



>>Entry Name: 3,4-Dihydro-2(1*H*)-naphthalenone

Synonym(s): β -Tetralone. 2-Oxotetrahydronaphthalene

CAS Registry Number: 530-93-8

Structure by analogy with 3,4-Dihydro-1(2*H*)-naphthalenone, [FNM68-V](#)

Molecular Formula: C₁₀H₁₀O

Molecular Weight: 146.188

Accurate Mass: 146.073165

Percentage Composition: C 82.16%; H 6.89%; O 10.94%

Physical Description: Liq. or cryst.

Melting Point: Mp 18°

Boiling Point: Bp₁₆ 138°. Bp₁ 106-109°

Density: d₄¹⁶ 1.106

Aldrich: T1920-8

Fluka: 87665

Sigma: T9014

>>Derivative: Semicarbazone

Physical Description: Cryst. (EtOH)

Melting Point: Mp 215°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 792A, (*nmr*)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 3A, (*ir*)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1223D, (*ir*)

Bamberger, E. *et al.*, *Annalen*, 1895, **288**, 74

v. Braun, J. *et al.*, *Ber.*, 1922, **55**, 3648

Stork, G. *et al.*, *J.A.C.S.*, 1946, **58**, 2172

Burckhalter, J.H. *et al.*, *J.O.C.*, 1961, **26**, 4232, (*synth*)

Shono, T. *et al.*, *Chem. Lett.*, 1976, 1319, (*synth*)

Adcock, W. *et al.*, *J.O.C.*, 1976, **41**, 1498, (*cmr*)

Hunden, D.C., *Org. Prep. Proced. Int.*, 1984, **16**, 294, (*synth*)