

# 2,3,5-Trichloro-1,1'-biphenyl

<b>Other names:</b>	PCB 23 1,1'-Biphenyl, 2,3,5-trichloro-
<b>Inchi:</b>	InChI=1S/C12H7Cl3/c13-9-6-10(12(15)11(14)7-9)8-4-2-1-3-5-8/h1-7H
<b>InchiKey:</b>	GBUCDGDROYMOAN-UHFFFAOYSA-N
<b>Formula:</b>	C12H7Cl3
<b>SMILES:</b>	Clc1cc(Cl)c(Cl)c(-c2ccccc2)c1
<b>Mol. weight [g/mol]:</b>	257.54
<b>CAS:</b>	55720-44-0

## Physical Properties

Property code	Value	Unit	Source
gf	210.30	kJ/mol	Joback Method
hf	100.42	kJ/mol	Joback Method
hfus	26.34	kJ/mol	Joback Method
hvap	62.00	kJ/mol	Joback Method
log10ws	-6.13		Crippen Method
logp	5.314		Crippen Method
mvol	169.140	ml/mol	McGowan Method
pc	2878.12	kPa	Joback Method
rinpol	1820.00		NIST Webbook
rinpol	1796.00		NIST Webbook
tb	654.55	K	Joback Method
tc	917.95	K	Joback Method
tf	405.16	K	Joback Method
vc	0.638	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	349.20	J/molxK	654.55	Joback Method
cpg	360.92	J/molxK	698.45	Joback Method
cpg	371.61	J/molxK	742.35	Joback Method
cpg	381.33	J/molxK	786.25	Joback Method
cpg	390.14	J/molxK	830.15	Joback Method

cpg	398.13	J/molxK	874.05	Joback Method
cpg	405.36	J/molxK	917.95	Joback Method
dvisc	0.0010725	Paxs	405.16	Joback Method
dvisc	0.0006985	Paxs	446.73	Joback Method
dvisc	0.0004893	Paxs	488.29	Joback Method
dvisc	0.0003625	Paxs	529.86	Joback Method
dvisc	0.0002805	Paxs	571.42	Joback Method
dvisc	0.0002248	Paxs	612.99	Joback Method
dvisc	0.0001852	Paxs	654.55	Joback Method

## Sources

<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=C55720440&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C55720440&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>
<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>

## 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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