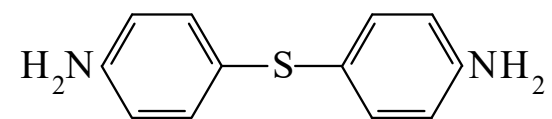




>>Entry Name: 4,4'-Diaminodiphenyl sulfide

Synonym(s): 4,4'-Thiobisbenzenamine, 9Cl. 4,4'-Thiodianiline, 8Cl. Bis(4-aminophenyl) sulfide. Thioaniline



CAS Registry Number: 139-65-1

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%

Use/Importance: Used in polymerisations. Used as 0.015*M* soln. in 0.8*M* HCl for photometric detn. of Re (λ_{max} 390 nm, ϵ 13000)

Physical Description: Needles (H₂O)

Melting Point: Mp 108-109°

Solubility: Sol. aq. HCl; insol. H₂O

Hazard & Toxicity: Possible human carcinogen. LD₅₀ (rat, orl) 1100 mg/kg. Exp. carcinogen. Exp. reprod. effects

Aldrich: 43637-2

Rare Chemicals Library: S36661-7

>>Derivative: 4*N*,4'*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%

Physical Description: Needles

Melting Point: Mp 220-221°. Mp 275-278°

>>Derivative: *S*-Oxide

Synonym(s): 4,4'-Diaminodiphenyl sulfoxide. 4,4'-Sulfinylbisbenzeneamine, 9Cl. Bis(4-aminophenyl) sulfoxide. Medapsol

CAS Registry Number: 119-59-5

Molecular Formula: C₁₂H₁₂N₂OS

Molecular Weight: 232.306

Accurate Mass: 232.067033

Percentage Composition: C 62.04%; H 5.21%; N 12.06%; O 6.89%; S 13.80%

Use/Importance: Used in photometric detn. of NO₃⁽⁻⁾

Physical Description: Prisms (EtOH or H₂O)

Melting Point: Mp 184° (175°)

>>Derivative: *S*-Oxide, 4*N*,4'*N*-di-Ac

Molecular Formula: C₁₆H₁₆N₂O₃S

Molecular Weight: 316.38

Accurate Mass: 316.088163

Percentage Composition: C 60.74%; H 5.10%; N 8.85%; O 15.17%; S 10.14%

Melting Point: Mp 278°

>>Derivative: *S,S*-Dioxide

see 4,4'-Diaminodiphenyl sulfone, [BLP46-W](#)

>>Derivative: 4*N*,4'*N*-Di-Et

Molecular Formula: C₁₆H₂₀N₂S

Molecular Weight: 272.413

Accurate Mass: 272.134718

Percentage Composition: C 70.55%; H 7.40%; N 10.28%; S 11.77%

Physical Description: Oil

References: