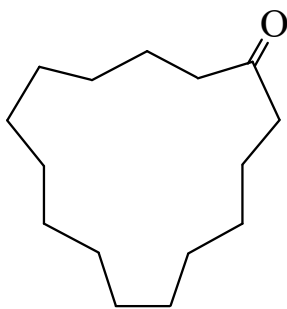




>>Entry Name: Cyclopentadecanone, 9CI

Synonym(s): Oxocyclopentadecane. Exaltone. Normuscone



CAS Registry Number: 502-72-7

Molecular Formula: C₁₅H₂₈O

Molecular Weight: 224.386

Accurate Mass: 224.214015

Percentage Composition: C 80.29%; H 12.58%; O 7.13%

Biological Source: Found in the scent gland of the male civet cat

Use/Importance: Used in perfumery (musk odour)

Melting Point: Mp 63°

Boiling Point: Bp_{0.3} 120°

Hazard & Toxicity: Skin irritant

Aldrich: C11120-1

Fluka: 29670

>>Derivative: Oxime

CAS Registry Number: 34341-05-4

Molecular Formula: C₁₅H₂₉NO

Molecular Weight: 239.4

Accurate Mass: 239.224914

Percentage Composition: C 75.26%; H 12.21%; N 5.85%; O 6.68%

Melting Point: Mp 75-76°

>>Derivative: 2,4-Dinitrophenylhydrazone

Melting Point: Mp 105°

>>Derivative: Semicarbazone

Melting Point: Mp 187-188°

>>Derivative: Ethylene acetal

Molecular Formula: C₁₇H₃₂O₂

Molecular Weight: 268.439

Accurate Mass: 268.24023

Percentage Composition: C 76.06%; H 12.01%; O 11.92%

Melting Point: Mp 27-28°

References:

- Aldrich Library of FT-IR Spectra*, 1st edn., 1985, **1**, 439A, (ir)
Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 676C, (nmr)
Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 524C, (ir)
Mathur, H.H. *et al.*, *J.C.S.*, 1963, 3505, (synth)
Nozaki, H., *Tet. Lett.*, 1967, 779, (synth)
Groth, P., *Acta Chem. Scand., Ser. A*, 1976, **30**, 294, (cryst struct)
Opdyke, D.L.J., *Food Cosmet. Toxicol.*, 1976, **14**, 735, (rev, tox)
Nokami, J. *et al.*, *Chem. Lett.*, 1978, 1283, (synth)
Feldhues, M. *et al.*, *Tetrahedron*, 1986, **42**, 1285, (synth, deriv, ir, pmr, ms)
Suginome, H. *et al.*, *Tet. Lett.*, 1987, **28**, 3963, (synth)
Bienz, S. *et al.*, *Helv. Chim. Acta*, 1988, **71**, 1704, (synth, pmr, cmr)
Weiper-Idelmann, A. *et al.*, *Acta Chem. Scand.*, 1998, **52**, 672-682, (synth, pmr, ms)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, CPU250