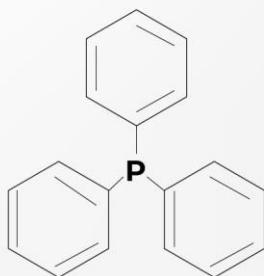


TRIPHENYLPHOSPHINE



PRODUCT IN FOCUS



Triphenylphosphine

INTRODUCTION

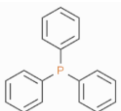
Triphenylphosphine is a common organophosphorus compound that is frequently abbreviated as PPh_3 or Ph_3P . It is widely used in organic and organometallic compound synthesis because it is an effective reducing agent as well as a neutral ligand. At room temperature, PPh_3 crystals are relatively air-stable and colourless.

MANUFACTURE

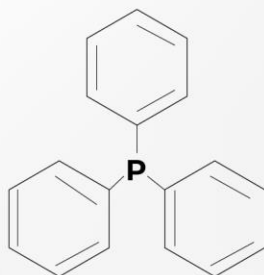
The industrial synthesis involves the reaction between phosphorus trichloride, chlorobenzene, and sodium.

APPLICATIONS

- ✔ Triphenylphosphine is used in the synthesis of Chlorambucil, which has been shown to be cytotoxic in breast and pancreatic cancers.
- ✔ It is also used to make α -Tocopherol analogues for monitoring antioxidant status.
- ✔ Used in the synthesis of Vitamin D2, Vitamin A, Clindamycin, and other drugs.
- ✔ Also, used in a variety of applications, including sensitizers, heat stabilizers, light stabilizers, antioxidants, flame retardants, antistatic agents, rubber antiozonants, and analytical reagents.
- ✔ The Wittig reaction, which converts aldehydes and ketones to alkenes, was Ph_3P 's first significant use in organic synthesis.
- ✔ Triphenylphosphine is also used as a transition metal-ligand in olefin polymerizations and in the Suzuki, Mitsunobu, and Appel reactions.
- ✔ In homogeneous catalysis, triphenylphosphine is a standard ligand.

Synonym	Triphenylphosphane, Phosphorus triphenyl
CAS no.	603-35-0
EINECS no.	210-036-0
Molecular formula	$\text{C}_{18}\text{H}_{15}\text{P}$
Molecular weight	262.29 g/mol
Structure	

TRIPHENYLPHOSPHINE



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SPECIFICATIONS

Test	Unit	Specification
Description	-	A white to off white crystalline powder or flakes
Solubility	-	Soluble in toluene
Melting range	°C	78.0 to 83.0
Loss on drying	% w/w	Not more than 0.5
Assay (by chemical)	%	Not less than 99.0

PACKING

25 kg HDPE bag.

STORAGE

Store in a dry and well-ventilated place.

REACH

Not registered.

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.