

# Tricyclo[6.4.0.0(2,7)]dodecane

<b>Other names:</b>	Biphenylene, dodecahydro-Tricyclo[6,4,0,0(2,7)]dodecane
<b>Inchi:</b>	InChI=1S/C12H20/c1-2-6-10-9(5-1)11-7-3-4-8-12(10)11/h9-12H,1-8H2
<b>InchiKey:</b>	PTNLWTZEWCIXDH-UHFFFAOYSA-N
<b>Formula:</b>	C12H20
<b>SMILES:</b>	C1CCC2C(C1)C1CCCCC21
<b>Mol. weight [g/mol]:</b>	164.29
<b>CAS:</b>	53485-49-7

## Physical Properties

Property code	Value	Unit	Source
gf	188.40	kJ/mol	Joback Method
hf	-111.43	kJ/mol	Joback Method
hfus	16.01	kJ/mol	Joback Method
hvap	42.25	kJ/mol	Joback Method
log10ws	-3.56		Crippen Method
logp	3.613		Crippen Method
mcvol	147.360	ml/mol	McGowan Method
pc	2662.52	kPa	Joback Method
rinpola	1344.00		NIST Webbook
tb	502.32	K	Joback Method
tc	726.21	K	Joback Method
tf	264.02	K	Joback Method
vc	0.553	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	369.20	J/molxK	502.32	Joback Method
cpg	393.61	J/molxK	539.63	Joback Method
cpg	416.37	J/molxK	576.95	Joback Method
cpg	437.59	J/molxK	614.26	Joback Method
cpg	457.35	J/molxK	651.58	Joback Method
cpg	475.77	J/molxK	688.89	Joback Method

cpg	492.92	J/mol×K	726.21	Joback Method
dvisc	0.0016617	Paxs	264.02	Joback Method
dvisc	0.0014428	Paxs	303.74	Joback Method
dvisc	0.0012943	Paxs	343.45	Joback Method
dvisc	0.0011875	Paxs	383.17	Joback Method
dvisc	0.0011073	Paxs	422.89	Joback Method
dvisc	0.0010450	Paxs	462.60	Joback Method
dvisc	0.0009953	Paxs	502.32	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=C53485497&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C53485497&amp;Units=SI</a>
<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>

## 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>rinpol:</b>	Non-polar retention indices
<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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