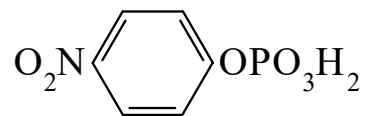




>>Entry Name: **Mono(4-nitrophenyl) phosphate, 9Cl**

Synonym(s): 4-Nitrophenyl dihydrogen phosphate. 4-Nitrophenyl phosphoric acid. PNPP



CAS Registry Number: 330-13-2

Related CAS Registry Numbers(s): 123334-11-2

Molecular Formula: C₆H₆NO₆P

Molecular Weight: 219.09

Accurate Mass: 218.993276

Percentage Composition: C 32.89%; H 2.76%; N 6.39%; O 43.82%; P 14.14%

Use/Importance: Substrate for phosphatase enzymes

Physical Description: Yellow-white needles (CHCl₃/Et₂O)

Melting Point: Mp 154-156°

Solubility: Insol. cold H₂O, sol. EtOH, CHCl₃, C₆H₆

pKa Value: pK_{a1} 0.3; pK_{a2} 4.96 (25°,H₂O)

Fluka: 73737

>>Derivative: Di-Na salt

CAS Registry Number: 4264-83-9

Use/Importance: Substrate for alkaline and acid phosphatase assays

Physical Description: White to pale-yellow cryst. +6H₂O

Aldrich: N2200-2

Fluka: 71770

Sigma: T8287

>>Derivative: Monoanilinium salt

Physical Description: Solid

Melting Point: Mp 180-182°

>>Derivative: Bis(cyclohexylammonium) salt

CAS Registry Number: 52483-84-8

Extra CAS Registry Numbers(s): 14545-82-5

Physical Description: Cryst. (Me₂CO)

Melting Point: Mp 165-167°. Mp 199-200° (as monohydrate)

Other Data: Forms hydrates

>>Derivative: Di-Ph ester

>>Derivative: Difluoride

Synonym(s): 4-Nitrophenyl phosphorodifluoridate. 4-Nitrophenyl phosphoryl difluoride. 4-Nitrophenyl difluorophosphate

Molecular Formula: C₆H₄F₂NO₄P

Molecular Weight: 223.072

Accurate Mass: 222.984602

Percentage Composition: C 32.31%; H 1.81%; F 17.03%; N 6.28%; O 28.69%; P 13.89%

Physical Description: Liq.

Boiling Point: Bp_{0.01} 72-75°

>>Derivative: Dichloride

References: