



>>Entry Name: *N*,4-Dimethylaniline

Synonym(s): *N*,4-Dimethylbenzenamine, 9Cl. *N*-Methyl-*p*-toluidine, 8Cl. 4-(Methylamino)toluene

CAS Registry Number: 623-08-5

Extra CAS Registry Numbers(s): 1300-73-8

Structure by analogy with *N*,2-Dimethylaniline, [FDC46-X](#)

Molecular Formula: C₈H₁₁N

Molecular Weight: 121.182

Accurate Mass: 121.089149

Percentage Composition: C 79.29%; H 9.15%; N 11.56%

Physical Description: Liq.

Boiling Point: Bp 209-211°. Bp₁₉ 98-99°

Density: d²⁰ 0.963

pKa Value: pK_a 5.25 (25°)

Rare Chemicals Library: S70575-6

>>Derivative: Picrate

Physical Description: Golden needles (C₆H₆)

Melting Point: Mp 130-132 dec.°

>>Derivative: *N*-Ac

Synonym(s): *N*-Methylacet-*p*-toluidide

CAS Registry Number: 612-03-3

Molecular Formula: C₁₀H₁₃NO

Molecular Weight: 163.219

Accurate Mass: 163.099714

Percentage Composition: C 73.59%; H 8.03%; N 8.58%; O 9.80%

Physical Description: Plates (EtOH/Et₂O)

Melting Point: Mp 83°

Boiling Point: Bp 283°

Rare Chemicals Library: S28882-9

>>Derivative: *N*-Nitroso

CAS Registry Number: 937-24-6

Molecular Formula: C₈H₁₀N₂O

Molecular Weight: 150.18

Accurate Mass: 150.079313

Percentage Composition: C 63.98%; H 6.71%; N 18.65%; O 10.65%

Physical Description: Cryst.

Melting Point: Mp 52°

References:

Decker, H. *et al.*, *Annalen*, 1913, **395**, 370

v. Braun, J. *et al.*, *Ber.*, 1918, **51**, 279

Sekiya, M. *et al.*, *Chem. Pharm. Bull.*, 1967, **15**, 1339, (*synth*)

Gates, P.N. *et al.*, *J.C.S. Perkin 2*, 1972, 1607, (*ir*, *Raman*)

Shapiro, B.L. *et al.*, *J. Phys. Chem. Ref. Data*, 1977, **6**, 919, (*nmr*)

Luh, T.Y. *et al.*, *Synth. Commun.*, 1979, **9**, 757, (*synth*)