



>>Entry Name: Dimethylphosphinic acid

CAS Registry Number: 3283-12-3

Type of Compound Code(s): AC6000

Me₂P(O)(OH)

Molecular Formula: C₂H₇O₂P

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: pK_{a1} 3.08 (H₂O) pK_{a1} 4.72 (75% EtOH) pK_{a1} 13.18 (MeNO₂)

Aldrich: 32829-4

>>Derivative: NH₄ 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: C₃H₉O₂P

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: Bp₁₂ 78.5-79.5°

Refractive Index: n_D²² 1.4299

>>Derivative: Et ester

Synonym(s): Ethyl dimethylphosphinate

CAS Registry Number: 2511-19-5

Type of Compound Code(s): AC6040

Molecular Formula: C₄H₁₁O₂P

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: Bp₁₅ 88-89°

Density: d₄²⁵ 1.03

Refractive Index: n_D²⁵ 1.4261

>>Derivative: Ph ester

Synonym(s): Phenyl dimethylphosphinate

CAS Registry Number: 57244-61-8

Type of Compound Code(s): AC6040

Molecular Formula: C₈H₁₁O₂P

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: Bp₂₇ 164-166°