



>>Entry Name: 3,4-Dihydro-7-hydroxy-1(2H)-naphthalenone, 9CI

Synonym(s): 7-Hydroxy-1-tetralone

CAS Registry Number: 22009-38-7

Related CAS Registry Numbers(s): 79137-18-1

Structure by analogy with 3,4-Dihydro-5-hydroxy-1(2H)-naphthalenone, [KHZ36-K](#)

Molecular Formula: C₁₀H₁₀O₂

Molecular Weight: 162.188

Accurate Mass: 162.06808

Percentage Composition: C 74.06%; H 6.21%; O 19.73%

Physical Description: Cryst. (H₂O)

Melting Point: Mp 159°

>>Derivative: Me ether

Synonym(s): 3,4-Dihydro-7-methoxy-1(2H)-naphthalenone. 7-Methoxy-1-tetralone

CAS Registry Number: 6836-19-7

Molecular Formula: C₁₁H₁₂O₂

Molecular Weight: 176.215

Accurate Mass: 176.08373

Percentage Composition: C 74.98%; H 6.86%; O 18.16%

Physical Description: Prisms (petrol)

Melting Point: Mp 66-67° (61-62.5°)

Boiling Point: Bp₁₁ 160-165°. Bp_{0.7} 115-120°

Aldrich: 16336-8

>>Derivative: Me ether, oxime

CAS Registry Number: 20175-97-7

Molecular Formula: C₁₁H₁₃NO₂

Molecular Weight: 191.229

Accurate Mass: 191.094629

Percentage Composition: C 69.09%; H 6.85%; N 7.32%; O 16.73%

Melting Point: Mp 87.5-88.2°

>>Derivative: Me ether, 2,4-dinitrophenylhydrazone

Physical Description: Cryst. (EtOAc or Py)

Melting Point: Mp 285-286° (278° dec.)

>>Derivative: Me ether, semicarbazone

Physical Description: Needles

Melting Point: Mp 224-226° (dec.)

References:

Haworth, R.D. *et al.*, *J.C.S.*, 1934, 1950; 1947, 176, (*Me ether*, *Me ether oxime*)

Thomas, D.G. *et al.*, *J.A.C.S.*, 1948, **70**, 331, (*synth*, *deriv*)

Org. Synth., *Coll. Vol.*, 3, 1955, 798, (*Me ether*)

Jackman, L.M. *et al.*, *J.A.C.S.*, 1974, **96**, 5130, (*synth*, *derivs*)

Trost, B.M. *et al.*, *J.A.C.S.*, 1977, **99**, 8116, (*synth*)

Pelter, A. *et al.*, *Tetrahedron*, 1985, **41**, 2933, (*Me ether*, *synth*, *pmr*, *ir*, *ms*)