

# SAFETY DATA SHEET

Date Printed: 05/20/2024 Date Revised: 01/15/2022

### **SECTION 1. IDENTIFICATION**

Product Identifier: (5N) 99.999% Europium(II) Fluoride

**Product Code:** EU2-F-05

**CAS Number:** 14077-39-5

Relevant identified uses of the substance: Scientific research and development

Supplier details:

**American Elements** 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551

Fax: +1 310-208-0351

Emergency telephone number:

+1 800-424-9300

## **SECTION 2. HAZARDS IDENTIFICATION**

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Label Elements** 

Signal Word: Warning **Hazard Statements** Harmful if swallowed Harmful in contact with skin

Causes skin irritation Causes serious eye irritation

Harmful if inhaled

May cause respiratory irritation



**Precautionary Statements** 

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN: Wash with plenty of soap and water

Call a POISON CENTER or doctor/physician if you feel unwell

If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component: Europium fluoride (EuF2)

CAS-No: 14077-39-5 Weight %: <=100

### **SECTION 4. FIRST AID MEASURES**

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

Most important symptoms and effects

None reasonably foreseeable.

Notes to Physician Treat symptomatically

## **SECTION 5. FIREFIGHTING MEASURES**

Unsuitable Extinguishing Media No information available Flash Point No information available

Method - No information available

Autoignition Temperature No information available

**Explosion Limits** 

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products** 

Hydrogen fluoride Europium oxide

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Health: 2 Flammability: 0 Instability: 0 Physical hazards: -

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

Environmental Precautions Should not be released into the environment. See Section 12 for additional ecological

information. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

#### **SECTION 7. HANDLING AND STORAGE**

Handling

Wear personal protective equipment. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

Storage

Protect from moisture.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin and body protection Long sleeved clothing.

Respiratory Protection No protective equipment is needed under normal use conditions.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State Solid

Appearance Yellow

**Odor Odorless** 

Odor Threshold No information available

pH No information available

Melting Point/Range 1380 °C / 2516 °F

Boiling Point/Range > 2400 °C / 4352 °F

Flash Point No information available

**Evaporation Rate Not applicable** 

Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available

Lower No data available

Vapor Pressure No information available

Vapor Density Not applicable

Specific Gravity 6.495 g/cm3

Solubility No information available

Partition coefficient; n-octanol/water No data available

Autoignition Temperature No information available

Decomposition Temperature No information available

Viscosity Not applicable

Molecular Formula EuF2

Molecular Weight 189.96

### **SECTION 10. STABILITY AND REACTIVITY**

Reactive Hazard None known, based on information available

Stability Moisture sensitive.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition ProductsHydrogen fluoride, Europium oxide

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

**Acute Toxicity** 

**Product Information** 

**Component Information** 

Toxicologically Synergistic

**Products** 

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed

No information available

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

#### **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity** 

May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Persistence and Degradability Insoluble in water May persist

Bioaccumulation/ Accumulation No information available.

Mobility Is not likely mobile in the environment due its low water solubility.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

#### **SECTION 14. TRANSPORT INFORMATION**

DOT

UN-No UN3288

Proper Shipping Name TOXIC SOLID, INORGANIC, N.O.S.

Proper technical name (Europium(II) fluoride, anhydrous)

Hazard Class 6.1

Packing Group III

**TDG** 

UN-No UN3288

Proper Shipping Name TOXIC SOLID, INORGANIC, N.O.S.

Hazard Class 6.1

Packing Group III

**IATA** 

**UN-No UN3288** 

Proper Shipping Name TOXIC SOLID, INORGANIC, N.O.S.

Hazard Class 6.1

Packing Group III

IMDG/IMO

UN-No UN3288

Proper Shipping Name TOXIC SOLID, INORGANIC, N.O.S.

Hazard Class 6.1

Packing Group III

#### **SECTION 15. REGULATORY INFORMATION**

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration

Not applicable

**CERCLA Not applicable** 

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

#### 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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 regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.