

### 1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Yttrium Fluoride

Chemical Formula: YF<sub>3</sub>

Manufacturer Item Number: YT-5760

Manufacturer: Lorad Chemical Corporation

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# 2. HAZARD IDENTIFICATION

Signal Word: Danger

Pictograms:



Hazard Statements: H302+312 Harmful is shallowed or in contact with skin.

H331 Toxic if inhaled. H315 Causes skin irritation. H320 Causes eye irritation.

H335 May cause respiratory irritation.

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: Yttrium(III) fluoride; Yttrium trifluoride

Percentage: 100 wt%

CAS #: 13709-49-4



**EC #**: 237-257-5

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. Seek medical attention.

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: 1 mg/m³ as Y

Threshold Limit Value: Long term: 1 mg/m³ as Y



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: White

Forms: Powder, Granules, Tablets

Odorless Odorless

Water Solubility: Insoluble

**Boiling Point:** 2,230°C (4,046°F)

**Melting Point:** 1,387°C (2,528.6°F)

Flash Point: No Data Available.

**Autoignition Temperature:** No Data Available.

**Density:** 4.01 g/cm<sup>3</sup>

Molecular Weight: 145.9 g/mol

### 10. REACTIVITY

Stability: Stable under recommended storage conditions.

Reacts with:

Oxidizing agents.

Incompatible Conditions:

Water / Moisture

Hazardous Decomposition Products: Hydrogen fluoride; Yttrium oxide

# 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

**Eyes** May cause serious irritation.

Skin Harmful.
 Ingestion Harmful.
 Inhalation Toxic.

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.



Signs and Symptoms: No Data Available.

Aggravate Medical Conditions: No Data Available.

Median Lethal Dose: No Data Available.

Carcinogen: No Data Available.

#### 12. ECOLOGICAL INFORMATION

Aquatic Toxicity: Medium.

Persistence and degradability: No.

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.

### 14. TRANSPORTATION DATA

Hazardous: Hazardous as powder, granules, tablets

Pictogram:



Hazard Class: 6.1 Toxic substances

Packing Group:

UN Number: UN3288

Proper Shipping Name: Toxic solid, inorganic, n.o.s. (Yttrium 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 Yttrium Fluoride (CAS No. 13709-49-4)

New Jersey Right to Know Compoents Yttrium Fluoride (CAS No. 13709-49-4)

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**

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