

MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION

Trade Name: Europium Trifluoride **Formula:** EuF₃
Chemical Nature: Europium fluoride **CAS #:** 13765-25-8

II HAZARDOUS INGREDIENTS

Ingredient: Europium fluoride **OSHA Hazardous (H)/Non-Hazardous (NH):** H **Percent:** >99

SARA Title Hazard Classification: Delayed (Chronic) Health Hazard

Warning Statements: Inhalation of dust may cause lung damage.

III PHYSICAL DATA

Boiling Point: 4136 °C **Melting Point:** 2534 °F
Specific Gravity: N/A **Vapor Density (Air=1):** N/A
Vapor Pressure: N/A **% Volatiles by Volume:** Zero
Evaporation Rate: N/A **Solubility in H₂O:** Insoluble
Appearance and Odor: White Solid(powder)/odorless

IV FIRE AND EXPLOSION HAZARDS DATA

Flash Point (°F)/Method: N/A (solid above 200 °F) **Flammable Limits: LFL:** N/A **UFL:** N/A

Extinguishing Media: Use extinguishing method for surrounding fire.

Special Fire Fighting Procedures: Wear a NIOSH/MSHA approved self-contained breathing apparatus with a full face piece operated in pressure-demand or other positive pressure mode and protective clothing.

Unusual Fire and Explosion Hazards: Not combustible. Under fire conditions, toxic fumes of hydrogen fluoride are emitted.

V HEALTH HAZARD INFORMATION

Exposure Limits in Air (TLV or suggested control figure):

Chemical Name: Fluoride Compounds

ACGIH (TLV): 2.5 mg (as F)/m³

OSHA(TWA): 2.5 mg (as F)/m³

Effects of Repeated Overexposure: Inhalation of dust may cause lung damage.

Carcinogenicity: This does not contain any ingredient designated by IARC, NTP, ACGIH, or OSHA as a probable human carcinogen.

Effects of Single Overexposure:

Swallowing: Low Oral Toxicity expected based on acute oral toxicity data for a related compound, neodymium fluoride, where no deaths were observed in rats at 5000 mg/kg.

Skin Absorption: Low Toxicity By Skin Absorption expected based on acute dermal toxicity data for a related compound, neodymium fluoride, where no deaths were observed in rats at 2000 mg/kg.

Inhalation: No acute inhalation data available.

Skin Contact: Non-Irritating based on skin irritation data in rabbit for a related compound, neodymium fluoride.

Eye Contact: Non-Irritation on eye irritation data in rabbits for a related compound, neodymium fluoride.

Significant Laboratory Data with Possible Relevance to People: No additional data found.

Medical Conditions Aggravated by Overexposure: Respiratory diseases

EMERGENCY AND FIRST AID PROCEDURES:

EYES: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes using an eyewash fountain. Lift upper and lower lids and rinse well under them. Get medical attention if irritation develops or persists.

SKIN: In case of contact, immediately wash with soap and water for at least 5 minutes. Remove any contaminated clothing and shoes. Thoroughly clean contaminated clothing and shoes before reuse. Get medical attention if irritation develops or persists.

INHALATION: Remove from area of exposure. Get medical attention as needed.

INGESTION: If swallowed and victim is fully conscious, induce vomiting immediately by giving two glasses of water and sticking finger down throat. GET IMMEDIATE MEDICAL ATTENTION.

NOTE TO PHYSICIAN: Treat symptomatically. No specified information found.

VI REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Open flame and moisture

Incompatibility (Material to avoid): Strong Acids

Hazardous Decomposition Products or Byproducts: Hydrogen fluoride fumes are emitted on thermal decomposition or when digested in hot mineral acids.

Hazardous Polymerization: Will not occur.

VII SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material Is Released or Spilled: Wear appropriate protective gear. Sweep up into plastic container. Avoid creating dusting conditions. Ventilate area. Wash spill area after material pickup is complete.

Waste Disposal Method: Dispose of in accordance with Local, State and Federal regulations.

Handling and Storage: Store in a cool dry place in a tightly sealed container. Avoid breathing dusts. Avoid direct or prolonged contact with skin and eyes. Wash hands thoroughly after handling. Do not rub eyes with soiled hands. Do not eat, drink or smoke in the work area.

Other Precautions: Dry powders can build static electricity charges when subjected to the friction of conveying, mixing or sliding. To prevent ignition, provide adequate precautions, such as electrical grounding, or inert atmospheres when material is used in the presence of flammable materials.

VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection: In dusting conditions, use a NIOSH/MSHA approved air purifying respirator with appropriate cartridge when TLV exceeded.

Ventilation: Provide adequate ventilation. Use local exhaust under dusting conditions.

Eye Protection: Safety glasses with side shields, Do not wear contact lenses. **Protective Clothing:** Work Uniform and gloves.

Other Protective Equipment: Maintain a sink, safety shower and eyewash fountain in the work area.

IX SPECIAL PRECAUTIONS

TSCA Inventory Status: Product is TSCA certified.

Transportation Status: Not regulated by DOT.

Reportable Quantity (RQ), under U.S. EPA CERCLA: Not Listed

Specifically Listed under SARA Title III: Not Listed

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