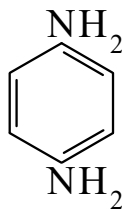




>>Entry Name: 1,4-Benzenediamine, 9Cl

Synonym(s): *p*-Phenylenediamine, 8Cl. 1,4-Diaminobenzene. Ursol D



CAS Registry Number: 106-50-3

Related CAS Registry Numbers(s): 2198-58-5 3566-44-7 6283-63-2 16713-15-8 34527-55-4 60160-75-0 62637-92-7

Extra CAS Registry Numbers(s): 25265-76-3

Molecular Formula: C₆H₈N₂

Molecular Weight: 108.143

Accurate Mass: 108.068748

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

Source/Synthesis: Manuf. by Fe-HCl redn. of 1,4-dinitrobenzene or 4-nitroaniline

Use/Importance: Used as 0.2% aq. soln. for photometric detn. of CN⁽⁻⁾, Au^{III}. Used in manuf. of dyes, aramid fibres, polyamides with exceptional tensile strength, and heat-resistant polyimides

Physical Description: Leaflets (Et₂O)

Melting Point: Mp 147°

Boiling Point: Bp 267°

Solubility: Sol. EtOH, Et₂O, hot H₂O

pKa Value: pK_{a1} 6.31; pK_{a2} 2.97 (20°)

Hazard & Toxicity: OES: long-term 0.1 mg m⁻³ (Sk). Eye, skin and respiratory tract irritant. Sensitiser which can cause dermatitis, bronchial asthma, and inflammation of the eyes. LD₅₀ (rat, orl) 80 mg/kg. Hepatotoxic

Aldrich: P2396-2

Fluka: 78430

Sigma: P7194

Supelco: R43-1518

>>Derivative: Hydrochloride (1:2)

CAS Registry Number: 624-18-0

Melting Point: Mp 275°

>>Derivative: Picrate

Physical Description: Green orthorhombic cryst.

Melting Point: Mp 205°

>>Derivative: *N*-Ac

Synonym(s): *N*-(4-Aminophenyl)acetamide, 9Cl. *p*-Aminoacetanilide

CAS Registry Number: 122-80-5

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: Needles (H₂O)

Melting Point: Mp 165-167°

Hazard & Toxicity: Eye irritant. LD₅₀ (rat, orl) 3350 mg/kg

Aldrich: 10052-8

Fluka: 6590

Rare Chemicals Library: S43711-5

Sigma: A0952