

SAFETY DATA SHEET

Date Printed: 04/19/2024 Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Bentonite Nanoclay

Product Code: AL-SIAT-05-NCLAY

CAS Number: 1302-78-9

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: +1 800-424-9300

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SECTION 2. HAZARDS IDENTIFICATION

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Potential Chronic Health Effects: CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition: Name: Magnesium aluminum silicate CAS #: 1302-78-9 % by Weight: 100 Toxicological Data on Ingredients: Not applicable.

SECTION 4. FIRST AID MEASURES

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact:

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

SECTION 5. FIREFIGHTING MEASURES

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

SECTION 7. HANDLING AND STORAGE

Precautions:

Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the

container or the label. Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 24°C (75.2°F).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Personal Protection:

Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance: Solid. Odor: Not available. Taste: Not available. Molecular Weight: Not available. Color: Not available. pH (1% soln/water): Not applicable. Boiling Point: Not available. Melting Point: Not available. Critical Temperature: Not available. Specific Gravity: Not available. Vapor Pressure: Not applicable. Vapor Density: Not available. Volatility: Not available. Odor Threshold: Not available. Water/Oil Dist. Coeff.: Not available. Ionicity (in Water): Not available. Dispersion Properties: Not available. Solubility: Insoluble in cold water.

SECTION 10. STABILITY AND REACTIVITY

Stability: The product is stable. Instability Temperature: Not available. Conditions of Instability: Incompatible materials Incompatibility with various substances: Not available. Corrosivity: Non-corrosive in presence of glass. Special Remarks on Reactivity: Not available. Special Remarks on Corrosivity: Not available. Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation. Ingestion. Toxicity to Animals: Acute oral toxicity (LD50): 16000 mg/kg [Rat]. Chronic Effects on Humans: Not available. Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation. Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: Not available. BOD5 and COD: Not available. Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: Not available. Special Remarks on the Products of Biodegradation: Not available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Classification: Not a DOT controlled material (United States). Identification: Not applicable. Special Provisions for Transport: Not applicable.

SECTION 15. REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: Magnesium aluminum silicate Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances. Other Classifications: WHMIS (Canada): Not controlled under WHMIS (Canada). DSCL (EEC): This product is not classified according to the EU regulations. Not applicable. HMIS (U.S.A.): Health Hazard: 1 Fire Hazard: 0 Reactivity: 0 Personal Protection: E National Fire Protection Association (U.S.A.): Health: 1 Flammability: 0 Reactivity: 0 Specific hazard: Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses."

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.