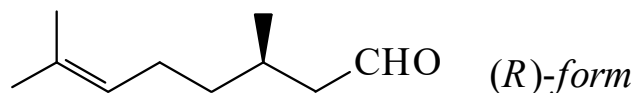




>>Entry Name: 3,7-Dimethyl-6-octenal

ENTRY UNDER REVIEW

Synonym(s): Citronellal. Rhodinal. fema 2307



CAS Registry Number: 106-23-0

Type of Compound Code(s): WE9000 WA2800

Molecular Formula: C₁₀H₁₈O

Molecular Weight: 154.252

Accurate Mass: 154.135765

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

Source/Synthesis: Isol. from essential oils, also prod. synthetically

Use/Importance: Intermed. for synth. of monoterpenes used in perfumery. Limited use in soap and detergent perfumes. Flavouring ingredient

Physical Description: Oil with powerful fresh herbaceous-citrus odour

Other Data: Enantiomer composition of natural citronellal varies widely, e.g. from 89% (*S*-) in lemon peel oil to 86.5% (*R*-) in citronella oil. Enantiomers have similar odour props.

Aldrich: W23071-5

Fluka: 27470

Rare Chemicals Library: S45792-2

Sigma: C2513

>>Variant: (*R*)-form

CAS Registry Number: 2385-77-5

Type of Compound Code(s): VS0100 WA2800 WE9000

Molecular Formula: C₁₀H₁₈O

Molecular Weight: 154.252

Accurate Mass: 154.135765

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

Biological Source: Constit. of citronella oil. Also in oils of eucalyptus, lavender, *Ocimum gratissimum*, *Phlebalium nudum*, *Citrus* spp. and others

Use/Importance: Flavouring agent

Boiling Point: Bp 204-205°. Bp₁₄ 90°

Optical Rotation: $[\alpha]_D^{18} +13.1$

Refractive Index: $n_D^{20} 1.4477$

Aldrich: 34364-1

Fluka: 27467

Sigma: C7330

>>Variant: (*S*)-form

CAS Registry Number: 5949-05-3

Type of Compound Code(s): VS0100

Molecular Formula: C₁₀H₁₈O

Molecular Weight: 154.252

Accurate Mass: 154.135765

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

Biological Source: Reported from oils of *Backhousia citriodora* and *Citrus hystrix*

Optical Rotation: $[\alpha]_D^{20} -13.1$

Aldrich: 37375-3

Fluka: 27468

Sigma: C7205

>>Variant: ($\pm$)-form

CAS Registry Number: 26489-02-1

Molecular Formula: C₁₀H₁₈O

Molecular Weight: 154.252

Accurate Mass: 154.135765

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

Source/Synthesis: Major component (85%) of oil of *Eucalyptus citriodora*

References: