



>>Entry Name: Phenylhydrazine, 9Cl, 8Cl

Synonym(s): Hydrazinobenzene

CAS Registry Number: 100-63-0

Related CAS Registry Numbers(s): 37887-33-5

PhNHNH₂

Molecular Formula: C₆H₈N₂

Molecular Weight: 108.143

Accurate Mass: 108.068748

Percentage Composition: C 66.64%; H 7.46%; N 25.90%

Use/Importance: Reagent for characterisation of carbonyl compds. and prep. of numerous heterocyclic compds. Historical reagent (E. Fischer) used in detn. of sugar structure and discovery of the Fischer indole synthesis. Reducing agent for azo and nitro compds. Used as 1% aq. soln. for photometric detn. of Mo, Al, Cr, Ti, Zr

Biological Use/Importance: Haemolytic agent

Physical Description: Plates or oil with aniline-like odour

Melting Point: Mp 19.6°

Boiling Point: Bp 243° dec.. Bp₁₂ 122°

Density: d₄²⁵ 1.095

pKa Value: pK_a -5.2 (20°, H₂O)

Refractive Index: n_D²⁰ 1.6080

Other Data: Oxid. in air

Hazard & Toxicity: Fl. p. 88°. Potent skin sensitizer which causes eczematous dermatitis, and often swelling and vesiculation. Occup. exposure has caused haemolytic anaemia, and may damage liver and kidneys. LD₅₀ (rat, orl) 188 mg/kg. Exp. carcinogen, exp. reprod. effects. ACGIH: long-term 0.1 ppm (Sk)

Aldrich: P2625-2

Fluka: 78672

Sigma: P6766

>>Derivative: Hydrochloride

CAS Registry Number: 59-88-1

Use/Importance: Shows erythrocyte-destroying props. formerly used in treatment of polycythaemia vera

Physical Description: Leaflets (H₂O)

Melting Point: Mp 250-254 dec.°

Aldrich: 11471-5

Fluka: 78690

Sigma: P7126

>>Derivative: N¹-Ac

Synonym(s): Acetic acid 1-phenylhydrazide, 9Cl

CAS Registry Number: 2116-41-8

Molecular Formula: C₈H₁₀N₂O

Molecular Weight: 150.18

Accurate Mass: 150.079313

Percentage Composition: C 63.98%; H 6.71%; N 18.65%; O 10.65%

Physical Description: Plates (C₆H₆/petrol)

Melting Point: Mp 126° (119-120°)

Rare Chemicals Library: S68003-6