



>>Entry Name: Triphenylmethylamine

Synonym(s): α,α -Diphenylbenzenemethanamine, 9Cl. α -Aminotriphenylmethane. Tritylamine

CAS Registry Number: 5824-40-8

Ph_3CNH_2

Molecular Formula: $\text{C}_{19}\text{H}_{17}\text{N}$

Molecular Weight: 259.35

Accurate Mass: 259.136099

Percentage Composition: C 87.99%; H 6.61%; N 5.40%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 105°

Aldrich: 32543-0

Fluka: 93075

Rare Chemicals Library: S10987-8

>>Derivative: Hydrochloride

Physical Description: Needles

Melting Point: Mp 244°

>>Derivative: *N*-Ac

Molecular Formula: $\text{C}_{21}\text{H}_{19}\text{NO}$

Molecular Weight: 301.387

Accurate Mass: 301.146664

Percentage Composition: C 83.69%; H 6.35%; N 4.65%; O 5.31%

Physical Description: Needles (EtOH)

Melting Point: Mp 207-208°

>>Derivative: *N*-Me

Molecular Formula: $\text{C}_{20}\text{H}_{19}\text{N}$

Molecular Weight: 273.377

Accurate Mass: 273.151749

Percentage Composition: C 87.87%; H 7.01%; N 5.12%

Physical Description: Prisms (petrol)

Melting Point: Mp 73°

>>Derivative: *N*-Ph

Synonym(s): *N*-Tritylaniline

CAS Registry Number: 4471-22-1

Molecular Formula: $\text{C}_{25}\text{H}_{21}\text{N}$

Molecular Weight: 335.448

Accurate Mass: 335.167399

Percentage Composition: C 89.51%; H 6.31%; N 4.18%

Physical Description: Prisms (Et_2O /EtOH)

Melting Point: Mp 149-150°

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **2**, 568C, (*nmr*)

Sisti, A.J., *J.O.C.*, 1974, **39**, 3932, (*synth, ir, nmr*)

Hoffman, R.V. *et al.*, *J.O.C.*, 1979, **44**, 2364, (*synth*)

Glidewell, C. *et al.*, *Acta Cryst. C*, 1994, **50**, 924, (*cryst struct*)

Canlé, L.M. *et al.*, *J.C.S. Perkin 2*, 2000, 85-92, (*synth, pmr, cmr, cryst struct*)