

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 57.00

Revision Date: July 8, 2011

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 crystal. Odorless.

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

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

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

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

NFPA CODE

H-3

F-0

R-0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Ventilate area and sweep up the spill, place in a sealed bag or container, and dispose.

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.

Deliquescent. Store in a cool, dry place within a Flinn Chem-Saf bag.

Use a fume hood when heating.

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.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White, odorless crystal.
Solubility: Water soluble.
Formula: NH_4F
Formula weight: 37.05

Melting point: 100 °C (decomposes)
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, NO_x and NH_3 .

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

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 LD_{50} : 31 mg/kg
IHL-RAT LC_{50} : N.A.
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: 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

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