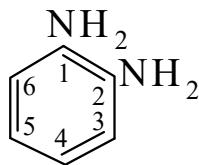




>>Entry Name: 1,2-Benzenediamine, 9CI

Synonym(s): *o*-Phenylenediamine, 8CI. 1,2-Diaminobenzene



CAS Registry Number: 95-54-5

Related CAS Registry Numbers(s): 74710-09-1

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 1,2-dinitrobenzene or 1-nitroaniline

Use/Importance: Used as 0.2% aq. soln. for photometric detn. of Br⁽⁻⁾, Se, Pt, V. Intermed. for heterocyclic synth., esp. of quinoxalines. Used in manuf. of antioxidants, photographic chemicals and polyamide fibres. Chromogenic substrate used in conjunction with horseradish peroxidase

Physical Description: Leaflets (H₂O)

Melting Point: Mp 104°

Boiling Point: Bp 256-258°

Solubility: Sol. hot H₂O, EtOH, Et₂O, CHCl₃

pKa Value: pK_{a1} 4.65; pK_{a2} 1.86 (20°, H₂O)

Other Data: Electrochem. homopolym. gives an electroactive ladder polymer containing phenazine rings

Hazard & Toxicity: Eye and skin irritant and may cause dermatitis. LD₅₀ (rat, orl) 1070 mg/kg

Aldrich: 27578-6

Fluka: 78412

Sigma: O6882

>>Derivative: Hydrochloride (1:2)

CAS Registry Number: 615-28-1

Physical Description: Pink-white cryst. (MeOH)

Melting Point: Mp 290 dec.°

Aldrich: 23823-6

Fluka: 78440

Rare Chemicals Library: S57083-4

Sigma: P8787

>>Derivative: Picrate

Physical Description: Orange monoclinic cryst.

Melting Point: Mp 214° (dec.)

>>Derivative: *N,N'*-Diformyl

Synonym(s): *N,N'*-1,2-Phenylenebisformamide, 9CI. 1,2-Bis(formamido)benzene

CAS Registry Number: 31354-51-5

Molecular Formula: C₈H₈N₂O₂

Molecular Weight: 164.163

Accurate Mass: 164.058578

Percentage Composition: C 58.53%; H 4.91%; N 17.06%; O 19.49%

Melting Point: Mp 155-157 dec.°

>>Derivative: *N*-Ac

Synonym(s): *N*-(2-Aminophenyl)acetamide, 9CI. 2-Aminoacetanilide

CAS Registry Number: 34801-09-7

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)

Melting Point: Mp 132° (145°)