

3,3'-Diaminobenzidine

Other names:	[1,1'-Biphenyl]-3,3',4,4'-tetramine 3,3',4,4'-Biphenyltetramine 3,3',4,4'-Diphenyltetramine 3,3',4,4'-Tetraaminobiphenyl 3,3',4,4'-Tetraaminodiphenyl 3,3',4,4'-Tetraminobiphenyl DAB NSC 76152 biphenyl-3,3',4,4'-tetrayltetraamine
Inchi:	InChI=1S/C12H14N4/c13-9-3-1-7(5-11(9)15)8-2-4-10(14)12(16)6-8/h1-6H,13-16H2
InchiKey:	HSTOKWSFWGCZMH-UHFFFAOYSA-N
Formula:	C12H14N4
SMILES:	<chem>Nc1ccc(-c2ccc(N)c(N)c2)cc1N</chem>
Mol. weight [g/mol]:	214.27
CAS:	91-95-2

Physical Properties

Property code	Value	Unit	Source
gf	502.26	kJ/mol	Joback Method
hf	271.33	kJ/mol	Joback Method
hfus	34.15	kJ/mol	Joback Method
hvap	92.07	kJ/mol	Joback Method
log10ws	-2.61		Crippen Method
logp	1.682		Crippen Method
mcvol	172.340	ml/mol	McGowan Method
pc	4216.56	kPa	Joback Method
tb	837.36	K	Joback Method
tc	1110.33	K	Joback Method
tf	660.96	K	Joback Method
vc	0.608	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
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cpg	497.08	J/mol×K	837.36	Joback Method
cpg	508.50	J/mol×K	882.85	Joback Method
cpg	518.83	J/mol×K	928.35	Joback Method
cpg	528.16	J/mol×K	973.84	Joback Method
cpg	536.55	J/mol×K	1019.34	Joback Method
cpg	544.08	J/mol×K	1064.83	Joback Method
cpg	550.81	J/mol×K	1110.33	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=C91952&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.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

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