FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 57.00

Revision Date: March 14, 2001

Section 1 — Chemical Product and Company Identification

Ammonium 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

Ammonium Fluoride

CAS#: 12125-01-8

Section 3 — Hazards Identification

White odorless crystal.

Toxic by ingestion or inhalation; corrosive to body tissues. Avoid all body tissue contact. Symptoms of overexposure may include salivation, nausea, vomiting, abdominal pain, fever and labored breathing. When heated to decomposition, emits very toxic fumes of F, NOx, and NH3.

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, 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. Induce vomiting. Call a physician or poison control at once.

<u>Section 5 — Fire Fighting Measures</u>

Non flammable solid.

When heated to decomposition, emits very toxic fumes of F, NOx, and NH3.

Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE

F-0

and SCBA with full facepiece operated in positive pressure mode.

R-0

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 alcohols, glycols, amines and amides. Store in a cool dry place. Deliquescent, store in Flinn Chem-Saf bag. Use fume hood when heating.

<u>Section 8 — Exposure Controls , Personal Protection</u>

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

White, odorless crystal. Solubility: Water soluble.

Formula: NH4F

Formula Weight: 37.05 Specific Gravity: 1.0

Section 10 — Stability and Reactivity

Emits toxic fumes under fire conditions. Do not store in glass. Avoid contact with acids and bases. Contact with caustic liberates ammonia. When heated to decomposition, emits very toxic fumes of F, NOx, and NH3.

Shelf life: Indefinite

<u>Section 11 — Toxicological Information</u>

Acute effects: Corrosive. Symptoms of overexposure may include nausea, fever, vomiting, abdominal pain, and labored breathing. Chronic effects: Calcification of bones, ligaments and tendons.

Target organs: N.A.

IPR-RAT LD50: 31 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 #6 is one option.

Section 14 — Transport Information

Shipping Name: Ammonium Fluoride Hazard Class: 6.1, Keep away from food.

UN Number: UN2505 N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (235-185-9).

Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

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