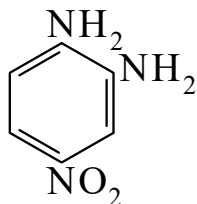




>>Entry Name: **1,2-Diamino-4-nitrobenzene**

Synonym(s): 4-Nitro-1,2-benzenediamine, 9Cl. 4-Nitro-*o*-phenylenediamine, 8Cl



CAS Registry Number: 99-56-9

Molecular Formula: C₆H₇N₃O₂

Molecular Weight: 153.14

Accurate Mass: 153.053827

Percentage Composition: C 47.06%; H 4.61%; N 27.44%; O 20.90%

Use/Importance: Used as a 0.6-1% soln. in 1M HCl for extraction-photometric detn. of Se (toluene), SO₂ ($\lambda_{\max}$ 475 nm), gc detn. of Se. Reagent for α -keto acids. Forms a second-order nonlinear polymer with bisphenol A diglycidyl ether

Physical Description: Dark-red needles (H₂O)

Melting Point: Mp 201°

Solubility: Sol. EtOH, Me₂CO, C₆H₆, CHCl₃; mod. sol. dil. acids

Hazard & Toxicity: LD₅₀ (rat, orl) 681 mg/kg. Exp. reprod. and teratogenic effects

Aldrich: 10889-8

Fluka: 73630

Sigma: N9504

>>Derivative: 1-*N*-Ac

Synonym(s): 2-Amino-4-nitroacetanilide

CAS Registry Number: 53987-32-9

Molecular Formula: C₈H₉N₃O₃

Molecular Weight: 195.177

Accurate Mass: 195.064392

Percentage Composition: C 49.23%; H 4.65%; N 21.53%; O 24.59%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 205°

>>Derivative: 2-*N*-Ac

Synonym(s): 2-Amino-5-nitroacetanilide

CAS Registry Number: 43154-39-8

Molecular Formula: C₈H₉N₃O₃

Molecular Weight: 195.177

Accurate Mass: 195.064392

Percentage Composition: C 49.23%; H 4.65%; N 21.53%; O 24.59%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 195°

>>Derivative: 1,2-*N*-Di-Ac

CAS Registry Number: 30152-85-3

Molecular Formula: C₁₀H₁₁N₃O₄

Molecular Weight: 237.215

Accurate Mass: 237.074957

Percentage Composition: C 50.63%; H 4.67%; N 17.71%; O 26.98%

Physical Description: Prisms (AcOH aq.)

Melting Point: Mp 255°

>>Derivative: 1,2-*N*-Dibenzoyl

Molecular Formula: C₂₀H₁₅N₃O₄

Molecular Weight: 361.356

Accurate Mass: 361.106257

Percentage Composition: C 66.48%; H 4.18%; N 11.63%; O 17.71%

Physical Description: Needles (EtOH)

Melting Point: Mp 235-236°