



>>Entry Name: **3-Aminobiphenyl**

Synonym(s): [1,1'-Biphenyl]-3-amine, 9CI

CAS Registry Number: 2243-47-2

Related CAS Registry Numbers(s): 2113-55-5

Molecular Formula: C₁₂H₁₁N

Molecular Weight: 169.226

Accurate Mass: 169.089149

Percentage Composition: C 85.17%; H 6.55%; N 8.28%

Physical Description: Needles

Melting Point: Mp 31-31.5°

Boiling Point: Bp₁₃₅ 254°. Bp₁₈ 177-178°

pKa Value: pK_a 4.22 (20°, 10% EtOH aq.) pK_a 4.18 (H₂O)

Other Data: Steam-volatile

>>Derivative: *N*-Ac

Synonym(s): *N*-[1,1'-Biphenyl]-3-ylacetamide, 9CI. 3-Acetamidobiphenyl

CAS Registry Number: 2113-54-4

Molecular Formula: C₁₄H₁₃NO

Molecular Weight: 211.263

Accurate Mass: 211.099714

Percentage Composition: C 79.59%; H 6.20%; N 6.63%; O 7.57%

Physical Description: Needles (EtOH)

Melting Point: Mp 148°

>>Derivative: *N*-Benzenesulfonyl

Melting Point: Mp 187-188°

References:

Campaigne, E. *et al.*, *J.A.C.S.*, 1946, **68**, 1663, (*synth*)

Bosshard, H.H. *et al.*, *Helv. Chim. Acta*, 1961, **44**, 1985, (*synth*)

Dieteren, H.M.L. *et al.*, *Rec. Trav. Chim. (J. R. Neth. Chem. Soc.)*, 1963, **82**, 5, (*synth, uv*)

Ibuki, E. *et al.*, *Bull. Chem. Soc. Jpn.*, 1975, **48**, 1868, (*synth*)

Zhel'tov, A.Y. *et al.*, *Zh. Org. Khim.*, 1975, **11**, 1304, (*uv*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, PDY250