>>**Entry Name: 1,3-Benzenediamine,** 9CI
Synonym(s): *m*-Phenylenediamine, 8CI. 1,3-Diaminobenzene

CAS Registry Number: 108-45-2
Related CAS Registry Numbers(s): 541-69-5 59736-00-4 73353-97-6
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 1,3-dinitrobenzene or 3-nitroaniline
Use/Importance: Used for photometric detn. of $NO_2^{(-)}$. Used in manuf. of dyes and aramid fibres. Epoxy resin curing agent
Physical Description: Cryst. (C_6H_6/hexane)
Melting Point: Mp 65°
Boiling Point: Bp 287°. Bp_5 135-140°
Solubility: Sol. EtOH, Et_2O, H_2O
pKa Value: pK_a 1.89 (20°, H_2O)
Hazard & Toxicity: Eye and skin irritant, and may cause dermatitis. LD_{50} (rat, ipr) 283 mg/kg. Exp. reprod. and teratogenic effects

Aldrich: 42075-1
Fluka: 78422
Sigma: P1142
Supelco: R47-3413

>>**Derivative:** Picrate

Physical Description: Dark yellow monoclinic cryst.
Melting Point: Mp 184°

>>**Derivative:** *N,N*'-Diformyl
Synonym(s): *N,N*'-1,3-Phenylenebisformamide, 9CI. 1,3-Bis(formamido)benzene

CAS Registry Number: 25227-79-6
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%
Physical Description: Cryst. (EtOH)
Melting Point: Mp 152-154°

>>**Derivative:** *N*-Ac
Synonym(s): *N*-(3-Aminophenyl)acetamide, 9CI. 3-Aminoacetanilide

CAS Registry Number: 102-28-3
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 (C_6H_6)
Melting Point: Mp 86.5-87.5°
Hazard & Toxicity: Severe eye irritant. LD_{50} (rat, orl) 1830 mg/kg

Rare Chemicals Library: S37304-4