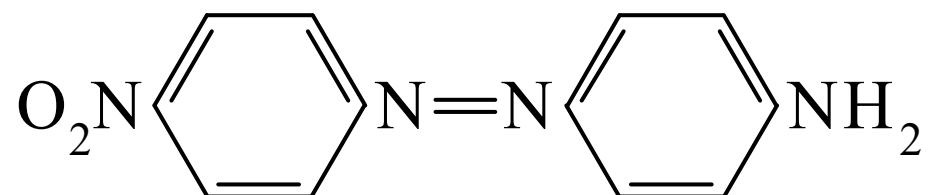




>>Entry Name: 4-Amino-4'-nitroazobenzene

Synonym(s): 4-[(4-Nitrophenyl)azo]benzenamine, 9Cl. C.I. Disperse Orange 3. C.I. 11005



CAS Registry Number: 730-40-5

Molecular Formula: $C_{12}H_{10}N_4O_2$

Molecular Weight: 242.237

Accurate Mass: 242.080376

Percentage Composition: C 59.50%; H 4.16%; N 23.13%; O 13.21%

Use/Importance: Used as a 5% soln. in Py as acid-base indicator for non-aq. titrations

Physical Description: Cryst. (toluene)

Melting Point: Mp 216° (210-212°)

Solubility: Sol. Me_2CO , EtOH, 2-ethoxyethanol, toluene

Aldrich: 21571-6

Sigma: D1142

>>Derivative: Hydrochloride

Physical Description: Steel-blue needles

Melting Point: Mp 193°

>>Derivative: *N*-Ac

CAS Registry Number: 19680-34-3

Molecular Formula: $C_{14}H_{12}N_4O_3$

Molecular Weight: 284.274

Accurate Mass: 284.090941

Percentage Composition: C 59.15%; H 4.25%; N 19.71%; O 16.88%

Physical Description: Orange-red needles

Melting Point: Mp 245-246°

>>Derivative: *N*-Me

Synonym(s): *N*-Methyl-4-[(4-nitrophenyl)azo]benzenamine, 9Cl

CAS Registry Number: 31464-31-0

Molecular Formula: $C_{13}H_{12}N_4O_2$

Molecular Weight: 256.263

Accurate Mass: 256.096026

Percentage Composition: C 60.93%; H 4.72%; N 21.86%; O 12.49%

Physical Description: Blue prisms or needles (C_6H_6); plates (EtOH or AcOH)

Melting Point: Mp 206-207°

Other Data: Dichroic

>>Derivative: *N*-Me, *N*-Ac

CAS Registry Number: 51095-63-7

Molecular Formula: $C_{15}H_{14}N_4O_3$

Molecular Weight: 298.301

Accurate Mass: 298.106591

Percentage Composition: C 60.40%; H 4.73%; N 18.78%; O 16.09%

Physical Description: Orange-red needles

Melting Point: Mp 194-195°