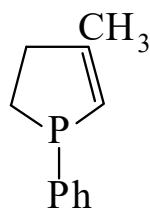




>>Entry Name: 2,3-Dihydro-4-methyl-1-phenyl-1*H*-phosphole, 9CI

Synonym(s): 3-Methyl-1-phenyl-2-phospholene



CAS Registry Number: 1445-83-6

Molecular Formula: C₁₁H₁₃P

Molecular Weight: 176.197

Accurate Mass: 176.075487

Percentage Composition: C 74.98%; H 7.44%; P 17.58%

>>Variant: (–)-form

CAS Registry Number: 64822-29-3

Molecular Formula: C₁₁H₁₃P

Molecular Weight: 176.197

Accurate Mass: 176.075487

Percentage Composition: C 74.98%; H 7.44%; P 17.58%

Optical Rotation: $[\alpha]_{\text{D}}^{24} -133.3$

>>Variant: (±)-form

CAS Registry Number: 64822-28-2

Molecular Formula: C₁₁H₁₃P

Molecular Weight: 176.197

Accurate Mass: 176.075487

Percentage Composition: C 74.98%; H 7.44%; P 17.58%

Use/Importance: Used to prepare aromatic aldehydes from acid chlorides

Boiling Point: Bp₂ 90-95°

>>Derivative: 1-Oxide

CAS Registry Number: 707-61-9

Molecular Formula: C₁₁H₁₃OP

Molecular Weight: 192.197

Accurate Mass: 192.070402

Percentage Composition: C 68.74%; H 6.82%; O 8.32%; P 16.12%

Physical Description: Cryst. (toluene/methylcyclohexane)

Melting Point: Mp 68-69°

Boiling Point: Bp_{0.4} 177°

Aldrich: 19174-4

References:

Quin, L.D. *et al.*, *J.O.C.*, 1968, **33**, 1034, (*synth*)

Smith, D.G. *et al.*, *Chem. Comm.*, 1975, 459, (*synth*)

Ibers, J.A. *et al.*, *J.A.C.S.*, 1977, **99**, 7876, (*synth, resohn*)

Tomioka, H. *et al.*, *J.O.C.*, 1977, **42**, 3070, (*synth*)

Moedritzer, K. *et al.*, *Synth. React. Inorg. Met.-Org. Chem.*, 1978, **8**, 167, (*synth*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1979, **7**, 244, (*synth, use*)