



>>Entry Name: 3,3',3''-Phosphinidynetrispropanoic acid, 10CI

Synonym(s): Tris(2-carboxyethyl)phosphine

CAS Registry Number: 5961-85-3

$\text{P}(\text{CH}_2\text{CH}_2\text{COOH})_3$

Molecular Formula: $\text{C}_9\text{H}_{15}\text{O}_6\text{P}$

Molecular Weight: 250.188

Accurate Mass: 250.060627

Percentage Composition: C 43.21%; H 6.04%; O 38.37%; P 12.38%

>>Derivative: Hydrochloride

CAS Registry Number: 51805-45-9

Physical Description: Cryst. (H_2O)

Melting Point: Mp 176°

Fluka: 93284

Sigma: C4706

>>Derivative: *P*-Oxide

CAS Registry Number: 5962-40-3

Molecular Formula: $\text{C}_9\text{H}_{15}\text{O}_7\text{P}$

Molecular Weight: 266.187

Accurate Mass: 266.055542

Percentage Composition: C 40.61%; H 5.68%; O 42.07%; P 11.64%

Physical Description: Phys. props. not reported

>>Derivative: Tri-Me ester

CAS Registry Number: 29269-17-8

Molecular Formula: $\text{C}_{12}\text{H}_{21}\text{O}_6\text{P}$

Molecular Weight: 292.268

Accurate Mass: 292.107577

Percentage Composition: C 49.31%; H 7.24%; O 32.85%; P 10.60%

Physical Description: Oil

Density: d_4^{20} 1.12

Refractive Index: n_D^{20} 1.4868

>>Derivative: Tri-Me ester, oxide

Synonym(s): 3,3',3''-Phosphinylidynetrispropanoic acid trimethyl ester

CAS Registry Number: 66250-56-4

Molecular Formula: $\text{C}_{12}\text{H}_{21}\text{O}_7\text{P}$

Molecular Weight: 308.267

Accurate Mass: 308.102492

Percentage Composition: C 46.76%; H 6.87%; O 36.33%; P 10.05%

Physical Description: Yellow oil

Solubility: Insol. CCl_4 , hydrocarbons

Density: d_4^{20} 1.25

Refractive Index: n_D^{20} 1.4845

>>Derivative: Tri-Et ester

CAS Registry Number: 67991-12-2

Molecular Formula: $\text{C}_{15}\text{H}_{27}\text{O}_6\text{P}$

Molecular Weight: 334.348

Accurate Mass: 334.154527

Percentage Composition: C 53.89%; H 8.14%; O 28.71%; P 9.26%

Physical Description: Light-yellow viscous oil

Density: d_4^{20} 1.08

Refractive Index: n_D^{20} 1.4803