

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Holmium Fluoride

Chemical Formula: HoF₃

Manufacturer Item Number: HO-2180

Manufacturer: Lorad Chemical Corporation
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2. HAZARD IDENTIFICATION

Signal Word: Danger

Pictograms:



Hazard Statements: H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H302+312 Harmful if swallowed or in contact with skin.
H331 Toxic if inhaled.

Precautionary Statements: P261 Avoid breathing dust / fumes / gas / mist / vapors / spray.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position for comfortable breathing.
P405 Store locked up.
P501 Dispose of contents / container in accordance with local / regional / national / international regulations.

HMIS Health Ratings (0-4)

- Health: 2
- Flammability: 0
- Physical: 1

3. COMPOSITION

Additional Names: Holmium(III) Fluoride

Percentage: 100 wt%

CAS #: 13760-78-6

EC #: 237-352-1

4. FIRST AID PROCEDURES

General Treatment	Consult a physician. Show this SDS to the doctor in attendance. Move out of dangerous area.
Special Treatment:	No Data Available.
Important Symptoms:	No Data Available.
Inhalation:	If breathing, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion:	Give one or two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.
Skin:	For skin contact, flush with large amounts of soap and water while removing contaminated clothing. Consult a physician.
Eyes:	Immediately flush eyes with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. Consult a physician.

5. FIREFIGHTING MEASURES

Flammability:	Non-flammable.
Special Hazards from Substance:	No Data Available.
Extinguishing Media:	Use suitable extinguishing agent for surrounding material and type of fire.
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

If Material is Released / Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Prevent further leakage or spills if safe to do so. Do not allow to enter drains, sewers, or watercourses.

7. HANDLING AND STORAGE

Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in Section 10.
Work / Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to main concentration at or below threshold limit.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits:	Long term: 2.5 mg/m ³ as F
Threshold Limit Value:	Long term: 2.5 mg/m ³ at F

Special Equipment:	No Data Available.
Respiratory Protection:	Wear respirator if there is dust formation or high concentrations of material present. In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment.
Protective Gloves:	Handle with gloves. Gloves must be inspected prior to use. use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Eye Protection:	Safety glasses. Use equipment for eye protection tested and approved under government standards such as NIOSH (US) or EN 166(EU).
Body Protection:	Wear appropriate protective clothing.

9. PHYSICAL AND CHEMICAL CHARACTERISTICS

Color:	Yellow
Forms:	Powder
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	2,200°C (3,992°F)
Melting Point:	1,143°C (2,089.4°F)
Flash Point:	No Data Available.
Autoignition Temperature:	No Data Available.
Density:	7.64 g/cm ³
Molecular Weight:	221.93 g/mol

10. REACTIVITY

Stability:	Stable under recommended storage conditions.
Reacts with:	Oxidizing agents.
Incompatible Conditions:	No Data Available.
Hazardous Decomposition Products:	Metal oxide fumes

11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

- Eyes	Causes serious eye irritation.
- Skin	Causes skin irritation.
- Ingestion	May cause irritation.
- Inhalation	May cause irritation.
- Chronic	Fluorides may cause salivation, nausea, vomiting, diarrhea and abdominal pain, followed by weakness, tremors, shallow respiration, convulsions and coma. May cause brain and kidney damage. Chronic Fluoride poisoning may cause severe bone changes, loss of weight, anorexia, anemia, and dental defects. Lanthanons can cause delayed blood clotting lead to hemorrhages. Exposure may also lead to sensitivity to heat, itching, increased awareness of odor and taste, and liver damage.

Signs and Symptoms:

No Data Available.

Aggravate Medical Conditions:

No Data Available.

Median Lethal Dose:

No Data Available.

Carcinogen:

No classification data on carcinogenic properties of this material is available from EPA, IARC, NTP, OSHA, or ACGIH.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity:	Low
Persistence and degradability:	No Data Available.
Bioaccumulative potential:	No.
Notes:	No Data Available.

13. DISPOSAL CONSIDERATIONS

Disposal:	Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Empty containers should be taken to an appropriated waste handling site for recycling or disposal. Dispose of in accordance with local, state, or national regulations.
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14. TRANSPORTATION DATA

Hazardous:	Hazardous for Transportation
Pictogram:	
Hazard Class:	6.1 Toxic substances
Packing Group:	III
UN Number:	UN3288
Proper Shipping Name:	Toxic solid, inorganic, n.o.s. (Holmium Fluoride)

15. REGULATORY INFORMATION

SARA 302 Components	No chemical in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	This material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards	Acute Health Hazard.
Massachusetts Right to Know Components	No components are subject to Ma. Right to Know Act.
Pennsylvania Right to Know Components	Holmium Fluoride (CAS No. 13760-78-6)
New Jersey Right to Know Components	Holmium Fluoride (CAS No. 13760-78-6)
California Prop. 65 Components	This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Copyright 2017 Lorad Chemical Corporation. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regards to appropriate safety standards. It does not represent a guarantee of the properties of the product. Lorad Chemical Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.