

SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Identifier: (2N) 99% Antimony Granules

Product Code: SB-E-02-GR

CAS Number: 7440-36-0

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 Classification according to Regulation (EC) No 1272/2008 GHS06 Skull and crossbones Acute Tox. 3 H301 Toxic if swallowed. GHS07 Acute Tox. 4 H332 Harmful if inhaled. Classification according to Directive 67/548/EEC or Directive 1999/45/EC T; Toxic R25: Toxic if swallowed. Xn; Harmful R20: Harmful by inhalation. N; Dangerous for the environment R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Information concerning particular hazards for human and environment: N/A Hazards not otherwise classified No data available. Label elements Labelling according to Regulation (EC) No 1272/2008 The substance is classified and labeled according to the CLP regulation. Hazard pictograms



GHS06 GHS07 Signal word Danger Hazard statements H301 Toxic if swallowed. H332 Harmful if inhaled. Precautionary statements P261 Avoid breathing dust/fume/gas/mist/vapors/spray. P264 Wash thoroughly after handling. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P321 Specific treatment (see on this label). P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. WHMIS classification D1A - Very toxic material causing immediate and serious toxic effects Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) HEALTH FIRE REACTIVITY 2 0 1 Health (acute effects) = 2Flammability = 0Physical Hazard = 1 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: 7440-36-0 Antimony Identification number(s): EC number: 231-146-5

SECTION 4. FIRST AID MEASURES

Description of first aid measures General information Immediately remove any clothing soiled by the product. In case of irregular breathing or respiratory arrest provide artificial respiration. If inhaled:

Supply 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:

Do not induce vomiting; immediately call for medical help.

Information for doctor

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed No information available.

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media Suitable extinguishing media Special powder for metal fires. Do not use water. For safety reasons unsuitable extinguishing media Water Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Antimony oxides 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 Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Environmental precautions: Do not allow product to reach sewage system or any water course. Do not allow to penetrate the ground/soil. Methods and material for containment and cleanup: Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation. Prevention of secondary hazards: No special measures required. 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 Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure adequate ventilation. Information about protection against explosions and fires: No data available. Conditions for safe storage, including any incompatibilities Storage Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Do not store together with acids. Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well-sealed containers. Specific end use(s) No information 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:

7440-36-0 Antimony (100.0%)

PEL (USA) Long-term value: 0.5 mg/m³ as Sb

REL (USA) Long-term value: 0.5 mg/m³ as Sb

TLV (USA) Long-term value: 0.5 mg/m³ as Sb

EL (Canada) Long-term value: 0.5 mg/m³

EV (Canada) Long-term value: 0.5 mg/m³

Additional information: No data

Exposure controls

Personal protective equipment

Follow typical general protective and industrial hygiene measures 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.

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. Material of gloves Nitrile rubber, NBR Penetration time of glove material (in minutes): 480 Glove thickness: 0.11 mm Eye protection: Safety glasses Body protection: Protective work clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties Appearance: Form: Powder Color: gray Odor: Odorless Odor threshold: No data available. pH: N/A. Melting point/range: 630.7 °C (1167 °F) Boiling point/range: 1587 °C (2889 °F) Sublimation temperature / start: No data available. Flammability (solid, gas): No data available. Ignition temperature: No data available. Decomposition temperature: No data available. Auto igniting: No data available. Danger of explosion: No data available. **Explosion limits:** Lower: No data available. Upper: No data available. Vapor pressure: N/A. Density at 20 °C (68 °F): 6.68 g/cm3 (55.745 lbs/gal) Relative density: No data available. Vapor density: N/A. Evaporation rate: N/A. Solubility in Water (H₂O): Insoluble Partition coefficient (n-octanol/water): No data available. Viscosity: Dynamic: N/A. Kinematic: N/A. Other information: No information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: No data available. 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 Conditions to avoid No information available.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity: Harmful if inhaled. Toxic if swallowed. The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance. LD/LC50 values that are relevant for classification: Oral LD50 100 mg/kg (rat) Skin irritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: N/A Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP. OSHA or ACGIH. The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this substance. Reproductive toxicity: N/A Specific target organ system toxicity - repeated exposure: N/A Specific target organ system toxicity - single exposure: N/A Aspiration hazard: N/A Subacute to chronic toxicity: N/A Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Carcinogenic categories OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity Aquatic toxicity: No information available. Persistence and degradability: No information available. Bioaccumulative potential: No information available. Mobility in soil: No information available. Additional ecological information: General notes: Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

Avoid transfer into the environment. Results of PBT and vPvB assessment: PBT: N/A. vPvB: N/A. Other adverse effects No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods Recommendation: Consult state, local or national 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 UN2871 UN proper shipping name DOT Antimony powder IMDG ANTIMONY POWDER, MARINE POLLUTANT IATA ANTIMONY POWDER Transport hazard class(es) DOT Class 6.1 Toxic substances. Label 6.1 Class 6.1 (T5) Toxic substances Label 6.1 IMDG Class 6.1 Toxic substances. Label 6.1 IATA Class 6.1 Toxic substances. Label 6.1 Packing group DOT, IMDG, IATA Ш

Environmental hazards: Environmentally hazardous substance, solid; Marine Pollutant Marine pollutant (IMDG): Yes (P) Symbol (fish and tree) Special precautions for user Warning: Toxic substances EMS Number: F-A.S-A 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": UN2871, Antimony powder, 6.1, III

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture 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) 7440-36-0 Antimony 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 themarket and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. **REACH - Pre-registered substances** Substance is listed. Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

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.