



>>Entry Name: Diphenylphosphinic acid, 9CI, 8CI

CAS Registry Number: 1707-03-5
Type of Compound Code(s): AC6000
Ph₂P(O)OH

Molecular Formula: C₁₂H₁₁O₂P
Molecular Weight: 218.191
Accurate Mass: 218.049667
Percentage Composition: C 66.06%; H 5.08%; O 14.67%; P 14.20%
Physical Description: Needles (C₆H₆, conc. HNO₃ or EtOH aq.)
Melting Point: Mp 195-196°
pKa Value: pK_{a1} 1.72 (20°, 0.1M NaClO₄) pK_a 2.32 (7% EtOH)
Other Data: Forms anhydride at 230°
Hazard & Toxicity: LD₅₀ (mus, scu) 1000 mg/kg

Aldrich: 10852-9
Fluka: 43153

>>Derivative: Dibenzylammonium salt

CAS Registry Number: 29544-53-4
Physical Description: Cryst. (EtOH aq.)
Melting Point: Mp 133-137°

>>Derivative: Me ester
Synonym(s): Methyl diphenylphosphinate

CAS Registry Number: 1706-90-7
Type of Compound Code(s): AC6040
Molecular Formula: C₁₃H₁₃O₂P
Molecular Weight: 232.218
Accurate Mass: 232.065317
Percentage Composition: C 67.24%; H 5.64%; O 13.78%; P 13.34%
Melting Point: Mp 57°
Boiling Point: Bp₂₉ 232°. Bp_{0.3} 162-163°
Other Data: Sl. hygroscopic

>>Derivative: Et ester
Synonym(s): Ethyl diphenylphosphinate

CAS Registry Number: 1733-55-7
Type of Compound Code(s): AC6040
Molecular Formula: C₁₄H₁₅O₂P
Molecular Weight: 246.245
Accurate Mass: 246.080967
Percentage Composition: C 68.29%; H 6.14%; O 12.99%; P 12.58%
Melting Point: Mp 42°
Boiling Point: Bp_{0.1} 178-180°
Other Data: V. hygroscopic, taking up 0.5 mol H₂O

>>Derivative: Isopropyl ester
Synonym(s): Isopropyl diphenylphosphinate

CAS Registry Number: 1706-91-8
Type of Compound Code(s): AC6040
Molecular Formula: C₁₅H₁₇O₂P
Molecular Weight: 260.272
Accurate Mass: 260.096617
Percentage Composition: C 69.22%; H 6.58%; O 12.29%; P 11.90%
Physical Description: Cryst. (C₆H₆/petrol or Me₂CO aq.)
Melting Point: Mp 97-99°