



>>Entry Name: Dimethylphosphinic acid

CAS Registry Number: 3283-12-3

Type of Compound Code(s): AC6000

$\text{Me}_2\text{P}(\text{O})(\text{OH})$

Molecular Formula: $\text{C}_2\text{H}_7\text{O}_2\text{P}$

Molecular Weight: 94.05

Accurate Mass: 94.018367

Percentage Composition: C 25.54%; H 7.50%; O 34.02%; P 32.93%

Melting Point: Mp 87.5-88.5°

pKa Value: $\text{p}K_{\text{a}1}$ 3.08 (H_2O) $\text{p}K_{\text{a}1}$ 4.72 (75% EtOH) $\text{p}K_{\text{a}1}$ 13.18 (MeNO_2)

Aldrich: 32829-4

>>Derivative: NH_4 salt

CAS Registry Number: 51528-33-7

Physical Description: Cryst.

Melting Point: Mp 173 dec.°

>>Derivative: Me ester

Synonym(s): Methyl dimethylphosphinate

CAS Registry Number: 14337-77-0

Type of Compound Code(s): AC6040

Molecular Formula: $\text{C}_3\text{H}_9\text{O}_2\text{P}$

Molecular Weight: 108.077

Accurate Mass: 108.034017

Percentage Composition: C 33.34%; H 8.39%; O 29.61%; P 28.66%

Physical Description: Liq.

Boiling Point: Bp_{12} 78.5-79.5°

Refractive Index: n_{D}^{22} 1.4299

>>Derivative: Et ester

Synonym(s): Ethyl dimethylphosphinate

CAS Registry Number: 2511-19-5

Type of Compound Code(s): AC6040

Molecular Formula: $\text{C}_4\text{H}_{11}\text{O}_2\text{P}$

Molecular Weight: 122.103

Accurate Mass: 122.049667

Percentage Composition: C 39.35%; H 9.08%; O 26.21%; P 25.37%

Physical Description: Liq.

Boiling Point: Bp_{15} 88-89°

Density: d_4^{25} 1.03

Refractive Index: n_{D}^{25} 1.4261

>>Derivative: Ph ester

Synonym(s): Phenyl dimethylphosphinate

CAS Registry Number: 57244-61-8

Type of Compound Code(s): AC6040

Molecular Formula: $\text{C}_8\text{H}_{11}\text{O}_2\text{P}$

Molecular Weight: 170.147

Accurate Mass: 170.049667

Percentage Composition: C 56.47%; H 6.52%; O 18.81%; P 18.20%

Physical Description: Liq.

Boiling Point: Bp_{27} 164-166°