

SAFETY DATA SHEET

Date Printed: 06/02/2024 Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Aluminum Hydroxide Oxide Nanopowder

Product Code: AL-OOH-05-NP

CAS Number: 24623-77-6

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

Chemical name: Boehmite, [ALOOH] CAS-No: 24623-77-6 / 1318-23-6 EINECS-No: 246-368-8 / 215-284-3 Weight: >99 % R/S-sentences: None

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Danger indication: None Special comments on danger forpeople and environment: None For additional information on toxicity, please refer to Section 11.

SECTION 4. FIRST AID MEASURES

Inhalation: Move to fresh air. Consult a physician if necessary. Skin contact : Mechanical (dry) removal. Subsequent rinsing with water. Eye contact: Intensive rinsing with water. Consult a physician if necessary. Ingestion: Rinse out mouth and give plenty of waterto drink. Seek medical advice.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Product itself is non-combustible. Fire extinguishing method of surrounding areas must be considered.

Unsafe extinguishing media: None.

Special exposure hazards : None.

Special protective equipment: None.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid dust formation. In case of exposure to high levels of airborne dust, wear a personal respirator in compliance with national legislation. Environmental precautions : No special environmental precautions required. Methods for clean-up: Take up mechanically. Dispose of absorbed material in accordance within the regulations.

SECTION 7. HANDLING AND STORAGE

Handling: Avoid dust formation. No special handling advice required. Storage: Dry storage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: OSHA-PEL:15 mg/m3 (total dust), 5 mg/m3 (respirable dust) ACGIH-TWA: 10 mg/m3 (Value is for particulate matter containing no asbestos and <1% crystalline silica) Personal protection: Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. When dust concentration is above the exposure limits, workers have to use appropriate certified respirators. Hand protection: Wear suitable gloves. Eye protection: Wear safety glasses/goggles to avoid eye contact. Skin protection: No special protective equipment required. Hygiene measures: Do not eat, drink or smoke when handling. Wash hands after handling and before eating. Other/general protection: None. Environmental exposure controls: No data available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Powder Color: White

Odor: Odorless pH: 9 -10 Solubility in water: Insoluble

Density: 3,0 g/cm³ (20 ° C) Vapor pressure: N/A Boiling point: N/A Melting point: Decomposes before melting Flash point : N/A Flammability: N/A Auto ignition: N/A Octanol-Water coefficient: N/A

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions. Loss of water and decomposition starts at 340 °C. Conditions to avoid: None Hazardous reactions: No hazardous reactions known. Hazardous polymerisation : Will not occur. Hazardous decomposition: None Additional information: Soluble in strong acids and caustic solutions.

SECTION 11. TOXICOLOGICAL INFORMATION

The product is non-toxic. Acute oral toxicity: Rat, DL50 : >5000 mg/kg Skin irritation: No effect. Eye irritation: No effect. Inhalation: May cause irritation of respiratory tract. Ingestion: No data available. Sensitization: No effect. Carcinogenity: No known carcinogenic hazardous effects. There is no evidence of any mutageneous or toxic effect on reproduction.

SECTION 12. ECOLOGICAL INFORMATION

Boehmite generates no risk for the environment. There is no ecotoxic classification for boehmite. Algae toxicity: Algae, ErC50 > 100 mg/l Daphnia toxicity: Daphnia, EC50 > 100 mg/l.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal : Reuse or recycle when possible.

Dispose of in accordance with local regulations.

Spoiled packages: Empty containers should be taken for local recycling, recovery or waste disposal.

Further information: Can be landfilled, when in compliance with local regulations.

SECTION 14. TRANSPORT INFORMATION

Land transport ADR, RID, GGVS, GGVE Not classified as hazardous goods. River transport ADN, ADR Not classified as hazardous goods. Sea transport IMDG, GGVSee Not classified as hazardous goods. Air transport ICAO-TI, IATA-DGR Not classified as hazardous goods. DOT Not regulated

SECTION 15. REGULATORY INFORMATION

Labelling according to EC Directives: Not defined, product is not hazardous. Water hazard class: Not hazardous to water. R-phrases: N/A S-phrases: N/A Symbols: None

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.