

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 603.00

Revision Date: December 14, 2011

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

## Phosphorus Pentoxide

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Phosphorus Pentoxide

Synonym: Phosphoric anhydride

CAS#: 1314-56-3

### SECTION 3 — HAZARDS IDENTIFICATION

Soft white powder. Odorless.

Severely corrosive to skin and body tissue. Severe irritant if ingested. Moderately toxic by ingestion, inhalation, and skin absorption.

Reacts violently with water.

#### FLINN AT-A-GLANCE

Health-2

Flammability-0

Reactivity-3

Exposure-3

Storage-2

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Reacts violently with water.

When heated to decomposition, emits toxic fumes of PO<sub>x</sub>.

**Fire Fighting Instructions:** Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #10. Store with sulfur and phosphorus.

Store in a Flinn Chem-Saf bag and then inside a Flinn Saf-Stor can. Use and dispense in a hood.

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use exhaust ventilation to keep airborne concentrations low.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Soft white powder. Odorless.

Solubility: Soluble in water.

Formula:  $P_2O_5$ 

Formula weight: 141.05

Melting point: 340 °C

Specific gravity: 72.39

Vapor density: 4.9

Discontinued product

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with sodium, aluminum, potassium, ammonia, peroxides, magnesium, and water.

Shelf life: Poor

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Highly toxic

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD<sub>50</sub>: N.A.IHL-RAT LC<sub>50</sub>: 1217 mg/m<sup>3</sup>/1HSKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Method #24b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Phosphorus pentoxide

Hazard class: 8, Corrosive

UN number: UN1807

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (215-236-1), RCRA code D002, D003.

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**SECTION 16 — OTHER INFORMATION**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**