

# SAFETY DATA SHEET

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#### **SECTION 1. IDENTIFICATION**

Product Name: Beryllium Hydroxide

**Product Number:** All applicable American Elements product codes, e.g. BE-OH-02-P , BE-OH-03-P , BE-OH-04-P , BE-OH-05-P

CAS #: 13327-32-7

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) GHS06 Skull and crossbones Acute Tox. 3 H301 Toxic if swallowed. Acute Tox. 2 H330 Fatal if inhaled. GHS08 Health hazard Carc. 1B H350 May cause cancer. STOT RE 1 H372 Causes damage to the lung and the blood through prolonged or repeated exposure. Route of exposure: Inhalative. GHS07 Skin Irrit. 2 H315 Causes skin irritation. Eve Irrit. 2 H319 Causes serious eye irritation. Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation. Hazards not otherwise classified No data available **GHS** label elements GHS label elements, including precautionary statements



GHS06 GHS08 Signal word: Danger Hazard statements H301 Toxic if swallowed. H330 Fatal if inhaled. H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H350 May cause cancer. H335 May cause respiratory irritation. H372 Causes damage to the lung and the blood through prolonged or repeated exposure. Route of exposure: Inhalative. Precautionary statements P260 Do not breathe dust/fume/gas/mist/vapors/spray. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/... P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P320 Specific treatment is urgent (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 D2A - Very toxic material causing other toxic effects Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) Health (acute effects) = 3Flammability = 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: 13327-32-7 Beryllium Hydroxide

# **SECTION 4. FIRST AID MEASURES**

Description of first aid measures General information Immediately remove any clothing soiled by the product. Remove breathing apparatus only after contaminated clothing has been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration. 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: Do not induce vomiting; immediately call for medical help. 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 No data available

# **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media Suitable extinguishing agents

Product is not flammable. Use fire-fighting measures that suit the surrounding fire.

Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

Toxic 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 Environmental precautions: Do not allow material to be released to the environment without official permits. Methods and materials 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.

### SECTION 7. HANDLING AND STORAGE

#### Handling

Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Open and handle container with care. Information about protection against explosions and fires: The product is not flammable 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: No data available Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well-sealed containers. Specific end use(s) No data available

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

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. Store protective clothing separately. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Breathing equipment: Use self-contained respiratory protective device in emergency situations. 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 Body protection: Protective work clothing.

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

Information on basic physical and chemical properties Appearance: Form: Powder Color: White Odor: Odorless Odor threshold: No data available. pH: N/A Melting point/Melting range: No data available. Boiling point/Boiling range: No data available. Sublimation temperature / start: No data available Flammability (solid, gas): No data available. 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: N/A Density at 20 °C (68 °F): No data available. Relative density: No data available. Vapor density: N/A Evaporation rate: N/A Solubility in Water (H<sub>2</sub>O): No data available. 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 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 No dangerous reactions known Conditions to avoid No data available Incompatible materials: No data available Hazardous decomposition products: Toxic metal oxide fume

#### SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity: Fatal 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: No data

Skin irritation or corrosion: Causes skin irritation.

Eye irritation or corrosion: Causes serious eye irritation.

Sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: No effects known.

Carcinogenicity: May cause cancer.

IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity.

ACGIH A1: Confirmed human carcinogen: Agent is carcinogenic to humans based on epidemiologic studies of, or convincing clinical evidence in, exposed humans.

EPA-B1: Probable human carcinogen, limited evidence of carcinogenicity from epidemiologic studies. NTP-K: Known to be carcinogenic: sufficient evidence from human studies.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this substance.

Reproductive toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.

Specific target organ system toxicity - repeated exposure:

Causes damage to the lung and the blood through prolonged or repeated exposure. Route of exposure: Inhalative.

Specific target organ system toxicity - single exposure:

May cause respiratory irritation.

Aspiration hazard: No effects known.

Subacute to chronic toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.

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 UN1566 UN proper shipping name DOT Beryllium compounds, n.o.s. (Beryllium oxide) IMDG, IATA BERYLLIUM COMPOUND, N.O.S. (Beryllium oxide) Transport hazard class(es) DOT Class 6.1 Toxic substances. Label 6.1 Class 6.1 (T5) Toxic substances Label 6.1 IMDG, IATA Class 6.1 Toxic substances. Label 6.1 Packing group DOT, IMDG, IATA Ш Environmental hazards: N/A 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": UN1566, Beryllium compounds, n.o.s. (Beryllium oxide), 6.1, 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 GHS06 GHS08 Signal word: Danger Hazard statements H301 Toxic if swallowed. H330 Fatal if inhaled. H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H350 May cause cancer. H335 May cause respiratory irritation. H372 Causes damage to the lung and the blood through prolonged or repeated exposure. Route of exposure: Inhalative. Precautionary statements P260 Do not breathe dust/fume/gas/mist/vapors/spray. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/... P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P320 Specific treatment is urgent (see on this label). P405 Store locked up. 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 Non-Domestic Substances List (NDSL). SARA Section 313 (specific toxic chemical listings) 1304-56-9 Beryllium oxide California Proposition 65 Prop 65 - Chemicals known to cause cancer 1304-56-9 Beryllium oxide 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. This product is subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and 40CFR372. 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.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

#### **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.