

# SAFETY DATA SHEET

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## **SECTION 1. IDENTIFICATION**

Product Identifier: (4N) 99.99% Strontium Sleeves

Product Code: SR-M-04-SLV

CAS Number: 7440-24-6

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**

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) GHS02 Flame Water-react. 2 H261 In contact with water releases flammable gas. Hazards not otherwise classified No data available GHS label elements GHS label elements, including precautionary statements Hazard pictograms

GHS02 Signal word Danger Hazard statements H261 In contact with water releases flammable gas. Precautionary statements P231+P232 Handle under inert gas. Protect from moisture. P280 Wear protective gloves/protective clothing/eye protection/face protection. P233 Keep container tightly closed. P370+P378 In case of fire: Use for extinction: Special powder for metal fires. P402+P404 Store in a dry place. Store in a closed container. P501 Dispose of contents/container in accordance with local/regional/ national/international regulations. WHMIS classification B6 - Reactive flammable material Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) HEALTH FIRE REACTIVITY 1 3 2 Health (acute effects) = 1Flammability = 3Physical Hazard = 2 Other hazards Results of PBT and vPvB assessment PBT: N/A vPvB: N/A

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

Substances CAS No. / Substance Name: 7440-24-6 strontium Identification number(s): EC number: 231-133-4

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

Description of first aid measures If inhaled: Supply patient with fresh air. If not breathing, provide artificial respiration. Keep patient warm. Seek immediate medical advice. In case of skin contact: Immediately wash with soap and water; rinse thoroughly. Seek immediate medical advice. In case of eye contact: Rinse opened eye for several minutes under running water. Consult a physician. If swallowed: Seek medical treatment. Information for doctor Most important symptoms and effects, both acute and delayed No data available Indication of any immediate medical attention and special treatment needed

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

Extinguishing media Suitable extinguishing agents Special powder for metal fires. Do not use water. For safety reasons unsuitable extinguishing agents Carbon dioxide Water Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Metal oxide fume Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation Keep away from ignition sources Environmental precautions: Do not allow material to be released to the environment without official permits. Methods and materials for containment and cleanup: Keep away from ignition sources. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents Prevention of secondary hazards: Keep away from ignition sources. Reference to other sections See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

#### SECTION 7. HANDLING AND STORAGE

Handling Precautions for safe handling Handle under dry protective gas. Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Reacts violently with water Information about protection against explosions and fires: Protect against electrostatic charges. Conditions for safe storage, including any incompatibilities Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from air. Store away from water/moisture. Do not store together with acids. Store away from oxidizing agents. Further information about storage conditions: Store under dry inert gas. Keep container tightly sealed. Store in cool, dry conditions in well-sealed containers. Protect from humidity and water. Specific end use(s) No data available

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

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

None.

Additional information:

No data

Exposure controls

Personal protective equipment

Follow typical protective and hygienic practices for handling chemicals.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Maintain an ergonomically appropriate working environment.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Recommended filter device for short term use:

Use a respirator with type P100 (USA) or P3 (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.

Protection of hands:

Impervious gloves

Inspect gloves prior to use.

Suitability of gloves should be determined both by material and quality, the latter of which may vary by manufacturer.

Penetration time of glove material (in minutes)

No data available

Eye protection:

Safety glasses

Full face protection

Body protection:

Protective work clothing

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

Information on basic physical and chemical properties Appearance: Form: Solid Color: White to yellow to gold Odor: No data available Odor threshold: No data available. pH: N/A Melting point/Melting range: 777 °C (1431 °F) Boiling point/Boiling range: 1382 °C (2520 °F) Sublimation temperature / start: No data available Flammability (solid, gas) Contact with water liberates extremely flammable gases. Ignition temperature: No data available Decomposition temperature: No data available Autoignition: No data available. Danger of explosion: No data available. **Explosion limits:** Lower: No data available Upper: No data available Vapor pressure at 20 °C (68 °F): 0 hPa Density at 20 °C (68 °F): 2.64 g/cm<sup>3</sup> (22.031 lbs/gal) Relative density No data available. Vapor density N/A Evaporation rate N/A Solubility in Water (H<sub>2</sub>O): Contact with water releases flammable gases Partition coefficient (n-octanol/water): No data available. Viscosity: Dynamic: N/A Kinematic: N/A Other information No data available

# SECTION 10. STABILITY AND REACTIVITY

Reactivity In contact with water releases flammable gases which may ignite spontaneously. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions Reacts with strong oxidizing agents Contact with water releases flammable gases Conditions to avoid No data available Incompatible materials: Acids Air

#### SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in this product. LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity Aquatic toxicity: No data available Persistence and degradability No data available Bioaccumulative potential No data available Mobility in soil No data available Additional ecological information: Do not allow material to be released to the environment without official permits. Do not allow undiluted product or large quantities to reach groundwater, water courses, or sewage systems. Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: N/A vPvB: N/A Other adverse effects No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods Recommendation Consult official regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

#### **SECTION 14. TRANSPORT INFORMATION**

**UN-Number** DOT, IMDG, IATA UN3208 UN proper shipping name DOT Metallic substance, water-reactive, n.o.s. (strontium) IMDG. IATA METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S. (strontium) Transport hazard class(es) DOT Class 4.3 Substances which, in contact with water, emit flammable gases. Label 4.3 Class 4.3 (W2) Substances which, in contact with water, emit flammable gases Label 4.3 IMDG, IATA Class 4.3 Substances which, in contact with water, emit flammable gases. Label 4.3 Packing group DOT, IMDG, IATA II Environmental hazards: N/A Special precautions for user Warning: Substances which, in contact with water, emit flammable gases EMS Number: F-G,S-N Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code N/A Transport/Additional information: DOT Marine Pollutant (DOT): No UN "Model Regulation": UN3208, Metallic substance, water-reactive, n.o.s. (strontium), 4.3, II

## **SECTION 15. REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture GHS GHS label elements, including precautionary statements Hazard pictograms GHS02 Signal word Danger Hazard statements H261 In contact with water releases flammable gas. Precautionary statements P231+P232 Handle under inert gas. Protect from moisture. P280 Wear protective gloves/protective clothing/eye protection/face protection. P233 Keep container tightly closed. P370+P378 In case of fire: Use for extinction: Special powder for metal fires. P402+P404 Store in a dry place. Store in a closed container. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. National regulations All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory. All components of this product are listed on the Canadian Domestic Substances List (DSL). SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Information about limitation of use: For use only by technically qualified individuals. Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use)

Substance is not listed.

## **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.