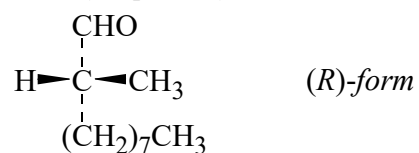




>>Entry Name: 2-Methyldecanal, 9CI

Synonym(s): Methyl octyl aldehyde. Methyl octyl acetaldehyde. α -Methylcapraldehyde



CAS Registry Number: 19009-56-4

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%

>>Variant: (R)-form

CAS Registry Number: 195833-12-6

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%

Physical Description: Oil

Optical Rotation: $[\alpha]_{\text{D}}^{20} -20.2$ (c, 0.62 in CHCl_3)

>>Variant: (S)-form

CAS Registry Number: 195833-11-5

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%

Physical Description: Oil

Optical Rotation: $[\alpha]_{\text{D}}^{20} +21.7$ (c, 0.58 in CHCl_3)

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

CAS Registry Number: 120892-77-5

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%

Use/Importance: Used in perfumery to add green and citrus notes

Physical Description: Liq. with citrus/green odour

Boiling Point: Bp_{744} 119-120°. $\text{Bp}_{0.2}$ 64°

>>Derivative: 2,4-Dinitrophenylhydrazone

CAS Registry Number: 37596-35-3

Melting Point: Mp 63-64°

References:

Hill, C.M. *et al.*, *J.A.C.S.*, 1955, **77**, 3889-3892, (*synth*)

Ceruti, M. *et al.*, *Synthesis*, 1987, 79-82, (*synth*, *ir*, *pmr*)

Oppolzer, W. *et al.*, *Helv. Chim. Acta*, 1997, **80**, 1319-1337, (*synth*, *ir*, *pmr*, *cmr*, *ms*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, MIW000