



>>Entry Name: 2-Oxopentanoic acid, 9CI
Synonym(s): 2-Oxovaleric acid. α -Ketovaleric acid

CAS Registry Number: 1821-02-9

$\text{H}_3\text{CCH}_2\text{CH}_2\text{COCOOH}$

Molecular Formula: $\text{C}_5\text{H}_8\text{O}_3$
Molecular Weight: 116.116
Accurate Mass: 116.047345
Percentage Composition: C 51.72%; H 6.94%; O 41.34%
Biological Source: Isol. from *Trigonella caerulea*
Physical Description: Liq.
Melting Point: Mp 6-7°
Boiling Point: Bp 179°. Bp₁₂ 78°
Solubility: Mod. sol. H_2O
Density: d_4^{14} 1.097
Refractive Index: n_D^{20} 1.4283

Fluka: 75950
Sigma: K9250

>>Derivative: Na salt

CAS Registry Number: 13022-83-8
Physical Description: Cryst.
Melting Point: Mp 236°

>>Derivative: Oxime
Synonym(s): 2-(Hydroxyimino)pentanoic acid, 9CI

CAS Registry Number: 21486-54-4
Molecular Formula: $\text{C}_5\text{H}_9\text{NO}_3$
Molecular Weight: 131.131
Accurate Mass: 131.058244
Percentage Composition: C 45.80%; H 6.92%; N 10.68%; O 36.60%
Physical Description: Needles (petrol)
Melting Point: Mp 145°

>>Derivative: Phenylhydrazone

Physical Description: Cryst.
Melting Point: Mp 101-102°

>>Derivative: Semicarbazone

Physical Description: Cryst. (EtOH)
Melting Point: Mp 220 dec.°

>>Derivative: Me ester

CAS Registry Number: 6376-59-6
Molecular Formula: $\text{C}_6\text{H}_{10}\text{O}_3$
Molecular Weight: 130.143
Accurate Mass: 130.062995
Percentage Composition: C 55.37%; H 7.74%; O 36.88%
Physical Description: Liq.
Boiling Point: Bp₁₂ 60-62°

>>Derivative: Et ester

CAS Registry Number: 50461-74-0
Molecular Formula: $\text{C}_7\text{H}_{12}\text{O}_3$
Molecular Weight: 144.17
Accurate Mass: 144.078645
Percentage Composition: C 58.32%; H 8.39%; O 33.29%
Physical Description: Liq.
Boiling Point: Bp 179-180°. Bp₁₁ 70.5°