

SAFETY DATA SHEET

Date Accessed: 25/08/2023

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SECTION 1. IDENTIFICATION

Product Name: Europium(II) Fluoride

CAS #: 14077-39-5

Relevant identified uses of the substance: Scientific research and development

Supplier details:

Stanford Advanced Materials

E-mail: sales@samaterials.com

Tel: (949) 407-8904

Address: 23661 Birtcher Dr., Lake Forest, CA 92630 U.S.A.

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 Products Hydrogen 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 6.1Packing 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

SECTION 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.