

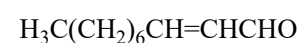


>>Entry Name: 2-Decenal

ENTRY UNDER REVIEW

Synonym(s): FEMA 2366

CAS Registry Number: 3913-71-1



Molecular Formula: $\text{C}_{10}\text{H}_{18}\text{O}$

Molecular Weight: 154.252

Accurate Mass: 154.135765

Percentage Composition: C 77.87%; H 11.76%; O 10.37%

Biological Source: Constit. of essential oil of coriander and oil of *Achasma walang*. Defensive secretion of the bug *Caleotechus sordidus*

Use/Importance: Flavouring agent

Physical Description: Liq. with waxy, orange-like, sweet aldehyde-like odour

Hazard & Toxicity: Skin irritant. LD₅₀ (rat, orl) 5000 mg/kg

Aldrich: W23660-8

Fluka: 30658

>>Variant: (E)-form

CAS Registry Number: 3913-81-3

Molecular Formula: $\text{C}_{10}\text{H}_{18}\text{O}$

Molecular Weight: 154.252

Accurate Mass: 154.135765

Percentage Composition: C 77.87%; H 11.76%; O 10.37%

Boiling Point: Bp 229-231°. Bp_{11.5} 107-107.5°

Other: PB D00820

>>Derivative: Oxime

Molecular Formula: $\text{C}_{10}\text{H}_{19}\text{NO}$

Molecular Weight: 169.266

Accurate Mass: 169.146664

Percentage Composition: C 70.96%; H 11.31%; N 8.27%; O 9.45%

Melting Point: Mp 55°

>>Derivative: Semicarbazone

CAS Registry Number: 16742-25-9

Physical Description: Cryst. (EtOH)

Melting Point: Mp 168.5°

>>Variant: (Z)-form

Molecular Formula: $\text{C}_{10}\text{H}_{18}\text{O}$

Molecular Weight: 154.252

Accurate Mass: 154.135765

Percentage Composition: C 77.87%; H 11.76%; O 10.37%

Boiling Point: Bp₁₇ 112°

Other Data: 95% pure

References:

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Swift, C.E. *et al.*, *J.A.C.S.*, 1949, **71**, 1512, (*synth*)

Tschinkel, W.R., *J. Insect Physiol.*, 1975, **21**, 659, (*isol*)

Dirinck, P. *et al.*, *J. Food Sci.*, 1977, **42**, 645, (*isol*)

Selke, E. *et al.*, *Lipids*, 1978, **13**, 511, (*glc, ms*)

Smith, R.M., *N.Z. J. Sci.*, 1978, **21**, 121, (*isol*)

Opdyke, D.L.J., *Food Cosmet. Toxicol.*, 1979, **17**, 761, (*rev, tox*)

Bestmann, H.J. *et al.*, *Chem. Ber.*, 1982, **115**, 161, (*synth*)

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