>>**Entry Name: 4-Methyldiphenylamine**
Synonym(s): 4-Methyl-*N*-phenylbenzenamine, 9CI. *N*-Phenyl-*p*-toluidine, 8CI. Phenyl-*p*-tolylamine

CAS Registry Number: 620-84-8

Molecular Formula: $C_{13}H_{13}N$
Molecular Weight: 183.252
Accurate Mass: 183.104799
Percentage Composition: C 85.21%; H 7.15%; N 7.64%
Use/Importance: Used as a redox indicator
Physical Description: Cryst.
Melting Point: Mp 89°
Boiling Point: Bp_{727} 318°
Solubility: Sol. Me_2CO, Et_2O, CS_2
pKa Value: pK_a 23.1 (25°, DMSO aq.)

>>**Derivative:** *N*-Ac

Molecular Formula: $C_{15}H_{15}NO$
Molecular Weight: 225.29
Accurate Mass: 225.115364
Percentage Composition: C 79.97%; H 6.71%; N 6.22%; O 7.10%
Physical Description: Cryst. (EtOH)
Melting Point: Mp 52°

References:

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Cox, R.A. *et al.*, *J.A.C.S.*, 1976, **98**, 488