FLINN SCIENTIFIC, INC. Material Safety Data Sheet (MSDS)

MSDS #: 601.00

Revision Date: December 14, 2011

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

Spontaneously combustible solid. Extremely flammable.

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.

Exposure-3 Storage-3

Health-3

Flammability-3

Reactivity-3

0 is low hazard, 3 is high hazard

FLINN AT-A-GLANCE

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

Extremely flammable solid.	NFPA Code
Spontaneously combustible solid. Autoignition Temperature: 30 °C	H-4
When heated to decomposition, emits toxic fumes of POx and/or phosphine.	F-4
Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and	R-2
SCBA with full facepiece operated in positive pressure mode.	

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: PEL 0.1 mg/m³ (OSHA)

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SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White to off-white to yellow chunks.

Solubility: Insoluble in water and alcohol. Soluble in carbon

Formula: P

Formula weight: 123.88

disulfide.

Discontinued product

Melting point: 44.1 °C

Specific gravity: 1.82 Vapor density: 0.02

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, ORL-HUM LD₅₀: 1.4 mg/kg vomiting, and diarrhea IHL-RAT LC₅₀: N.A. Chronic effects: N.A. SKN-RBT LD₅₀: N.A.

Target organs: 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 review all federal, state and local regulations that may apply, before proceeding.

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.