

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 601.00

Revision Date: September 27, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Phosphorus, Yellow

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, Yellow

Synonym: yellow or white phosphorus.

CAS#: 7723-14-0

SECTION 3 — HAZARDS IDENTIFICATION

White to off-white to yellow chunks; exhibits phosphorescence at room temperature. Odorless.

Highly toxic by ingestion, inhalation and skin absorption. May be fatal.

Corrosive to body tissues. Skin burns very possible. Avoid all body contact.

Spontaneously combustible solid. Extremely flammable.

FLINN AT-A-GLANCE

Health-3

Flammability-3

Reactivity-3

Exposure-3

Storage-3

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician, 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: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

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

SECTION 5 — FIRE FIGHTING MEASURES

Extremely flammable solid.

Spontaneously combustible solid. Autoignition Temperature: 86 °F

When heated to decomposition, emits toxic fumes of POx and/or phosphine.

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

H-4

F-4

R-2

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. Cover with wet sand; keep under cold water and follow disposal procedure.

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 dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can.

Store under water and away from heat. 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 ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 0.1 mg/m³ (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White to off-white to yellow chunks.

Solubility: Insoluble in water and alcohol. Soluble in carbon disulfide.

Formula: P

Formula Weight: 123.88

Melting Point: 44.1 °C

Specific Gravity: 1.82

Vapor Density: 0.02 (Air=1)

Vapor Pressure: 1 mm @ 76.6 °C

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with halogens, halide, sulfur, oxidizers, copper, copper alloys, oxygen, reducers, heat, open flame, and all sources of ignition.

Shelf life: Poor; serious storage risk.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Highly toxic, harmful solid and fumes, stomach pain, vomiting, and diarrhea

Chronic effects: N.A.

Target organs: N.A.

ORL-HUMAN LD50: 1.4 mg/kg

IHL-RAT LC50: N.A.

SKN-RBT LD50: N.A.

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

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please consult with state and local regulations.

Flinn Suggested Disposal Method #27c is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping Name: Phosphorus, yellow, under water

Hazard Class: 4.2, Spontaneously combustible, poison

UN Number: UN1381

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-768-7), RCRA code D001.

SECTION 16 — OTHER INFORMATION

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