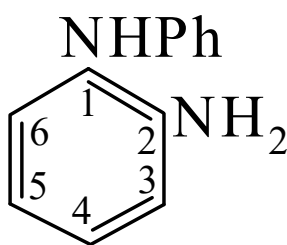




>>Entry Name: 2-Aminodiphenylamine

Synonym(s): *N*-Phenyl-1,2-benzenediamine, 9Cl. *N*-Phenyl-*o*-phenylenediamine. *o*-Semidine



CAS Registry Number: 534-85-0

Molecular Formula: C₁₂H₁₂N₂

Molecular Weight: 184.24

Accurate Mass: 184.100048

Percentage Composition: C 78.23%; H 6.56%; N 15.20%

Use/Importance: Used as 1% soln. in 1M HClO₄ for extraction-photometric detn. of Se ($\lambda_{\max}$ 352 nm, ϵ 18100, hexanol, PhCl)

Physical Description: Needles (H₂O)

Melting Point: Mp 79-80°

Solubility: Sol. acids, C₆H₆, cyclohexane

Aldrich: P2835-2

Fluka: 7900

>>Derivative: Hydrochloride

Melting Point: Mp 115.5-117 dec.°

>>Derivative: 2-*N*-Ac

Molecular Formula: C₁₄H₁₄N₂O

Molecular Weight: 226.277

Accurate Mass: 226.110613

Percentage Composition: C 74.31%; H 6.24%; N 12.38%; O 7.07%

Melting Point: Mp 121°

>>Derivative: 2-*N*-Benzoyl

Molecular Formula: C₁₉H₁₆N₂O

Molecular Weight: 288.348

Accurate Mass: 288.126263

Percentage Composition: C 79.14%; H 5.59%; N 9.72%; O 5.55%

Melting Point: Mp 136°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 538B, (*nmr*)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 1238D, (*ir*)

Kehrmann, F. *et al.*, *Ber.*, 1913, **46**, 341, (*synth*)

Ariyoshi, H. *et al.*, *Talanta*, 1960, **5**, 112, (*detn, Se*)

Ger. Pat., 1972, 2 213 895; *CA*, **78**, 85944, (*use*)

Kalyanaraman, V. *et al.*, *J.O.C.*, 1973, **38**, 507, (*bibl*)

Kasterka, B., *Mikrochim. Acta*, 1989, **1**, 337, (*detn, Se*)