SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Name: Barium Strontium Titanate Sputtering Target

Product Number: All applicable American Elements product codes, e.g. BA-SRTI-02-ST , BA-SRTI-025-ST , BA-SRTI-03-ST , BA-SRTI-035-ST , BA-SRTI-04-ST , BA-SRTI-05-ST

CAS #: 12430-73-8

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

Statements of Hazard: Irritant
Acute Health Hazard: Irritant to eyes, skin, mucous membranes and respiratory system. May be harmful by ingestion, inhalation or skin absorption.
Chronic Health Hazard: Not Available
HMIS Rating: H:0 F:0 P:0
NFPA Rating: H:0 F:0 R:0
To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.
Pictogram



Signal Word: Warning
Hazard Statement(s): H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

H332 Harmful if inhaled.
H335 May cause respiratory irritation.
Precautionary Statement(s): P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/ attention.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Barium strontium titanate
Synonyms: BST
CAS Number: 12430-73-8
MDL Number: MFCD05865190
EINECS Number: 235-659-5
Beilstein Registry Number: Not Available
Molecular Formula: (BaTiO3)(SrTiO3)
Molecular Weight: 416.68
Content: 99+%
Notes: Not Available

SECTION 4. FIRST AID MEASURES

Eye Contact: Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.
Skin Contact: Wash skin with soap and water. If irritation persists, seek medical attention.
Ingestion: Do not induce vomiting. Seek medical attention.
Inhalation: Move to a fresh air environment. Contact a physician if breathing becomes difficult.

SECTION 5. FIREFIGHTING MEASURES

Flash Point: Not Available
Explosion Limits: Lower: Not Available
Upper: Not Available
Autoignition: Not Available
Extinguishing Media: Carbon dioxide, dry chemical powder, alcoholresistant

foam or water spray.
Protective Equipment: Wear self-contained respirator and fully protective impervious suit.
Specific Hazards: May emit hazardous fumes under fire conditions.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection: Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use.
Keep unprotected persons away.
Environmental Protection: Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

SECTION 7. HANDLING AND STORAGE

Handling: Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.
Storage: Store in a tightly closed container in a dry, wellventilated place.
Sensitivities: Not Available
Storage Temperature: 15-30 ºC

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Wear appropriate protective eyeglass or chemical safety goggles. Make sure that there is an eyewash facility in your vicinity.
Skin: Wear impervious gloves and protective clothing.
Respiratory: Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.
Exposure Limits: Country Source Type Value
USA ACGIH TWA Not Available
USA OSHA STEL Not Available
USA OSHA PEL Not Available

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder or solid
Odor: Not Available
Melting Point: Not Available

Boiling Point: Not Available
pH Value: Not Available
Density: 4.91 g/cm3
Refractive Index, n20
D: Not Available
Viscosity: Not Available
Solubility in Water: Not Available
Vapor Pressure: Not Available
Vapor Density(Air=1): Not Available

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.
Incompatibility: Strong oxidizing agents.
Conditions to Avoid: Heat, Flame, Sparks, other ignition sources
Hazardous Decomposition Products: Barium oxides, Strontium oxides, Titanium oxides

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SECTION 11. TOXICOLOGICAL INFORMATION

RTECS Reference: Not Available
Target Organs: Not Available
Toxicity Data: Not Available
Skin corrosion/irritation: Not Available
Serious eye damage/irritation: Not Available
Carcinogenicity: Not Available

SECTION 12. ECOLOGICAL INFORMATION

Not Available

SECTION 13. DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT: Not Regulated
IATA: Not Regulated
IMDG: Not Regulated

SECTION 15. REGULATORY INFORMATION

United States:

Toxic Substance Control Act (TSCA): Listed
Superfund Amendments and Reauthorization Act (SARA 302): Not listed
Superfund Amendments and Reauthorization Act (SARA 311/312): Not listed
Superfund Amendments and Reauthorization Act (SARA 313): Not listed
European Union:
European Inventory of Existing Chemical Substances (EINECS): No. 235-659-5
Hazard Codes: Xi
Risk Statements: 36/37/38
Safety Statements: 26
Canada
Canadian Domestic Substances List (DSL): Not listed
Canadian Non-Domestic Substances List (NDSL): Listed

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.