

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (5N) 99.999% Strontium Fluoride Sputtering Target

**Product Code:** SR-F-05-ST

**CAS Number:** 7783-48-4

**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

### 2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Harmful in contact with skin and eyes. Particular care must be exercised when machining and creating dust or particles.

### 2.2. LABEL ELEMENTS



Signal Word: Warning

H315 Causes skin irritation

H319 Causes serious eye irritation.

H332 Harmful if inhaled

Precautionary Statements:

P262 Do not breathe dust/fume/gas/mist/vapors/spray.

P301+P310 IF SWALLOWED: Immediately call a poison centre or doctor. Rinse mouth.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

### 2.3. OTHER HAZARDS

None

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

### **3.1. SUBSTANCES**

Component Name	CAS number	%	EC number (EINECS)	EU index	UN number
Strontium Fluoride	7783-48-4	100%	232-000-3	-	-

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

### **4.1. DESCRIPTION OF FIRST AID MEASURES**

GENERAL: Consult a doctor for specific advice.

EYES: Irrigate thoroughly with water for at least 15 minutes. Obtain medical attention.

SKIN: Wash thoroughly with soap and water. Dry area with clean towel. Remove contaminated clothing and wash clothing before re-use.

INHALATION: Remove to fresh air. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may administer oxygen. Keep affected person warm and at rest. Obtain medical attention.

INGESTION: Induce vomiting if conscious and as directed by properly qualified personnel. Wash out mouth thoroughly with water. Never make an unconscious person vomit or drink fluids. Obtain Medical Attention Immediately!.

### **4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED**

Refer to Section 2.2 and to section 11.

### **4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED**

No Data.

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## **SECTION 5. FIREFIGHTING MEASURES**

### **5.1. EXTINGUISHING MEDIA**

This product does not burn.

### **5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE**

Material may evolve toxic fumes in a fire.

### **5.3. ADVICE FOR FIREFIGHTERS**

Use breathing apparatus if necessary.

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

### **6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Wear suitable protective clothing & equipment as listed under Section 8. Avoid making dust.

### **6.2. ENVIRONMENTAL PRECAUTIONS**

Prevent further leakage or spillage. Do not let product enter drains. Do not discharge to the environment.

### **6.3. METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP**

Take up and containerize for proper disposal. Containerize any cleaning materials used for proper disposal.

### **6.4. REFERENCE TO OTHER SECTIONS**

Dispose as in Section 13.

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## SECTION 7. HANDLING AND STORAGE

### 7.1. PRECAUTIONS FOR SAFE HANDLING:

Keep away from heat. Avoid contact with skin and eyes. Protect against physical damage. Avoid generating dust.

### 7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep away from foodstuffs. Keep away from strong acids.

### 7.3. SPECIFIC END USES

Optical Material for Manufacture of Optical Components

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. CONTROL PARAMETERS

OCCUPATIONAL EXPOSURE LIMITS (OEL) = 2.5 mg/m<sup>3</sup>

### EXPOSURE CONTROLS

Protective gloves made of PVA are required. Use of a laboratory coat is suggested. Safety goggles or safety glasses with side shields are required if there is any possibility of chipping or dust creation. Respirators must be worn when the threshold limit is exceeded. Provide adequate general mechanical ventilation, and local exhaust ventilation. Wash hands immediately after handling the product.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Clear glassy geometric shapes, no odour. FLASH POINT: Not Applicable

BOILING POINT (760mm Hg) 2460°C FLAMMABILITY: Not Applicable

MELTING POINT: 1400°C EXPLOSIVE PROPERTIES: Not Applicable

SPECIFIC GRAVITY: 4.24 g/mL Vapor PRESSURE: Negligible at 25°C

SOLUBILITY IN WATER: 0.12 g/100ml H<sub>2</sub>O at 27°C pH IN AQUEOUS SOLUTION: No data available

### 9.2. OTHER SAFETY INFORMATION

None

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## SECTION 10. STABILITY AND REACTIVITY

### 10.1. REACTIVITY

Reacts with strong mineral acids.

### 10.2. CHEMICAL STABILITY

Stable under normal conditions of storage and use

### 10.3. POSSIBILITY OF HAZARDOUS REACTIONS

None known

### 10.4. CONDITIONS TO AVOID

Avoid strong acids

### 10.5. INCOMPATIBLE MATERIALS

Strong Mineral Acids.

### 10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Decomposition product is Hydrogen Fluoride gas.

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

### **11.1. INFORMATION ON TOXICOLOGICAL EFFECTS**

Toxic by ingestion and inhalation of dust, with a cumulative effect. Affects nervous system. Particular care must be exercised when machining and creating dust or particles. Inhalation of dust may irritate respiratory system.

TOXIC DOSE - LD50 > 10600 mg/kg (oral/rat) CARCINOGENICITY: No evidence of carcinogenic properties.

MUTAGENICITY/TERATOGENICITY: No evidence of reproductive effects.

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## **SECTION 12. ECOLOGICAL INFORMATION**

### **12.1. TOXICITY**

Hazard to drinking water.

### **12.2. PERSISTENCE AND DEGRADABILITY**

No Data

### **12.3. BIOACCUMULATIVE POTENTIAL**

No Data

### **12.4. MOBILITY IN SOIL**

No Data

### **12.5. RESULTS OF PBT AND vPvB ASSESSMENT**

Not required or conducted

### **12.6. OTHER ADVERSE AFFECTS**

The following applies to inorganic fluorides in general: biological effects: fish: *L. idus* LC50 660mg/l; bacteria: *Ps. putida* toxic from 231 mg/l up; algae: *Sc. quadricauda* toxic from 249mg/l up; protozoa: *E. sulcatum* toxic from 101mg/l up; *U. parduczi* toxic from 71mg/l up (all values as NaF).

Hazard to drinking water.

The following applies to strontium compounds in general: toxic for aquatic organisms: fish: *Salmo* toxic from 1mg/l up; lethal from 1500mg/l up in 2 weeks, from 10g/l in 1 day, fish-nutrient animals: toxic from 3500mg/l up (values calculated as Sr)

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

### **13.1. WASTE TREATMENT METHODS**

Chemical residues are generally classified as special waste, and are covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company.

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## **SECTION 14. TRANSPORT INFORMATION**

### **14.1. UN NUMBER: None**

### **14.2. UN PROPER SHIPPING NAME:**

Not subject to transportation regulations.

### **14.3. TRANSPORT HAZARD CLASS: None**

### **14.4. PACKING GROUP: None**

### **14.5. ENVIRONMENTAL HAZARDS: None**

### **14.6. SPECIAL PRECAUTIONS FOR USER: None**

### **14.7. TRANSPORT IN BULK MARPOL / IBC: No Data**

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## **SECTION 15. REGULATORY INFORMATION**

### **15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS / LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE**

TSCA: Not listed in the TSCA inventory

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## **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.