

SAFETY DATA SHEET

Date Printed: 05/11/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Zinc Carbonate Sputtering Target

Product Code: ZN-CB-04-ST

CAS Number: 3486-35-9

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
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Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

- Inhalation: Zinc carbonate can irritate the respiratory tract, the effect being that of a mild alkali. - Some soreness and coughing are symptoms.
 - Ingestion: Not considered a significantly toxic substance, but contact with gastric juice can produce zinc chloride. Pain and strictures or cramps may occur in this case, and medical attention should be obtained.
 - Skin Contact: Mild irritant and astringent, can cause pain and redness on long contact.
 - Eye Contact: Mild, alkaline irritant, may cause some mechanical injury.
 - Chronic Exposure: No information found.
- Aggravation of Pre-existing Conditions: No information found.
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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component: Zinc carbonate
CAS-No: 3486-35-9
Weight %: 90 - 100

SECTION 4. FIRST AID MEASURES

- Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
 - Ingestion: Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.
 - Skin Contact: Wash exposed area with soap and water. Get medical advice if irritation develops.
 - Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Call a physician if irritation persists.
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SECTION 5. FIREFIGHTING MEASURES

- Fire: Not considered to be a fire hazard. Sealed containers may burst under fire conditions due to release of carbon dioxide.
 - Explosion: Not considered to be an explosion hazard.
 - Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.
 - Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.
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SECTION 6. ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.

SECTION 7. HANDLING AND STORAGE

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Airborne Exposure Limits: Zinc oxide:-OSHA Permissible Exposure Limit (PEL): fume: 5 mg/m³ (TWA) respirable fraction: 5 mg/m³ (TWA)total dusts: 15 mg/m³ (TWA)-ACGIH Threshold Limit Value (TLV):2 mg/m³ (TWA), 10 mg/m³ (STEL), Respirable fraction
- Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.
- Personal Respirators (NIOSH Approved): If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest.. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or

P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

- Skin Protection: Wear protective gloves and clean body-covering clothing.
 - Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.
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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White powder.

Odor: Odorless.

Solubility: Insoluble in water.

Density: 4.4

pH: No information found.

% Volatiles by volume @ 21C (70F): 0

Boiling Point: N/A

Melting Point: Decomposes to zinc oxide

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): No information found.

Evaporation Rate (BuAc=1): No information found.

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Fumes of zinc oxide can form at high temperatures.

Hazardous Polymerization: Will not occur.

Incompatibilities: May react explosively with chlorinated rubber or magnesium at elevated temperatures.

Conditions to Avoid: Incompatibles.

SECTION 11. TOXICOLOGICAL INFORMATION

Component Information

Toxicologically Synergistic Products: No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation: No data available

Sensitization: No data available

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

Mutagenic Effects: No data available

Reproductive Effects: No data available.

Developmental Effects: No data available.

Teratogenicity: No data available.

STOT - single exposure: None known

STOT - repeated exposure: None known

Aspiration hazard: No data available

Symptoms / effects, both acute and delayed: No data available

Endocrine Disruptor Information: No data available

Other Adverse Effects: The toxicological properties have not been fully investigated.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains.

Persistence and Degradability: No data available

Bioaccumulation/ Accumulation: No data available.

Mobility: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14. TRANSPORT INFORMATION

UN-Number

DOT, ADN, IMDG, IATA

N/A

UN proper shipping name

DOT, ADN, IMDG, IATA

N/A

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class

N/A

Packing group

DOT, IMDG, IATA

N/A

Environmental hazards:

N/A

Special precautions for user

N/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

SECTION 15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA 12(b)

N/A

SARA 313

N/A

SARA 311/312 Hazardous Categorization

Acute Health Hazard: No

Chronic Health Hazard: No

Fire Hazard: No

Sudden Release of Pressure Hazard: No

Reactive Hazard: No

Clean Air Act: N/A

OSHA

Occupational Safety and Health Administration

N/A

CERCLA: N/A

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant: N

DOT Severe Marine Pollutant: N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade: No data available

Canada:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

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.