

SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Bismuth Acetate

Product Code: BI-AC-04

CAS Number: 22306-37-2

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) The substance is not classified according to the Globally Harmonized System (GHS). Hazards not otherwise classified No data available **GHS** label elements 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 (acute effects) = 1Flammability = 1Physical 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: 22306-37-2 Bismuth(III) acetate Identification number(s): EC number: 244-904-5

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 Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. 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 product to enter drains, sewage systems, or other water courses. 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 Handle under dry protective gas. Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Information about protection against explosions and fires: No data available 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 water/moisture. Store away from oxidizing agents. Further information about storage conditions: Store under dry inert gas. This product is hygroscopic. 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. 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: No data available 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: No data available 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 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 Reacts with strong oxidizing agents

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: 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: 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:

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

Safety, health and environmental regulations/legi slation specific for the substance or mixture **GHS** label elements N/A Hazard pictograms N/A Signal word N/A Hazard statements N/A National regulations This product is not listed in the U.S. Envi ronmental Protection Agency Toxic Substances **Control Act Chemical Substance Inventor** v. Use of this product is restricted to research and development only. This produc t must be used by or directly under the supervision of a technically qualified ind ividual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes. This product is not listed on the Canadian Dome stic Substances List (DSL) or the Canadi an Non-Domestic Substances List (NDSL). 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 technica lly qualified individuals. Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) accord ing to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and A nnex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manuf acturing, 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.

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.