



>>Entry Name: Bis(4-aminophenyl) disulfide

Synonym(s): 4,4'-Dithiobisbenzenamine, 9Cl. 4,4'-Dithiodianiline, 8Cl. Dithioaniline

CAS Registry Number: 722-27-0

Molecular Formula: C₁₂H₁₂N₂S₂

Molecular Weight: 248.372

Accurate Mass: 248.044188

Percentage Composition: C 58.03%; H 4.87%; N 11.28%; S 25.82%

Use/Importance: Vulcanizing agent for urethane rubbers

Physical Description: Pale cream-coloured needles (EtOH aq.)

Melting Point: Mp 75-76°

Aldrich: 36946-2

>>Derivative: Hydrochloride (1:2)

Physical Description: Needles

Melting Point: Mp 225°

>>Derivative: 4,4'-N-Di-Ac

Synonym(s): *p*-Dithioacetanilide

Molecular Formula: C₁₆H₁₆N₂O₂S₂

Molecular Weight: 332.447

Accurate Mass: 332.065318

Percentage Composition: C 57.81%; H 4.85%; N 8.43%; O 9.63%; S 19.29%

Physical Description: Yellow plates

Melting Point: Mp 205°

>>Derivative: *N*-Tetra-Me

Molecular Formula: C₁₆H₂₀N₂S₂

Molecular Weight: 304.479

Accurate Mass: 304.106788

Percentage Composition: C 63.12%; H 6.62%; N 9.20%; S 21.06%

Physical Description: Yellow needles (EtOH)

Melting Point: Mp 118°

>>Derivative: *N*-Tetra-Et

Molecular Formula: C₂₀H₂₈N₂S₂

Molecular Weight: 360.587

Accurate Mass: 360.169388

Percentage Composition: C 66.62%; H 7.83%; N 7.77%; S 17.79%

Physical Description: Prisms (EtOH)

Melting Point: Mp 72°

References:

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Bauer, L. *et al.*, *J.C.S.*, 1949, 3434, (*synth*)

Papke, K. *et al.*, *Pharmazie*, 1967, **22**, 485, (*chromatog*)

Chibisova, T.A. *et al.*, *Zh. Org. Khim.*, 1971, **7**, 143, (*ir*)

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Shapiro, B.L. *et al.*, *J. Phys. Chem. Ref. Data*, 1977, **6**, 919, (*nmr*)

Sakata, K., *Inorg. Chim. Acta*, 1988, **148**, 7, (*synth*)