



>>Entry Name: 1,4-Dimethylnaphthalene, 9CI

CAS Registry Number: 571-58-4

Extra CAS Registry Numbers(s): 28804-88-8

Structure by analogy with 1,2-Dimethylnaphthalene, [FNV53-G](#)

Molecular Formula: C₁₂H₁₂

Molecular Weight: 156.227

Accurate Mass: 156.0939

Percentage Composition: C 92.26%; H 7.74%

Source/Synthesis: Occurs in coal tar

Use/Importance: Plant growth inhibitor

Physical Description: Liq.

Melting Point: Mp 7.85°

Boiling Point: Bp 264°. Bp₄₀ 145°

Density: d₄¹⁶ 1.018

Refractive Index: n_D²⁰ 1.6127

Aldrich: D17030-5

Fluka: 40790

Sigma: D6766

>>Derivative: Picrate

Physical Description: Orange needles (EtOH)

Melting Point: Mp 144°

>>Derivative: 1,3,5-Trinitrobenzene complex

Physical Description: Yellow needles (MeOH)

Melting Point: Mp 165-166°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 43A, (*nmr*)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 958A, (*ir*)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 879C, (*ir*)

Kloetzel, M.C., *J.A.C.S.*, 1940, **62**, 1708

Adv. Chem. Ser., 1955, **15**, 210, (*props*)

Hueckel, W. *et al.*, *Annalen*, 1965, **686**, 34, (*synth*)

Meigh, D.F. *et al.*, *Phytochemistry*, 1973, **12**, 987, (*use*)

Dalling, D.K. *et al.*, *J.A.C.S.*, 1977, **99**, 7142, (*cmr*)