

Material Safety Data Sheet (MSDS)

Product Name: Phosphorus Pentoxide Industrial Grade

MSDS Generate Date: 20-05-2017

Revision Date: 30-12-2024

Supplier:

Rawpharma Biz Pvt Ltd

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1. Identification of the Substance/Preparation and Company

- **Chemical Name:** Phosphorus Pentoxide
- **Synonyms:** Phosphoric Anhydride
- **CAS Number:** 1314-56-3
- **Grade:** Industrial

2. Composition / Information on Ingredients

- **Phosphorus Pentoxide (CAS No. 1314-56-3):** ≥ 99%

3. Hazards Identification

- **Classification (GHS):**
 - Corrosive to metals
 - Causes severe skin burns and eye damage

- May cause respiratory irritation
 - **Hazard Statements:**
 - H290: May be corrosive to metals
 - H314: Causes severe skin burns and eye damage
 - H335: May cause respiratory irritation
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4. First Aid Measures

- **Inhalation:** Move to fresh air; seek medical attention if symptoms persist.
 - **Skin Contact:** Immediately wash with plenty of water; remove contaminated clothing; seek medical attention.
 - **Eye Contact:** Rinse cautiously with water for at least 15 minutes; remove contact lenses if present; get immediate medical help.
 - **Ingestion:** Do **not induce vomiting**; rinse mouth; seek medical attention immediately.
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5. Fire Fighting Measures

- **Suitable Extinguishing Media:** Use dry chemical, CO₂, or sand.
 - **Unsuitable Media:** Water may react violently.
 - **Special Hazards:** Reacts with water to release heat; can form phosphoric acid vapors.
 - **Protective Equipment:** Use self-contained breathing apparatus and full protective clothing.
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6. Accidental Release Measures

- Evacuate the area.
 - Wear protective equipment.
 - Avoid dust formation.
 - Sweep up and place in a suitable container.
 - Do not allow material to enter drains or waterways.
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7. Handling and Storage

- **Handling:**
 - Avoid contact with moisture.
 - Use in well-ventilated areas.
 - Avoid inhalation of dust.
- **Storage:**
 - Keep container tightly closed.
 - Store in a cool, dry, and ventilated place.
 - Keep away from water and incompatible substances.

8. Exposure Controls / Personal Protection

- **Engineering Controls:** Use local exhaust ventilation.
- **Personal Protective Equipment (PPE):**
 - Gloves: Acid-resistant
 - Eye Protection: Goggles/face shield
 - Clothing: Acid-resistant lab coat or coveralls
 - Respiratory Protection: NIOSH-approved respirator for dust

9. Physical and Chemical Properties

- Appearance: White crystalline powder
- Odor: Odorless
- Melting Point: 340°C
- Boiling Point: Decomposes on heating
- Solubility: Reacts with water forming phosphoric acid
- Density: 2.3 g/cm³

10. Stability and Reactivity

- **Stability:** Stable under dry conditions
- **Conditions to Avoid:** Moisture, water, strong oxidizers
- **Incompatible Materials:** Water, alcohols, strong bases
- **Hazardous Decomposition Products:** Phosphoric acid fumes, heat

11. Toxicological Information

- **Acute Toxicity:** Harmful if inhaled or ingested
- **Skin Corrosion/Irritation:** Causes severe burns
- **Eye Damage:** Causes serious eye damage
- **Respiratory or Skin Sensitization:** May cause irritation

12. Ecological Information

- **Ecotoxicity:** Harmful to aquatic life; avoid release into the environment.
- **Persistence and Degradability:** Reacts with water to form phosphoric acid.
- **Bioaccumulative Potential:** Low

13. Disposal Considerations

- Dispose of in accordance with local regulations.
- Neutralize with soda ash or lime before disposal.
- Avoid release into water systems.

14. Transport Information (Detailed)

UN Number: 1439

UN Proper Shipping Name: Phosphorus Pentoxide

Transport Hazard Class: 8 (Corrosive substances)

Packing Group: II

Environmental Hazards: Not classified as marine pollutant, but avoid water contamination.

Transport Precautions:

- **Road/Rail (ADR/RID):** Ensure packaging is secure and dry; avoid exposure to moisture; transport in ventilated vehicles; placard for corrosives required.
- **Air (IATA/ICAO):** Use strong, sealed packaging; maintain dry conditions; handle with care to prevent exposure to humidity; proper labeling required.
- **Sea (IMDG):** Store in corrosion-resistant containers; segregate from water and incompatible materials; handle carefully to prevent container damage.

Emergency Response:

- Keep spill containment kits available.
- In case of accidental release, evacuate the area, use PPE, and prevent material from contacting water or drains.

15. Regulatory Information

- Complies with local and international chemical regulations.
- Hazard Classification: Corrosive
- GHS Labeling: Corrosion symbol

16. Other Information

- **Disclaimer:** Information is based on current knowledge and intended to describe safety requirements; it is not a guarantee of product properties.
- **MSDS Generate Date:** 20-05-2017
- **Revision Date:** 30-12-2024
- **Website:** www.rawpharmabiz.com
- MSDS are based on the manufacturer's provided information.