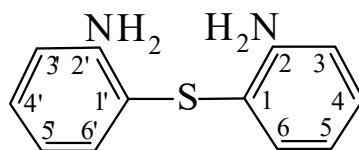




>>Entry Name: **2,2'-Diaminodiphenyl sulfide**

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



CAS Registry Number: 5873-51-8

Molecular Formula: C₁₂H₁₂N₂S

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: C₁₆H₁₆N₂O₂S

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: C₂₆H₂₀N₂O₂S

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: C₁₂H₁₂N₂O₂S

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:

- Baker, B.R. *et al.*, *J.O.C.*, 1950, **15**, 400, (*dioxide*)
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*)