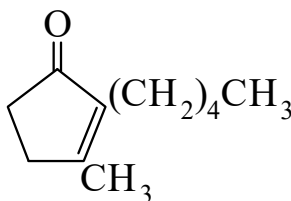




>>Entry Name: 3-Methyl-2-pentyl-2-cyclopentenone, 9CI

ENTRY UNDER REVIEW

Synonym(s): Dihydrojasnone. Tetrahydropyrethron. FEMA 3763



CAS Registry Number: 1128-08-1

Molecular Formula: C₁₁H₁₈O

Molecular Weight: 166.263

Accurate Mass: 166.135765

Percentage Composition: C 79.47%; H 10.91%; O 9.62%

Biological Source: Identified in bergamot orange oil (*Citrus bergamia*)

Use/Importance: Perfumery ingredient. Flavouring ingredient

Physical Description: Oil

Boiling Point: Bp₂₂ 140-147°. Bp₁₂ 115-117°

Density: d₄¹⁸ 0.917

Refractive Index: n_D²⁰ 1.4767

Hazard & Toxicity: Skin irritant. LD₅₀ (rat, orl) 2500 mg/kg

Aldrich: W37630-2

>>Derivative: Semicarbazone

Physical Description: Cryst. (C₆H₆)

Melting Point: Mp 177-178°

>>Derivative: 4-Nitrophenylhydrazone

Physical Description: Cryst. (MeOH)

Melting Point: Mp 118-119°

References:

- Staudinger, H. *et al.*, *Helv. Chim. Acta*, 1924, **7**, 257, (*synth*)
Opdyke, D.L.J., *Food Cosmet. Toxicol.*, 1974, **12**, 523, (*rev, tox*)
Bakuzis, P. *et al.*, *J.O.C.*, 1977, **42**, 2362, (*synth*)
Rohela, R.C. *et al.*, *Indian J. Chem., Sect. B*, 1978, **16**, 436, (*synth*)
Padmanabhan, S. *et al.*, *Synth. Commun.*, 1980, **10**, 503, (*synth*)
Fujisawa, T. *et al.*, *Chem. Lett.*, 1981, 55, (*synth*)
Takahashi, T. *et al.*, *Chem. Lett.*, 1981, 1189, (*synth*)
Brown, H.C. *et al.*, *Synthesis*, 1983, 886, (*synth*)
Liu, S.-H., *Tet. Lett.*, 1983, **24**, 439, (*synth*)
Sato, F. *et al.*, *Tet. Lett.*, 1983, **24**, 1041, (*synth*)
Cameron, A.G. *et al.*, *Tet. Lett.*, 1984, **25**, 2267, (*synth*)
Mikolajczyk, M. *et al.*, *Tet. Lett.*, 1984, **25**, 2489, (*synth*)
Anand, R.C. *et al.*, *Indian J. Chem., Sect. B*, 1985, **24**, 673, (*synth*)
Hendrickson, J.B. *et al.*, *J.O.C.*, 1985, **50**, 2110, (*synth*)
Chattopodhyay, A. *et al.*, *Chem. Ind. (London)*, 1986, 491, (*synth*)
Ohta, S. *et al.*, *Heterocycles*, 1987, **26**, 141, (*synth*)
Pecunioso, A. *et al.*, *J.O.C.*, 1988, **53**, 2614, (*synth*)
Antonioletti, R. *et al.*, *Gazz. Chim. Ital.*, 1991, **121**, 233, (*synth*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, DLQ600