SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Name: Lead(II) Fluoride Sputtering Target

Product Number: All applicable American Elements product codes, e.g. PB2-F-02-ST , PB2-F-03-ST , PB2-F-04-ST , PB2-F-05-ST

CAS #: 7783-46-2

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

Xn If swallowed causes nausea, vomiting, stomach pains and diarrhoea. Also harmful in contact with skin. Particular care must be exercised when machining and creating dust or particles.
Class 6.1 Poison



Signal: Warning
H302 Harmful if swallowed.
H332 Harmful if inhaled.
Signal: Health Hazard
H360 May damage fertility or the unborn child
H373 May cause damage to organs through prolonged or repeated exposure
Signal: Environment
H410 Very toxic to aquatic life with long lasting effects.
Prevention:
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when handling this product
Response:

P301+P310 IF SWALLOWED: Immediately call a poison centre or doctor. Rinse mouth.
P304+P312 IF INHALED: Call a poison centre or doctor/physician if you feel unwell.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT NAME CAS number % EC number (EINECS) EU index UN number
Lead Fluoride 7783-46-2 100% 231-998-8 082-001-00-6 2291

SECTION 4. FIRST AID MEASURES

EYES: Irrigate thoroughly with water for at least 15 minutes. Obtain medical attention.
SKIN: Wash off thoroughly with soap and water. Gently dry area with clean towel. Remove contaminated clothing and wash clothing before re-use.
INHALATION: Remove to uncontaminated area. 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 a properly qualified personnel. Wash out mouth thoroughly with water. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS. Obtain Medical Attention Immediately!

SECTION 5. FIREFIGHTING MEASURES

FLASH POINT: Not Ignitable. Not Applicable
EXTINGUISHING MEDIA: Water, CO2, foam or dry chemical.
UNUSUAL FIRE HAZARDS: May evolve toxic fumes in a fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

CONTAMINATION CLEANUP: Wear suitable protective clothing & equipment as listed under Exposure / Personal protection. Take up and containerize for proper disposal. Avoid making dust. Containerize any cleaning materials used for proper disposal.

SECTION 7. HANDLING AND STORAGE

USAGE PRECAUTIONS: Keep away from heat. Avoid skin contact. Protect against physical damage and avoid generating dust.
STORAGE PRECAUTIONS: Keep away from foodstuffs.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective gloves made of nitrile rubber (0.11mm) 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.

OCCUPATIONAL EXPOSURE LIMITS (OEL) =0.15 mg/m3 as Lead in 8 hour Time Weighted Average (TWA)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Clear glassy geometric shapes, no odour.
pH IN AQUEOUS SOLUTION: No data available
BOILING POINT (760mm Hg) 1293?C
MELTING POINT: 824?C
FLASH POINT: Not Applicable
FLAMMABILITY: Not Applicable
EXPLOSIVE PROPERTIES: Not Applicable
SPECIFIC GRAVITY: 7.75
Vapor PRESSURE: Not Applicable
SOLUBILITY IN WATER: Slightly soluble; 65mg/100ml H2O at 20?C

SECTION 10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions of storage and use.
HAZARDOUS DECOMPOSITION: Liberates toxic hydrogen fluoride gas in contact with mineral acid.
MATERIALS TO AVOID: Acids, Oxidisers, Concentrated Hot Sulphuric Acid

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SECTION 11. TOXICOLOGICAL INFORMATION

TOXIC DOSE - LD50 Not Available
CARCINOGENICITY No evidence of carcinogenic properties
MUTAGENICITY/TERATOGENICITY Chronic exposure is associated with subtle effects to the male reproductive system and, if exposed, the developing fetus.
TOXICOLOGICAL FINDINGS Also harmful in contact with skin. Particular care must be exercised when machining and creating dust or particles. Human exposure to lead, both acutely and chronically, is associated with well defined adverse effects to health. The target organs are blood, kidney and nervous system for acute exposure to toxic amounts. Lead accumulates in exposed individuals and approximately 90% of the absorbed dose remains deposited in the bone. Removal from exposure can reverse effects to the blood, male reproductive system, and to a limited extent the central nervous system.

SECTION 12. ECOLOGICAL INFORMATION

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.

SECTION 13. DISPOSAL CONSIDERATIONS

DISPOSAL 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.

SECTION 14. TRANSPORT INFORMATION

Class UN Packing Group Proper Shipping Name
6.1 2291 III Lead compounds, soluble, N.O.S. (Lead II Fluoride)

SECTION 15. REGULATORY INFORMATION

Hazard Symbols: Xn – Harmful N – Dangerous for the Environment
Risk Phrases: R20/22 Harmful by inhalation and if swallowed.
R33 Danger of cumulative effects
Safety Phrases: S13 Keep away from food, drink and animal feeding stuffs.
S22/21 When using do not eat, drink or smoke
Note that the Risk and Safety Phrases included here for completeness are being replaced with the GHS Hazard and Precautionary statements given in section 2.
TSCA INVENTORY ITEM: Yes

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. 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.