



>>Entry Name: **2,4-Diaminoazobenzene**

Synonym(s): 4-(Phenylazo)-1,3-benzenediamine, 9Cl. Chrysoidine, 8Cl. 4-Phenylazo-*m*-phenylenediamine

CAS Registry Number: 495-54-5

Molecular Formula: C₁₂H₁₂N₄

Molecular Weight: 212.254

Accurate Mass: 212.106196

Percentage Composition: C 67.91%; H 5.70%; N 26.40%

Use/Importance: Basic dye for colouring leather and paper

Physical Description: Pale-yellow cryst. (H₂O)

Melting Point: Mp 118-118.5°

Hazard & Toxicity: Eye irritant. LD₅₀ (rat, orl) 1650 mg/kg. Possible carcinogen (equivocal data)

Rare Chemicals Library: S44069-8

>>Derivative: Hydrochloride

Synonym(s): Basic orange 2. C.I. 11270. Solvent orange 3

CAS Registry Number: 532-82-1

Melting Point: Mp 235°

Other Data: λ_{max} 449 nm

Aldrich: 21449-3

Fluka: 27240

Rare Chemicals Library: S44092-2

Sigma: C9044

>>Derivative: 2,4-Di-Ac

Molecular Formula: C₁₆H₁₆N₄O₂

Molecular Weight: 296.328

Accurate Mass: 296.127326

Percentage Composition: C 64.85%; H 5.44%; N 18.91%; O 10.80%

Melting Point: Mp 250.5°

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 966B, (*ir*)

Aldrich Library of IR Spectra, 2nd Ed., 1264B, (*ir*)

Sigma-Aldrich Library of Stains, Dyes and Indicators, 211

Burr, A.H. *et al.*, *J. Soc. Dyers Colour.*, 1934, **50**, 42

Cepciansky, I. *et al.*, *Coll. Czech. Chem. Comm.*, 1968, **33**, 100

IARC Monog., 1975, **8**, 91; *Suppl.* 6, 176; *Suppl.* 7, 169, (*rev, tox*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials, 8th edn.*, Van Nostrand Reinhold, 1992, DBP999; PEK000