PRODUCT IN FOCUS

EXSYN®
ESSENTIAL CHEMISTRY

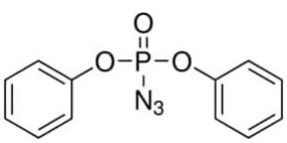
Diphenylphosphoryl azide

INTRODUCTION

Diphenylphosphoryl azide, known as DPPA, is a versatile azidation agent in organic chemistry. Its applications include preparation of organo azides, production of intermediates, synthesis of lactams, and many others.

Manufacture

It is manufactured by acid catalysis reaction between phosphoryl chloride and aniline.

Synonym	DPPA Phosphoric acid diphenyl ester azide
CAS no.	26386-88-9
EINECS no.	247-644-0
Molecular formula	$C_{12}H_{10}N_3PO_5$
Molecular weight	275.20
Structure	

Applications

Agrochemicals:

- Carfentrazone Ethyl (herbicide)

Intermediates:

- N-(Diphenoxyphosphoryldiazenyl)aniline
- (Trimethylsilyl)diazomethane
- Bis(4-nitrohenyl)phosphorazidate
- 2-Thionyl isocyanate

Others:

- As hydroazidation catalyst for making organo azides by Mitsunobu reaction
- As reagent in synthesis of oligosaccharides and in Curtis Rearrangement reaction
- In aziridation of olefins
- In preparation of aldose reductase inhibitor
- As activation agent in macrocytic lactam preparation
- As RM in synthesis of carbamates from carboxylic acids
- As KRM in racemization-free peptide synthesis and phosphoramidates

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SPECIFICATIONS

Test	Unit	Specification
Appearance	-	Colourless to slight yellow liquid
Moisture	%	Max 0.50
Purity by GC	%	Min 97.00

STORAGE
Stored at ambient temperature.

PACKING
50 kg UN approved HDPE drum.

REACH Status
Not registered yet.

ExSyn offers DPPA on commercial scales and welcomes enquiries. No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice! If you need any additional information or SDS, please contact us.