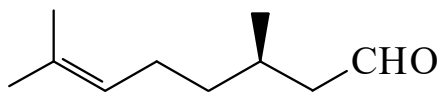
>>**Entry Name: 3,7-Dimethyl-6-octenal**
ENTRY UNDER REVIEW
Synonym(s): Citronellal. Rhodinal. fema 2307



(*R*)-*form*

CAS Registry Number: 106-23-0
Type of Compound Code(s): WE9000 WA2800

Molecular Formula: $C_{10}H_{18}O$
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: $C_{10}H_{18}O$
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°. Bp_{14} 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: $C_{10}H_{18}O$
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:** (±)-form

CAS Registry Number: 26489-02-1
Molecular Formula: $C_{10}H_{18}O$
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: