

Bismuth Aluminate Hydrate Pricing >			
Linear Formula	Bi₂(Al₂O₄)₃ • xH₂O		
Pubchem CID	22836481		
MDL Number	MFCD00672141		
EC No.	235-552-3		
IUPAC Name	dibismuth oxido(oxo)alumane hydrate		
Beilstein/Reaxys No.	N/A		
SMILES	O.[O-][AI]=O.[O-][AI]=O.[O-][AI]=O.[O-][AI]=O.[O-][AI]=O.[O-][AI]=O.[O-][AI]=O.[Bi+3].[Bi+3]		
Inchl Identifier	InChI=1S/6AI.2Bi.H2O.12O/h;;;;;;1H2;;;;;;q;;;;2*+3;;;;;;6*-1		
Inchl Key	DTLFPUBWACUQEV-UHFFFAOYSA-N		
Signal Word		N/A	
Hazard Statements		N/A	
Hazard Codes		N/A	
Risk Codes		N/A	
Safety Statements		N/A	

Safety StatementsN/ATransport InformationNONH for all modes of<br/>transportWGK Germany3

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### SAFETY DATA SHEET

Date Accessed: 05/01/2024 Date Revised: 01/15/2022

### **SECTION 1. IDENTIFICATION**

**Product Identifiers:** All applicable American Elements product codes for CAS #308796-32-9

**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 Fax: +1 310-208-0351

Emergency telephone number: Domestic, North America +1 800-424-9300 International +1 703-527-3887

### **SECTION 2. HAZARDS IDENTIFICATION**

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 The substance is not classified as hazardous to health or the environment according to the CLP regulation. Classification according to Directive 67/548/EEC or Directive 1999/45/EC N/A Information concerning particular hazards for human and environment: No data available Hazards not otherwise classified No data available Label elements Labelling according to Regulation (EC) No 1272/2008 N/A Hazard pictograms N/A Signal word N/A Hazard statements N/A WHMIS classification Not controlled Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) HEALTH FIRE REACTIVITY 1 0 0 Health (acute effects) = 1Flammability = 0Physical Hazard = 0 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: 308796-32-9 Bismuth aluminum oxide Identification number(s): EC number: 235-552-3

### **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 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: 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. Do not allow product to enter drains, sewage systems, or other water courses. Do not allow material to penetrate the ground or soil. Methods and materials for containment and cleanup: Pick up mechanically. 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. 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: Not required. 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

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: Not required. 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 immediatelv. 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. 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. 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: Yellowish 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 Flash point: N/A Flammability (solid, gas): Product is not flammable. Ignition temperature: No data available Decomposition temperature: No data available Autoignition: No data available. Danger of explosion: Product does not present an explosion hazard. Explosion limits: Lower: No data available Upper: No data available Vapor pressure: N/A Density: No data available Relative density: No data available. Vapor density: N/A Evaporation rate: N/A Solubility in Water (H<sub>2</sub>O): Insoluble 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: No decomposition products known.

# SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity: No effects known. 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: Bismuth and bismuth compounds are often poorly absorbed. Should absorption occur, however, exposure may cause loss of appetite, headache, skin rash, exodermatitis, kidney injury and jaundice. Repeated or prolonged exposure may cause a bismuth line or black spots on the gums, foul breath and salivation.

Subacute to chronic toxicity: No effects known. Subacute to chronic toxicity: Aluminum may be implicated in Alzheimers disease. Inhalation of aluminum containing dusts may cause pulmonary disease. 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. 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**

Not a hazardous material for transportation. UN-Number DOT, IMDG, IATA None UN proper shipping name DOT, IMDG, IATA None

Transport hazard class(es) DOT, ADR, IMDG, IATA Class None Packing group DOT, IMDG, IATA None 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: Not dangerous according to the above specifications. DOT Marine Pollutant (DOT): No

## SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture National regulations This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically gualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes. 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. REACH - Pre-registered substances Substance is not 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.