



>>Entry Name: 3-Hydroxypropanal, 9CI

Synonym(s): Hydracrylaldehyde, 8CI. Hydracrolein. Reuterin

CAS Registry Number: 2134-29-4

HOCH<sub>2</sub>CH<sub>2</sub>CHO

Molecular Formula: C<sub>3</sub>H<sub>6</sub>O<sub>2</sub>

Molecular Weight: 74.079

Accurate Mass: 74.03678

Percentage Composition: C 48.64%; H 8.16%; O 43.20%

Source/Synthesis: Prod. by *Lactobacillus reuteri* from the alimentary tract of humans and animals

Use/Importance: Active against gram-positive and gram-negative bacteria, fungi, yeasts and protozoa

Physical Description: Oil

Boiling Point: Bp<sub>12</sub> 75-78°. Bp<sub>0.2</sub> 38°

Solubility: Spar. sol. H<sub>2</sub>O

>>Derivative: Semicarbazone

Melting Point: Mp 114°

>>Derivative: 2,4-Dinitrophenylhydrazone

CAS Registry Number: 40365-04-6

Melting Point: Mp 132.5-133°

>>Derivative: Ac

CAS Registry Number: 18545-28-3

Molecular Formula: C<sub>5</sub>H<sub>8</sub>O<sub>3</sub>

Molecular Weight: 116.116

Accurate Mass: 116.047345

Percentage Composition: C 51.72%; H 6.94%; O 41.34%

Physical Description: Oil

Boiling Point: Bp 70°. Bp<sub>16</sub> 40°

>>Derivative: Ac, semicarbazone

Melting Point: Mp 162-163°

>>Derivative: Ac, 2,4-dinitrophenylhydrazone

CAS Registry Number: 40111-77-1

Melting Point: Mp 124.5-125.5°

>>Derivative: Benzoyl

Molecular Formula: C<sub>10</sub>H<sub>10</sub>O<sub>3</sub>

Molecular Weight: 178.187

Accurate Mass: 178.062995

Percentage Composition: C 67.41%; H 5.66%; O 26.94%

Physical Description: Oil

Boiling Point: Bp<sub>2</sub> 139-145°. Bp 103°

>>Derivative: Benzoyl, 2,4-dinitrophenylhydrazone

Melting Point: Mp 150-151°

>>Derivative: Di-Et acetal

Synonym(s): 3,3-Diethoxypropanol

CAS Registry Number: 16777-87-0

Molecular Formula: C<sub>7</sub>H<sub>16</sub>O<sub>3</sub>

Molecular Weight: 148.202

Accurate Mass: 148.109945

Percentage Composition: C 56.73%; H 10.88%; O 32.39%

Boiling Point: Bp<sub>14</sub> 90-93°. Bp<sub>36</sub> 118°

Aldrich: 27325-2