



>>Entry Name: Diphenyl phosphorazidate, 9Cl, 8Cl

Synonym(s): Diphenyl phosphoryl azide. DPPA

CAS Registry Number: 26386-88-9

Type of Compound Code(s): AC4040 AC4070

$(\text{PhO})_2\text{P}(\text{O})\text{N}_3$

Molecular Formula: $\text{C}_{12}\text{H}_{10}\text{N}_3\text{O}_3\text{P}$

Molecular Weight: 275.203

Accurate Mass: 275.045979

Percentage Composition: C 52.37%; H 3.66%; N 15.27%; O 17.44%; P 11.25%

Use/Importance: Reagent for synth. of peptides in both liq. and solid phases with little racemization. Used in Curtius reactions. With RCOOH , alcohols $\rightarrow$ carbamates, amines $\rightarrow$ amides, thiols $\rightarrow$ thioesters. Aminates aromatic and heteroaromatic organometallic reagents. Phosphorylating reagent equally reactive to *O*- and *N*-nucleophiles. With Ph_3P and diethyl azodicarboxylate, converts alcohols into azides

Physical Description: Oil

Boiling Point: $\text{Bp}_{0.17}$ 157°

Other Data: Stable, nonexplosive. Dec. at 170°

Aldrich: 17875-6

Fluka: 79627

Sigma: D7886

References:

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Cremlyn, R.J.W., *Aust. J. Chem.*, 1973, **26**, 1591-1593, (*synth, props*)

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Villalgordo, J.M. *et al.*, *Helv. Chim. Acta*, 1996, **79**, 213-219, (*use*)