

1,1'-Biphenyl, 2,2',4,4',5,5'-hexabromo-

Other names:	2,2',4,4',5,5'-Hexabromo-1,1'-biphenyl 2,2',4,4',5,5'-Hexabromobiphenyl 2,4,5,2',4',5'-Hexabromobiphenyl
Inchi:	InChI=1S/C12H4Br6/c13-7-3-11(17)9(15)1-5(7)6-2-10(16)12(18)4-8(6)14/h1-4H
InchiKey:	HMBBJSKXDBUNNT-UHFFFAOYSA-N
Formula:	C12H4Br6
SMILES:	<chem>Brc1cc(Br)c(-c2cc(Br)c(Br)cc2Br)cc1Br</chem>
Mol. weight [g/mol]:	627.58
CAS:	59080-40-9

Physical Properties

Property code	Value	Unit	Source
gf	303.12	kJ/mol	Joback Method
hf	271.21	kJ/mol	Joback Method
hfus	44.29	kJ/mol	Joback Method
hvap	89.44	kJ/mol	Joback Method
log10ws	-11.05		Crippen Method
logp	7.929		Crippen Method
mcvol	237.420	ml/mol	McGowan Method
pc	5220.69	kPa	Joback Method
tb	954.16	K	Joback Method
tc	1269.63	K	Joback Method
tf	711.76	K	Joback Method
vc	0.864	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	431.26	J/molxK	954.16	Joback Method
cpg	438.47	J/molxK	1006.74	Joback Method
cpg	445.68	J/molxK	1059.32	Joback Method
cpg	453.10	J/molxK	1111.90	Joback Method
cpg	460.94	J/molxK	1164.47	Joback Method
cpg	469.41	J/molxK	1217.05	Joback Method

cpg	478.71	J/mol×K	1269.63	Joback Method
dvisc	0.0002217	Paxs	711.76	Joback Method
dvisc	0.0001780	Paxs	752.16	Joback Method
dvisc	0.0001462	Paxs	792.56	Joback Method
dvisc	0.0001224	Paxs	832.96	Joback Method
dvisc	0.0001041	Paxs	873.36	Joback Method
dvisc	0.0000899	Paxs	913.76	Joback Method
dvisc	0.0000785	Paxs	954.16	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C59080409&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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