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

MSDS #: 632.00

Revision Date: April 28, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Potassium Fluoride

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 Fluoride

CAS#: 7789-23-3

SECTION 3 — HAZARDS IDENTIFICATION

White crystals or powder. Odorless.

Highly toxic by ingestion. Corrosive to body tissues.

Avoid all body tissue contact.

Fluoride overexposure can cause flu-like symptoms and possibly hypocalcemia.

FLINN AT-A-GLANCE

Health-3 Flammability-0 Reactivity-1

Exposure-2 Storage-1

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: Do NOT induce vomiting. Administer milk, chewable calcium carbonate tablets or milk of magnesia. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

NFPA CODE

When heated to decomposition, emits toxic fumes of K₂O and F.

None established

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

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 #2. Store with acetates, halides, sulfates, sulfates, thiosulfates and phosphates. Deliquescent, store in Flinn Chem-Saf Bag. 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 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 2.5 mg/m³ (as F) (ACGIH)

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SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White crystals or powder. Odorless.

Solubility: Soluble in water; insoluble in alcohol.

Formula: KF

Boiling point: 1500 °C

Melting point: 858 °C

Specific gravity: 2.480

Formula weight: 58.10

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong acids.

Shelf life: Fair to poor, substance deliquescent.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, corrosive ORL-RAT LD_{50} : 245 mg/kg Chronic effects: Fluorosis, hypocalcemia IHL-RAT LC_{50} : N.A. Target organs: Heart, kidneys, bones, nerves, GI system, teeth. SKN-RBT LD_{50} : 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 #6 is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Potassium fluoride Hazard class: 6.1, keep away from food.

UN number: UN1812 N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (232-151-5).

SECTION 16 — OTHER INFORMATION

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