[1,1'-Biphenyl]-2,2'-diamine

Other names:	2,2'-Biphenyldiamine
	o-Benzidine
	O,O'-Diaminobiphenyl
	2,2'-Diaminobiphenyl
	2,2'-Diaminodiphenyl
Inchi:	InChI=1S/C12H12N2/c13-11-7-3-1-5-9(11)10-6-2-4-8-12(10)14/h1-8H,13-14H2
InchiKey:	HOLGXWDGCVTMTB-UHFFFAOYSA-N
Formula:	C12H12N2
SMILES:	Nc1ccccc1-c1ccccc1N
Mol. weight [g/mol]:	184.24
CAS:	1454-80-4

Physical Properties

Property code	Value	Unit	Source
gf	388.62	kJ/mol	Joback Method
hf	226.69	kJ/mol	Joback Method
hfus	24.53	kJ/mol	Joback Method
hvap	69.46	kJ/mol	Joback Method
log10ws	-3.34		Crippen Method
logp	2.518		Crippen Method
mcvol	152.380	ml/mol	McGowan Method
pc	3791.65	kPa	Joback Method
tb	682.34	K	Joback Method
tc	947.66	K	Joback Method
tf	469.40	K	Joback Method
vc	0.549	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	391.10	J/mol×K	682.34	Joback Method
cpg	404.97	J/mol×K	726.56	Joback Method
cpg	417.65	J/mol×K	770.78	Joback Method
cpg	429.21	J/mol×K	815.00	Joback Method

cpg	439.73	J/mol×K	859.22	Joback Method
cpg	449.29	J/mol×K	903.44	Joback Method
cpg	457.98	J/mol×K	947.66	Joback Method

Sources

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=C1454804&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cpg:	Ideal gas heat capacity
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