



>>Entry Name: 4,4'-Diaminodiphenylmethane

Synonym(s): 4,4'-Methylenebisbenzenamine, 9CI. 4,4'-Methylenedianiline, 8CI. Di(4-aminophenyl)methane. Bis(4-aminophenyl)methane. Tonox. MDA

CAS Registry Number: 101-77-9

Molecular Formula: C₁₃H₁₄N₂

Molecular Weight: 198.267

Accurate Mass: 198.115698

Percentage Composition: C 78.75%; H 7.12%; N 14.13%

Use/Importance: Cross-linking agent for epoxy resins. Intermed. in the prodn. of the corresponding 1,1'-Methylenebis[4-isocyanatobenzene] [HGR79-X](#)

Physical Description: Pearly leaflets (C₆H₆)

Melting Point: Mp 93°

Boiling Point: Bp 398-399°. Bp₉ 232°

Solubility: Sl. sol. H₂O; v. sol. EtOH, C₆H₆, Et₂O

Hazard & Toxicity: Possible human carcinogen. Eye irritant. Hepatotoxic by ingestion and skin contact. Ingestion has also caused eye injury in man. LD₅₀ (rat, orl) 347 mg/kg; OES: long-term 0.01 ppm (Sk, new)

Aldrich: 13245-4

Fluka: 32950

Sigma: M0288

>>Derivative: 4,4'-N-Di-Ac

Synonym(s): *N,N'*-(Methylenedi-4,1-phenylene)bisacetamide, 9CI

CAS Registry Number: 2719-05-3

Molecular Formula: C₁₇H₁₈N₂O₂

Molecular Weight: 282.341

Accurate Mass: 282.136828

Percentage Composition: C 72.32%; H 6.43%; N 9.92%; O 11.33%

Melting Point: Mp 236-237°

Rare Chemicals Library: S68568-2

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

Molecular Formula: C₂₇H₂₂N₂

Molecular Weight: 374.484

Accurate Mass: 374.178298

Percentage Composition: C 86.60%; H 5.92%; N 7.48%

Physical Description: Leaflets

Melting Point: Mp 130°

>>Derivative: *N*-Me

CAS Registry Number: 26628-67-1

Molecular Formula: C₁₄H₁₆N₂

Molecular Weight: 212.294

Accurate Mass: 212.131348

Percentage Composition: C 79.21%; H 7.60%; N 13.20%

Physical Description: Cryst.

Melting Point: Mp 61-63°

>>Derivative: *N*-Tetra-Me

see Bis(4-dimethylaminophenyl)methane, [BJN89-N](#)

>>Derivative: *N*-Tetra-Et

see Bis(4-diethylaminophenyl)methane, [BJN75-G](#)

References: