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

MSDS #: 645.00

Revision Date: April 28, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Potassium Permanganate

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

Potassium Permanganate

CAS#: 7722-64-7

SECTION 3 — HAZARDS IDENTIFICATION

Dark purple or blue crystals with a metallic sheen. Odorless. Slightly toxic by ingestion. Corrosive to body tissues. Avoid all body tissue contact.

Strong oxidizing agent, dangerous fire risk when heated in contact with organic materials.

FLINN AT-A-GLANCE

Health-1 Flammability-0 Reactivity-3

Exposure-2 Storage-0

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.

Powerful oxidizing agent; dangerous fire and explosion risk. When heated in contact with organic or combustible materials, can explode. When heated to decomposition, emits toxic fumes of K₂O.

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 #8. Store with borates, chromates, manganates and permanganates. Store in a cool dry place. 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

Dark, purple, blue, odorless crystals with a metallic sheen.

Solubility: Soluble in water, acetone and methyl alcohol.

Formula: KMnO₄ Formula weight: 158.04 Melting point: 240 °C (decomposes)

Specific gravity: 2.7032

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong reducers, organic and combustible materials, finely powdered metals, peroxides, aluminum, zinc, lead, copper, and their alloys.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, corrosive. Overexposure may produce anemia, swelling of the throat with possible suffocation, kidney damage and

infertility in men. Chronic effects: N.A.

Target organs: Central nervous system, blood, kidneys, lungs

ORL-RAT LD₅₀: 1090 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 review all federal, state and local regulations that may apply, before proceeding. Flinn Suggested Disposal Method #12a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Potassium Permanganate

Hazard class: 5.1, Oxidizer UN number: UN1490 N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-760-3), 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.