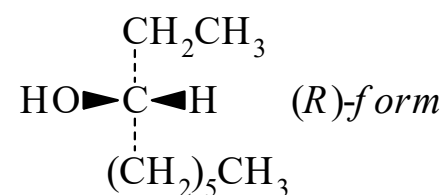




>>Entry Name: 3-Nonanol, 9CI

Synonym(s): Ethylhexylcarbinol



CAS Registry Number: 624-51-1

Extra CAS Registry Numbers(s): 28473-21-4

Molecular Formula: C₉H₂₀O

Molecular Weight: 144.256

Accurate Mass: 144.151415

Percentage Composition: C 74.94%; H 13.97%; O 11.09%

Biological Source: Constit. of Scotch spearmint oil and yarrow oil from *Achillea fragrantissima*. Also a Myrmicine worker ant pheromone

Fluka: 74295

>>Variant: (R)-form

CAS Registry Number: 61925-50-6

Molecular Formula: C₉H₂₀O

Molecular Weight: 144.256

Accurate Mass: 144.151415

Percentage Composition: C 74.94%; H 13.97%; O 11.09%

Optical Rotation: $[\alpha]_{\text{D}}^{24} -7.4$ (c, 8.1 in CHCl₃)

>>Variant: (S)-form

CAS Registry Number: 61925-49-3

Molecular Formula: C₉H₂₀O

Molecular Weight: 144.256

Accurate Mass: 144.151415

Percentage Composition: C 74.94%; H 13.97%; O 11.09%

Optical Rotation: $[\alpha]_{\text{D}}^{24} +9.6$ (c, 8.3 in CHCl₃)

>>Variant: (±)-form

CAS Registry Number: 74742-08-8

Molecular Formula: C₉H₂₀O

Molecular Weight: 144.256

Accurate Mass: 144.151415

Percentage Composition: C 74.94%; H 13.97%; O 11.09%

Boiling Point: Bp₂₀ 94°

Refractive Index: n_D²⁰ 1.4279

>>Derivative: 3,5-Dinitrobenzoyl

Melting Point: Mp 44-45°

References:

- Shalaby, A.F. *et al.*, *J. Pharm. Sci.*, 1964, **53**, 1502; *CA*, **62**, 3879h, (*isol*)
Thewalt, K. *et al.*, *J. Prakt. Chem.*, 1964, **26**, 237, (*synth*)
Mukaiyama, T. *et al.*, *Chem. Lett.*, 1976, 893, (*synth*)
Cammert, M.C. *et al.*, *J. Insect Physiol.*, 1978, **24**, 207; *CA*, **90**, 19298u
Japan. Pat., 1978, 78 25 502; *CA*, **89**, 42412d, (*synth*)
Spieler, J. *et al.*, *Eur. J. Org. Chem.*, 2000, 391-399, (*R*-form, *synth*, *pmr*)