,3,5,7H2
<b>InchiKey:</b>	JAAJQSRLGAYGKZ-UHFFFAOYSA-N
<b>Formula:</b>	C10H12O
<b>SMILES:</b>	OC1CCCc2ccccc21
<b>Mol. weight [g/mol]:</b>	148.20
<b>CAS:</b>	529-33-9

## Physical Properties

Property code	Value	Unit	Source
chs	-5408.70	kJ/mol	NIST Webbook
gf	47.93	kJ/mol	Joback Method
hf	-110.26	kJ/mol	Joback Method
hfus	15.43	kJ/mol	Joback Method
hvap	57.56	kJ/mol	Joback Method
ie	8.70 ± 0.01	eV	NIST Webbook
log10ws	-2.69		Crippen Method
logp	2.056		Crippen Method
mcvol	123.010	ml/mol	McGowan Method
pc	3834.03	kPa	Joback Method
tb	563.05	K	Joback Method
tc	777.80	K	Joback Method
tf	316.64	K	Joback Method
vc	0.456	m <sup>3</sup> /kmol	Joback Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	297.13	J/molxK	563.05	Joback Method
cpg	310.75	J/molxK	598.84	Joback Method
cpg	323.48	J/molxK	634.63	Joback Method
cpg	335.35	J/molxK	670.42	Joback Method
cpg	346.43	J/molxK	706.21	Joback Method
cpg	356.76	J/molxK	742.01	Joback Method
cpg	366.40	J/molxK	777.80	Joback Method
dvisc	0.0066435	Paxs	316.64	Joback Method
dvisc	0.0025404	Paxs	357.71	Joback Method
dvisc	0.0011841	Paxs	398.78	Joback Method
dvisc	0.0006365	Paxs	439.84	Joback Method
dvisc	0.0003804	Paxs	480.91	Joback Method
dvisc	0.0002465	Paxs	521.98	Joback Method
dvisc	0.0001702	Paxs	563.05	Joback Method

# Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	376.20	K	0.30	NIST Webbook

## Sources

NIST Webbook:	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C529339&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C529339&amp;Units=SI</a>
Crippen Method:	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
Crippen Method:	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
Joback Method:	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
McGowan Method:	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>

## Legend

<b>chs:</b>	Standard solid enthalpy of combustion
<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>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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