>>**Entry Name: 3-Hydroxypentanedioic acid,** 9CI
Synonym(s): 3-Hydroxyglutaric acid, 8CI. 2-Hydroxypropane-1,3-dicarboxylic acid

CAS Registry Number: 638-18-6
$HOOCCH_2CH(OH)CH_2COOH$

Molecular Formula: $C_5H_8O_5$
Molecular Weight: 148.115
Accurate Mass: 148.037175
Percentage Composition: C 40.55%; H 5.44%; O 54.01%
Physical Description: Needles (H_2O)
Melting Point: Mp 95°
Solubility: Sol. H_2O, EtOH, spar. sol. Et_2O

>>**Derivative:** Di-Me ester

CAS Registry Number: 7250-55-7
Molecular Formula: $C_7H_{12}O_5$
Molecular Weight: 176.169
Accurate Mass: 176.068475
Percentage Composition: C 47.73%; H 6.87%; O 45.41%
Boiling Point: Bp_{10} 134-136°
Aldrich: 16697-9
Fluka: 55275
Rare Chemicals Library: S36103-8

>>**Derivative:** Di-Et ester

CAS Registry Number: 32328-03-3
Molecular Formula: $C_9H_{16}O_5$
Molecular Weight: 204.222
Accurate Mass: 204.099775
Percentage Composition: C 52.93%; H 7.90%; O 39.17%
Boiling Point: Bp_2 105-107°
Aldrich: D9700-2
Fluka: 55270

>>**Derivative:** Ac

Molecular Formula: $C_7H_{10}O_6$
Molecular Weight: 190.152
Accurate Mass: 190.04774
Percentage Composition: C 44.22%; H 5.30%; O 50.48%
Melting Point: Mp 65-66°
pKa Value: pK_a 3.8

>>**Derivative:** Dinitrile
Synonym(s): 1,3-Dicyano-2-propanol

CAS Registry Number: 13880-89-2
Molecular Formula: $C_5H_6N_2O$
Molecular Weight: 110.115
Accurate Mass: 110.048013
Percentage Composition: C 54.54%; H 5.49%; N 25.44%; O 14.53%
Physical Description: Yellow oil
Boiling Point: $Bp_{0.2}$ 154-156°
Density: d_4^{35}1.01

>>**Derivative:** Dinitrile, Ac
Synonym(s): 2-Acetoxy-1,3-dicyanopropane

Molecular Formula: $C_7H_8N_2O_2$
Molecular Weight: 152.152
Accurate Mass: 152.058578
Percentage Composition: C 55.26%; H 5.30%; N 18.41%; O 21.03%
Physical Description: Liq.
Melting Point: Mp 45°
Boiling Point: Bp_1 126.5°