

# Naphthalene, 1,2,3,4-tetrahydro-6,7-dimethyl-

<b>Other names:</b>	6,7-Dimethyltetralin
<b>Inchi:</b>	InChI=1S/C12H16/c1-9-7-11-5-3-4-6-12(11)8-10(9)2/h7-8H,3-6H2,1-2H3
<b>InchiKey:</b>	MHPANBVNWFIIJM-UHFFFAOYSA-N
<b>Formula:</b>	C12H16
<b>SMILES:</b>	<chem>Cc1cc2c(cc1C)CCCC2</chem>
<b>Mol. weight [g/mol]:</b>	160.26
<b>CAS:</b>	1076-61-5

## Physical Properties

Property code	Value	Unit	Source
gf	190.04	kJ/mol	Joback Method
hf	-1.91	kJ/mol	Joback Method
hfus	14.67	kJ/mol	Joback Method
hvap	46.96	kJ/mol	Joback Method
log10ws	-3.92		Crippen Method
logp	3.182		Crippen Method
mcvol	145.320	ml/mol	McGowan Method
pc	2781.78	kPa	Joback Method
tb	531.26	K	Joback Method
tc	758.15	K	Joback Method
tf	307.64	K	Joback Method
vc	0.549	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	332.48	J/molxK	531.26	Joback Method
cpg	349.89	J/molxK	569.08	Joback Method
cpg	366.21	J/molxK	606.89	Joback Method
cpg	381.50	J/molxK	644.71	Joback Method
cpg	395.82	J/molxK	682.52	Joback Method
cpg	409.22	J/molxK	720.34	Joback Method
cpg	421.77	J/molxK	758.15	Joback Method
dvisc	0.0016640	Paxs	307.64	Joback Method

dvisc	0.0010670	Paxs	344.91	Joback Method
dvisc	0.0007461	Paxs	382.18	Joback Method
dvisc	0.0005560	Paxs	419.45	Joback Method
dvisc	0.0004346	Paxs	456.72	Joback Method
dvisc	0.0003527	Paxs	493.99	Joback Method
dvisc	0.0002947	Paxs	531.26	Joback Method

## Sources

<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=C1076615&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1076615&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>

## 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>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mccvol:</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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