



>>Entry Name: *O*-(Diphenylphosphinyl)hydroxylamine, 9CI

CAS Registry Number: 72804-96-7

Type of Compound Code(s): AC6000

Ph2P(O)ONH2

Molecular Formula: C12H12NO2P

Molecular Weight: 233.206

Accurate Mass: 233.060566

Percentage Composition: C 61.80%; H 5.19%; N 6.01%; O 13.72%; P 13.28%

General Statement: Formerly assigned the struct. Ph2P(O)NHOH

Use/Importance: Reagent for *N*-aminations, and aminations at carbon of Na, Mg, and Li carbanions

Physical Description: Cryst. (MeOH)

Melting Point: Mp 130-135 dec.°

Solubility: Spar. sol. Et₂O, CHCl₃, CH₂Cl₂

Other Data: Can be stored at -40° for several months. Dec. by Me₂CO, DMSO

>>Derivative: *N*-Ac

Type of Compound Code(s): AC6000

Molecular Formula: C14H14NO3P

Molecular Weight: 275.243

Accurate Mass: 275.071131

Percentage Composition: C 61.09%; H 5.13%; N 5.09%; O 17.44%; P 11.25%

Physical Description: Cryst. (CH₂Cl₂/Et₂O)

Melting Point: Mp 131-133°

>>Derivative: Acetone oxime

Synonym(s): 2-[(Diphenylphosphino)oxyimino]propane

Molecular Formula: C15H16NO2P

Molecular Weight: 273.271

Accurate Mass: 273.091866

Percentage Composition: C 65.93%; H 5.90%; N 5.13%; O 11.71%; P 11.33%

Physical Description: Cryst. (CH₂Cl₂/Et₂O)

Melting Point: Mp 117-119°

References:

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Colvin, E.W. *et al.*, *Tet. Lett.*, 1982, **23**, 3835, (*use*)

Boche, G. *et al.*, *Tet. Lett.*, 1982, **23**, 5399, (*use*)

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Aurell, M.J. *et al.*, *Synth. Commun.*, 1991, **21**, 1833, (*use*)