



>>Entry Name: Undecanal

ENTRY UNDER REVIEW

Synonym(s): Undecyl aldehyde. Undecylic aldehyde. FEMA 3092

CAS Registry Number: 112-44-7

$\text{H}_3\text{C}(\text{CH}_2)_9\text{CHO}$

Molecular Formula: $\text{C}_{11}\text{H}_{22}\text{O}$

Molecular Weight: 170.294

Accurate Mass: 170.167065

Percentage Composition: C 77.58%; H 13.02%; O 9.40%

Biological Source: Found in many essential oils, e.g. *Citrus* spp., *Cunila lythrifolia* and kumquat *Fortunella marginata*

Use/Importance: Perfumery and flavouring ingredient

Melting Point: Mp -4°

Boiling Point: Bp₁₈ 116-117°

Density: d_4^{23} 0.825

Refractive Index: n_D^{23} 1.4322

Other Data: Readily polymerises

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

Aldrich: W30920-6

Fluka: 94020

Sigma: U8252

Supelco: S48-3092

>>Derivative: Oxime

Molecular Formula: $\text{C}_{11}\text{H}_{23}\text{NO}$

Molecular Weight: 185.309

Accurate Mass: 185.177964

Percentage Composition: C 71.30%; H 12.51%; N 7.56%; O 8.63%

Physical Description: Cryst. (MeOH)

Melting Point: Mp 72°

>>Derivative: Semicarbazone

Physical Description: Cryst. (MeOH)

Melting Point: Mp 103°

>>Derivative: 2,4-Dinitrophenylhydrazone

Physical Description: Yellow cryst. (EtOH)

Melting Point: Mp 104°

References:

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