



>>Entry Name: 5-Hydroxy-2-pentanone, 9CI

Synonym(s): 3-Acetylpropanol. Levulinic alcohol

CAS Registry Number: 1071-73-4

H3CCOCH2CH2CH2OH

Molecular Formula: C5H10O2

Molecular Weight: 102.133

Accurate Mass: 102.06808

Percentage Composition: C 58.80%; H 9.87%; O 31.33%

Physical Description: Liq.

Boiling Point: Bp₇₃₀ 208° dec.. Bp₁₀₀ 144-145°

Density: d₄²⁰ 1.008

Refractive Index: n_D¹⁷ 1.4436

Other Data: Steam-volatile

Hazard & Toxicity: LD₅₀ (mus, orl) 1960 mg/kg

Aldrich: A2080-4

>>Derivative: Ac

CAS Registry Number: 5185-97-7

Molecular Formula: C7H12O3

Molecular Weight: 144.17

Accurate Mass: 144.078645

Percentage Composition: C 58.32%; H 8.39%; O 33.29%

Boiling Point: Bp 211-213°. Bp₁₂ 91°

>>Derivative: Semicarbazone

Melting Point: Mp 155-157°

References:

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Paul, R., *Bull. Soc. Chim. Fr.*, 1933, **53**, 417-426, (*synth*)

Edward, J.T. *et al.*, *Can. J. Chem.*, 1971, **49**, 3799-3806, (*uv, ir, nmr*)

Wallace, P. *et al.*, *J.C.S. Perkin 1*, 1988, 2971-2978, (*synth*)

Bovicelli, P. *et al.*, *Tet. Lett.*, 1994, **35**, 8477-8480, (*synth*)

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Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, ABH750