



>>Entry Name: 1,1-Diphenylhydrazine, 9CI

CAS Registry Number: 530-50-7

Related CAS Registry Numbers(s): 17018-72-3 38622-18-3

Type of Compound Code(s): PA3800

Ph_2NNH_2

Molecular Formula: $\text{C}_{12}\text{H}_{12}\text{N}_2$

Molecular Weight: 184.24

Accurate Mass: 184.100048

Percentage Composition: C 78.23%; H 6.56%; N 15.20%

Use/Importance: Reagent for characterisation of carbonyl compds.; extraction-photometric detn. of Se (λ_{max} 530 nm, ϵ 25700)

Physical Description: Plates (petrol)

Melting Point: Mp 34.5°. Mp 44°

Boiling Point: Bp₄₅ 220° (lit. gives a pressure range)

>>Derivative: Hydrochloride

CAS Registry Number: 530-47-2

Melting Point: Mp 165-170°

Aldrich: 11459-6

Fluka: 43080

>>Derivative: Ac

CAS Registry Number: 6233-05-2

Molecular Formula: $\text{C}_{14}\text{H}_{14}\text{N}_2\text{O}$

Molecular Weight: 226.277

Accurate Mass: 226.110613

Percentage Composition: C 74.31%; H 6.24%; N 12.38%; O 7.07%

Physical Description: Needles

Melting Point: Mp 188.5°

>>Derivative: Benzoyl

CAS Registry Number: 970-31-0

Molecular Formula: $\text{C}_{19}\text{H}_{16}\text{N}_2\text{O}$

Molecular Weight: 288.348

Accurate Mass: 288.126263

Percentage Composition: C 79.14%; H 5.59%; N 9.72%; O 5.55%

Physical Description: Cryst. (Me_2CO aq.)

Melting Point: Mp 194°

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 1257B, (*ir*)

Aldrich Library of NMR Spectra, 2nd edn., 1983, **1**, 989C, (*nmr*)

Murashova, V.I. *et al.*, *Zh. Anal. Khim.*, 1964, **19**, 1503, (*use*)

Kalamur, J. *et al.*, *CA*, 1967, **69**, 86668h, (*synth*)

Koga, N. *et al.*, *J.O.C.*, 1968, **33**, 3963, (*synth*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1969, **2**, 178

Gillis, R.G., *Org. Mass Spectrom.*, 1971, **5**, 1107, (*ms*)

Brindle, J.R. *et al.*, *Can. J. Chem.*, 1976, **54**, 871, (*synth*)

Shantl, J. *et al.*, *Monatsh. Chem.*, 1978, **109**, 1481, (*pmr*)