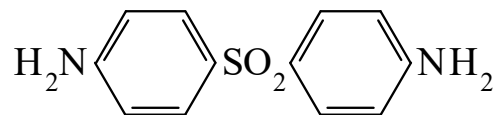




>>>Entry Name: **4,4'-Diaminodiphenyl sulfone**

Synonym(s): 4,4'-Sulfonylbisbenzenamine, 9CI. 4,4'-Sulfonyldianiline, 8CI. Bis(4-aminophenyl) sulfone. **Dapsone**, BAN, INN, USAN. Avlosulfon. Diaphenylsulfone. Metabolite C. NSC 6091. Many other names



CAS Registry Number: 80-08-0

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%

Use/Importance: Antileprotic drug. Investigated for the treatment and prevention of *Pneumocystis carinii* pneumonia. Used in polymerisation. Used as 0.2% soln. in conc. H₂SO₄ for photometric detn. of NO₃⁽⁻⁾ (λ_{max} 600 nm, ε 3000)

Physical Description: Dimorphic cryst. (EtOH aq.)

Melting Point: Mp 175-176°. Mp 180.5°

Solubility: Sol. dil. acids

Calculated Log P Data: Log P 0.89 (calc)

Hazard & Toxicity: Adverse haematological effects reported when used therapeutically. Can cause peripheral neuropathy. LD₅₀ (rat, orl) 1000 mg/kg. Exp. carcinogen. Exp. reprod. effects

Aldrich: A7480-7

Fluka: 32960

Sigma: D2505

>>>Derivative: *N*-Ac

Synonym(s): MADDS

CAS Registry Number: 565-20-8

Molecular Formula: C₁₄H₁₄N₂O₃S

Molecular Weight: 290.342

Accurate Mass: 290.072513

Percentage Composition: C 57.92%; H 4.86%; N 9.65%; O 16.53%; S 11.04%

Use/Importance: Metabolite and pro-drug of dapsone

Physical Description: Needles (MeOH)

Melting Point: Mp 242-243°

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

Synonym(s): Bis(4-acetamidophenyl) sulfone. **Acedapsone**, BAN, INN, USAN. Acetyldiphenarsone. BF 103. CI 556. CN 1883. F 1399. PAM MR 1165. Many other names

CAS Registry Number: 77-46-3

Molecular Formula: C₁₆H₁₆N₂O₄S

Molecular Weight: 332.379

Accurate Mass: 332.083078

Percentage Composition: C 57.82%; H 4.85%; N 8.43%; O 19.25%; S 9.65%

Use/Importance: Antimalarial and antileprotic drug

Melting Point: Mp 289-292°

Calculated Log P Data: Log P 1.31 (calc)

>>>Derivative: *N,N'*-Di-Me

CAS Registry Number: 7324-96-1

Molecular Formula: C₁₄H₁₆N₂O₂S

Molecular Weight: 276.359

Accurate Mass: 276.093248

Percentage Composition: C 60.85%; H 5.84%; N 10.14%; O 11.58%; S 11.60%

Physical Description: Leaflets (1,2-dichlorobenzene)

Melting Point: Mp 276°