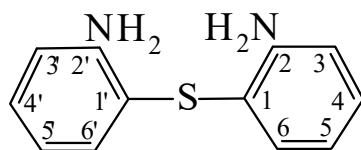




>>Entry Name: **2,2'-Diaminodiphenyl sulfide**

**Synonym(s):** 2,2'-Thiobisbenzenamine, 9Cl. 2,2'-Thiodianiline, 8Cl. Bis(2-aminophenyl) sulfide



**CAS Registry Number:** 5873-51-8

**Molecular Formula:** C<sub>12</sub>H<sub>12</sub>N<sub>2</sub>S

**Molecular Weight:** 216.306

**Accurate Mass:** 216.072118

**Percentage Composition:** C 66.63%; H 5.59%; N 12.95%; S 14.82%

**Physical Description:** Needles

**Melting Point:** Mp 87°

>>Derivative: 2,2'-N-Di-Ac

**Molecular Formula:** C<sub>16</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>S

**Molecular Weight:** 300.381

**Accurate Mass:** 300.093248

**Percentage Composition:** C 63.98%; H 5.37%; N 9.33%; O 10.65%; S 10.68%

**Melting Point:** Mp 164.5°

>>Derivative: 2,2'-N-Dibenzoyl

**Molecular Formula:** C<sub>26</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub>S

**Molecular Weight:** 424.522

**Accurate Mass:** 424.124548

**Percentage Composition:** C 73.56%; H 4.75%; N 6.60%; O 7.54%; S 7.55%

**Melting Point:** Mp 162-163°

>>Derivative: S,S-Dioxide

**Synonym(s):** 2,2'-Diaminodiphenyl sulfone. 2,2'-Sulfonylbisbenzeneamine, 9Cl. 2,2'-Sulfonyldianiline, 8Cl. Bis(2-aminophenyl)sulfone

**CAS Registry Number:** 53347-49-2

**Extra CAS Registry Numbers(s):** 27133-91-1

**Molecular Formula:** C<sub>12</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>S

**Molecular Weight:** 248.305

**Accurate Mass:** 248.061948

**Percentage Composition:** C 58.05%; H 4.87%; N 11.28%; O 12.89%; S 12.91%

**Melting Point:** Mp 146-147°

**References:**

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Allinger, N.L. *et al.*, *J.A.C.S.*, 1962, **84**, 1020, (*synth*)  
Hubert, A.J. *et al.*, *J.C.S.(C)*, 1969, 1334, (*synth*)  
Pappalardo, G.C., *Spectrochim. Acta A*, 1973, **29**, 2055, (*pmr*)  
*Czech. Pat.*, 1975, 158 469; *CA*, **84**, 16955k, (*dioxide*)  
Hlavaty, J. *et al.*, *Electrochim. Acta*, 1978, **23**, 589, (*synth*)  
Franc, J. *et al.*, *J. Chromatogr.*, 1979, **170**, 89, (*dioxide*)