



>>Entry Name: **Diphenyl phosphate**, 9Cl, 8Cl

Synonym(s): Hydrogen diphenyl phosphate. Diphenyl phosphoric acid. Diphenyl hydrogen phosphate

CAS Registry Number: 838-85-7

Type of Compound Code(s): AC4000

(PhO)₂P(O)OH

Molecular Formula: C₁₂H₁₁O₄P

Molecular Weight: 250.19

Accurate Mass: 250.039497

Percentage Composition: C 57.61%; H 4.43%; O 25.58%; P 12.38%

Physical Description: Solid

Melting Point: Mp 68-70°

Solubility: Sol. H₂O

pKa Value: pK_a 1.85 (H₂O) pK_a 1.91 (95% EtOH aq.) pK_a 2.28 (75% EtOH aq.) pK_a 4.81 (EtOH)

Aldrich: 85060-8

Fluka: 43152

Sigma: D4755

>>Derivative: Dihydrate

Melting Point: Mp 51°

>>Derivative: NH₄ salt

Physical Description: Solid

Melting Point: Mp 130°

>>Derivative: Cyclohexylammonium salt

CAS Registry Number: 13798-41-9

Physical Description: Cryst. (EtOH)

Melting Point: Mp 199-200°

>>Derivative: Me₄N salt

Physical Description: Solid

Melting Point: Mp 210°

>>Derivative: Anilinium salt

Physical Description: Solid

Melting Point: Mp 165-166°

>>Derivative: Me ester

Synonym(s): Methyl diphenylphosphate

CAS Registry Number: 115-89-9

Molecular Formula: C₁₃H₁₃O₄P

Molecular Weight: 264.217

Accurate Mass: 264.055147

Percentage Composition: C 59.10%; H 4.96%; O 24.22%; P 11.72%

Boiling Point: Bp_{0.03} 125°

Aldrich: 10587-2

>>Derivative: Fluoride

see Diphenyl phosphorofluoridate, [DRL07-D](#)

>>Derivative: Chloride

see Diphenyl phosphorochloridate, [GGN23-X](#)