



*Specialized in chemicals*

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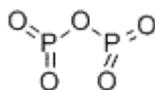
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## Technical Data Sheet

# Phosphorus Pentoxide

### Product Information

Product Name	Phosphorus Pentoxide
Synonyms	Phosphoric anhydride; PPO
CAS No.	1314-56-3
EINECS No.	215-236-1
Molecular formula	P <sub>2</sub> O <sub>5</sub>
Molecular weight	141.94
Chemical structure	



### Physical Properties

White amorphous powder. Soluble in sulfuric acid, insoluble in acetone, ammonia. Soluble in water, release a large amount of heat, first formed metaphosphate, pyrophosphate, eventually turned into orthophosphoric acid. Moist solution absorption in the air. Contact with the organic burning will happen. Contact with organic matter caused combustion was in danger. Heated or meet water heat liberation, let out poisonous corrosive flue gas. Has a strong corrosive. Phosphorus pentoxide is phosphoric acid anhydride.

Density	2.39g/cm <sup>3</sup>
Melting Point	340°C
Boiling Point	360°C sublimation
Flashing Point	340-360°C
Refractive Index	1.433-1.436

## Specification

<u>Items</u>	<u>Normal Grade</u>	<u>Superior Grade</u>
Appearance	White Powder	White Powder
Assay (P2O5)	≥99.0 %	≥99.5%
Water insoluble matter	≤0.02%	≤0.01%
Heavy Metals (Pb)	≤0.01%	≤0.003%
Asenic (As)	≤0.01%	≤0.005%
Iron (Fe)	≤0.01%	≤0.01%

## Safety

Phosphorus Pentoxide is hazard class 8 dangerous goods, it's belong to highly corrosive and toxic materials. Always refer to the Material Safety Data Sheet (MSDS)

## Applications

- 1) Used for gas and liquid desiccant.
- 2) Organic synthetic dehydrating agent.
- 3) Polyester resin antistatic agent.
- 4) Pharmaceutical and sugar refining agent.
- 5) It's the preparation of high purity phosphoric acid, phosphate, phosphide and phosphate ester of the parent material.
- 6) Used for the production of phosphorus pentoxide sol and H-type aerosol.
- 7) Used in the manufacture of optical glass, through uv glass, insulated glass, glass-ceramic and opacified glass, etc., in order to improve the ability of the dispersion coefficient of glass and through the ultraviolet.

## Packaging

25kg per pp woven bag, 18~20MT & 22~24MT per 20'ft containers with or without pallets  
50kg per iron drum, 18MT per 20'ft containers with or without pallets  
200kg per iron drum, 16MT per 20'ft containers with or without pallets

## Storage & Handling

Stored in a dry and clean warehouse. Relative humidity remained below 75%. Keep away from fire and heat. Packaging must be sealed, not damp. Should be stored separately from flammable, combustible, alkali, etc. Mixed storage can not be mixed. Please refer to the Materials Safety Data Sheet (MSDS) for the handling methods.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on handling and disposal.

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchant ability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we has been advised of the possibility of such damages.*

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