

# SAFETY DATA SHEET

Date Printed: 05/18/2024

Date Revised: 01/15/2022

## SECTION 1. IDENTIFICATION

**Product Identifier:** (5N) 99.999% Barium Stannate Sputtering Target

**Product Code:** BA-SNO-05-ST

**CAS Number:** 12009-18-6

**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

Statement of Hazard:

Irritant, Respiratory irritant, Toxic

Acute Health Hazard:

Irritant to eyes, skin, mucous membranes and respiratory system.

May be toxic by ingestion and inhalation, harmful by skin absorption.

Chronic Health Hazard:

Not Available

HMIS Rating: H - 3, F - 0, P - 0

NFPA Rating: H - 3, F - 0, P - 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:

Danger

Hazard Statement(s):

H301 Toxic if swallowed.

H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H331 Toxic if inhaled.  
H335 May cause respiratory irritation.  
Precautionary Statement(s):  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink, or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
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.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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

Chemical Name: Barium stannate 99%  
CAS Number: 12009-18-6  
MDL Number: MFCD00014187  
EINECS Number: 234-545-2

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### **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.

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### **SECTION 5. FIREFIGHTING MEASURES**

Flash Point (°C):  
Not Available  
Explosion Limits:  
Not Available  
Autoignition (°C):  
Not Available  
Extinguishing Media:

Carbon dioxide, dry chemical powder, alcohol-resistant foam, or water spray

**Protective Equipment:**

Wear self-contained respirator and fully protective impervious suit.

**Specific Hazards:**

May emit hazardous fumes under fire conditions.

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## **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. Remove from ignition sources if safe to do so. Follow emergency response plan and contact proper authorities if needed. 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.

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

**Handling and Storage:**

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. Store in a tightly closed container in a dry, well-ventilated place.

**Sensitivities:**

Not Available

**Storage Temperature (°C):**

15 to 30

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering Controls:**

Use product in a well ventilated area or under a fume hood. Use proper lab equipment while handling this product. Keep away from incompatible materials for possible risk of hazardous reaction.

**Eye Protection:**

Wear appropriate protective eyeglass or chemical safety goggles. Make sure that there is an eyewash station in your vicinity.

**Skin Protection:**

Wear impervious gloves and protective clothing.

**Respiratory Protection:**

Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

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

Appearance: White powder

Odor: No data available

Odor Threshold: No data available

Flash Point (°C): No data available  
Autoignition (°C): No data available  
UEL % by Volume: No data available  
LEL % by Volume: No data available  
Melting Point (°C): No data available  
Boiling Point (°C): No data available  
Evaporation Rate: No data available  
pH Value: No data available  
  
Density (g/cm<sup>3</sup>): 7.6  
Refractive Index (n<sub>20</sub><sup>D</sup>): No data available  
Viscosity: No data available  
Solubility in Water: No data available  
Solubility in Other: No data available  
Vapor Pressure (mmHg): No data available  
Vapor Density (Air=1): No data available

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

Stability:  
Stable under normal temperatures and pressures.  
Incompatibility:  
Strong oxidizing agents  
Reactivity:  
Product may react with incompatible materials to release other hazardous substances.  
Conditions to Avoid:  
Heat, flame, sparks, other ignition sources.  
Hazardous Decomposition Products:  
Barium oxides, Tin oxides

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

RTECS Reference:  
Not Available  
Target Organs:  
Not Available  
Toxicity Data:  
Not Available  
Carcinogenicity:  
National Toxicology Program (NTP) listed:  
Not Available  
International Agency for Research on Cancer (IARC) listed:  
Not Available  
Potential Symptoms:  
Not Available

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## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity:

Not Available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

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

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## **SECTION 14. TRANSPORT INFORMATION**

DOT Shipping Name: Barium Compound, N.O.S.

DOT UN Number: UN1564

DOT Hazard Class: Class 6.1

DOT Packing Group: PGII

IMDG Shipping Name: Barium Compound, N.O.S

IMDG UN Number: UN1564

IMDG Hazard Class: Class 6.1

IMDG Packing Group: PGII

Marine Pollutant: No

IATA: Barium Compound, N.O.S.

IATA UN Number: UN1564

IATA Hazard Class: Class 6.1

IATA Packing Group: PGII

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## **SECTION 15. REGULATORY INFORMATION**

United States

Toxic Substance Control Act (TSCA) listed:

Yes

Superfund Amendments and Reauthorization Act (SARA 302) listed:

No

Superfund Amendments and Reauthorization Act (SARA 311/312) listed:

No

Superfund Amendments and Reauthorization Act (SARA 313) listed:

No

European Union

European Inventory of Existing Chemical Substances (EINECS):

234-545-2

Canada

Canadian Domestic Substances List (DSL) listed:

Yes

Canadian Non-Domestic Substances List (NDSL) listed:

Yes

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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.