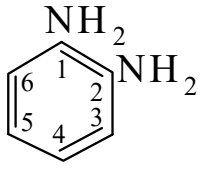
>>**Entry Name: 1,2-Benzenediamine,** 9CI
Synonym(s): *o*-Phenylenediamine, 8CI. 1,2-Diaminobenzene



CAS Registry Number: 95-54-5
Related CAS Registry Numbers(s): 74710-09-1
Extra CAS Registry Numbers(s): 25265-76-3

Molecular Formula: $C_6H_8N_2$
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 1,2-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 (H_2O)
Melting Point: Mp 104°
Boiling Point: Bp 256-258°
Solubility: Sol. hot H_2O, EtOH, Et_2O, $CHCl_3$
pKa Value: pK_{a1} 4.65; pK_{a2} 1.86 (20°, H_2O)
Other Data: Electrochem. homopolym. gives an electroactive ladder polymer containing phenazine rings
Hazard & Toxicity: Eye and skin irritant and may cause dermatitis. LD_{50} (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: $C_8H_8N_2O_2$
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: $C_8H_{10}N_2O$
Molecular Weight: 150.18
Accurate Mass: 150.079313
Percentage Composition: C 63.98%; H 6.71%; N 18.65%; O 10.65%
Physical Description: Plates (C_6H_6)
Melting Point: Mp 132° (145°)