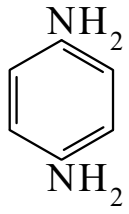
>>**Entry Name: 1,4-Benzenediamine,** 9CI
Synonym(s): *p*-Phenylenediamine, 8CI. 1,4-Diaminobenzene. Ursol D



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: $C_6H_8N_2$
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 (Et_2O)
Melting Point: Mp 147°
Boiling Point: Bp 267°
Solubility: Sol. EtOH, Et_2O, hot H_2O
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. LD_{50} (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, 9CI. *p*-Aminoacetanilide

CAS Registry Number: 122-80-5
Molecular Formula: $C_8H_{10}N_2O$
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 (H_2O)
Melting Point: Mp 165-167°
Hazard & Toxicity: Eye irritant. LD_{50} (rat, orl) 3350 mg/kg

Aldrich: 10052-8
Fluka: 6590
Rare Chemicals Library: S43711-5
Sigma: A0952