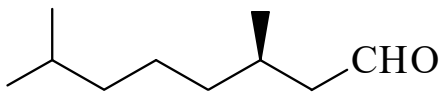
>>**Entry Name: 3,7-Dimethyloctanal**
Synonym(s): Tetrahydrocitral. Dihydrocitronellal



(*R*)-*form*

CAS Registry Number: 5988-91-0
Related CAS Registry Numbers(s): 25795-46-4 68141-23-1

Molecular Formula: $C_{10}H_{20}O$
Molecular Weight: 156.267
Accurate Mass: 156.151415
Percentage Composition: C 76.86%; H 12.90%; O 10.24%
Use/Importance: Used in perfumery

>>**Variant:** (*R*)-form

CAS Registry Number: 60018-13-5
Molecular Formula: $C_{10}H_{20}O$
Molecular Weight: 156.267
Accurate Mass: 156.151415
Percentage Composition: C 76.86%; H 12.90%; O 10.24%
Physical Description: Oil
Boiling Point: $Bp_{0.8}$ 55-60°
Optical Rotation: $[\alpha]_D^{25}$+13.5 (neat). $[\alpha]_D^{25}$+14.07 (c, 5.07 in $CHCl_3$)

>>**Variant:** (*S*)-form

CAS Registry Number: 124440-53-5
Molecular Formula: $C_{10}H_{20}O$
Molecular Weight: 156.267
Accurate Mass: 156.151415
Percentage Composition: C 76.86%; H 12.90%; O 10.24%
Physical Description: Oil
Boiling Point: Bp_{30} 121-122°
Optical Rotation: $[\alpha]_D^{25}$–6.78 (c, 5.21 in $CHCl_3$) (93% op). $[\alpha]_D^{22}$–7.1 (c, 0.9 in $CHCl_3$)
Refractive Index: n_D^{25} 1.4230

>>**Variant:** (±)-form

CAS Registry Number: 81738-03-6
Molecular Formula: $C_{10}H_{20}O$
Molecular Weight: 156.267
Accurate Mass: 156.151415
Percentage Composition: C 76.86%; H 12.90%; O 10.24%
Physical Description: Liq. with strong citrus odour
Boiling Point: Bp_{12} 81°
Density: d_4^{20}0.82
Refractive Index: n_D^{20} 1.4297

>>**Derivative:** Oxime

CAS Registry Number: 22457-26-7
Molecular Formula: $C_{10}H_{21}NO$
Molecular Weight: 171.282
Accurate Mass: 171.162314
Percentage Composition: C 70.12%; H 12.36%; N 8.18%; O 9.34%
Physical Description: Oil
Boiling Point: Bp_{17} 131-132°

>>**Derivative:** 2,4-Dinitrophenylhydrazone

Physical Description: Yellow leaflets (MeOH)
Melting Point: Mp 93°

>>**Derivative:** Semicarbazone

Physical Description: Needles (MeOH)
Melting Point: Mp 92-93°