

# 1,1'-Biphenyl, 3,3',4,4',5,5'-hexamethyl-

<b>Inchi:</b>	InChI=1S/C18H22/c1-11-7-17(8-12(2)15(11)5)18-9-13(3)16(6)14(4)10-18/h7-10H,1-6H3
<b>InchiKey:</b>	JQDKLRDTPXELAB-UHFFFAOYSA-N
<b>Formula:</b>	C18H22
<b>SMILES:</b>	<chem>Cc1cc(-c2cc(C)c(C)c(C)c2)cc(C)c1C</chem>
<b>Mol. weight [g/mol]:</b>	238.37
<b>CAS:</b>	56667-01-7

## Physical Properties

Property code	Value	Unit	Source
gf	267.72	kJ/mol	Joback Method
hf	-10.61	kJ/mol	Joback Method
hfus	28.12	kJ/mol	Joback Method
hvap	64.19	kJ/mol	Joback Method
log10ws	-6.93		Crippen Method
logp	5.204		Crippen Method
mcvol	216.960	ml/mol	McGowan Method
pc	1774.35	kPa	Joback Method
tb	694.48	K	Joback Method
tc	921.12	K	Joback Method
tf	406.00 ± 3.00	K	NIST Webbook
vc	0.828	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	575.42	J/molxK	694.48	Joback Method
cpg	593.58	J/molxK	732.25	Joback Method
cpg	610.63	J/molxK	770.03	Joback Method
cpg	626.62	J/molxK	807.80	Joback Method
cpg	641.57	J/molxK	845.57	Joback Method
cpg	655.52	J/molxK	883.34	Joback Method
cpg	668.51	J/molxK	921.12	Joback Method
dvisc	0.0006371	Paxs	420.58	Joback Method
dvisc	0.0004225	Paxs	466.23	Joback Method

dvisc	0.0003015	Paxs	511.88	Joback Method
dvisc	0.0002273	Paxs	557.53	Joback Method
dvisc	0.0001789	Paxs	603.18	Joback Method
dvisc	0.0001456	Paxs	648.83	Joback Method
dvisc	0.0001218	Paxs	694.48	Joback Method

## 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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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=C56667017&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C56667017&amp;Units=SI</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>mcvol:</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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