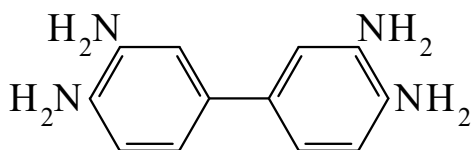




>>Entry Name: 3,3',4,4'-Biphenyltetramine

Synonym(s): 3,3',4,4'-Tetraaminobiphenyl. 3,3'-Diaminobenzidine. DAB



CAS Registry Number: 91-95-2

Related CAS Registry Numbers(s): 19010-26-5

Molecular Formula: C₁₂H₁₄N₄

Molecular Weight: 214.269

Accurate Mass: 214.121846

Percentage Composition: C 67.27%; H 6.59%; N 26.15%

Use/Importance: Used in photometric detn. of Se ($\lambda_{\max}$ 420 nm, ϵ 10200), Cr(VI), V; extraction-photometric detn. of NO₂⁽⁻⁾ ($\lambda_{\max}$ 350 nm, ϵ 3500, butanol); peroxidase substrate. Copolym. with diphenyl isophthalate to give high-temp. resistant polybenzimidazoles. Copolym. with bis(α -dicarbonyl) compds. to give polyquinoxalines

Physical Description: Cryst. (MeOH)

Melting Point: Mp 178-179°

pKa Value: pK_{a1} 6.2; pK_{a2} 5.16; pK_{a3} 3; pK_{a4} 2.4 (20°,DMF)

Other Data: Darkens rapidly in air.

Hazard & Toxicity: LD₅₀ (mus, orl) 1834 mg/kg

Aldrich: D1238-4

Fluka: 32741

Sigma: D8001

>>Derivative: Hydrochloride (1:4)

CAS Registry Number: 7411-49-6

Physical Description: Cryst.

Solubility: Sol. acids

Hazard & Toxicity: Exp. neoplastigenic data (large dose)

Fluka: 32750

Sigma: D5905

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