

SAFETY DATA SHEET

Date Printed: 05/17/2024 Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Barium Metaphosphate

Product Code: BA-MPAT-04

CAS Number: 13762-83-9

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

SECTION 2. HAZARDS IDENTIFICATION

Classification This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) Acute oral toxicity Category 4 Acute Inhalation Toxicity - Dusts and Mists Category 4 Label Elements Signal Word Warning Hazard Statements Harmful if swallowed or if inhaled **Precautionary Statements** Prevention Avoid breathing dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Ingestion IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth Disposal Dispose of contents/container to an approved waste disposal plant Hazards not otherwise classified (HNOC) None identified



Component Barium dimetaphosphate CAS-No 13762-83-9 Weight % <=100

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Getmedical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritationpersists, call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attentionif symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attentionif symptoms occur. Most important symptoms and effects

None reasonably foreseeable.

Notes to Physician Treat symptomatically

SECTION 4. FIRST AID MEASURES

Unsuitable Extinguishing Media No information available Flash Point No information available Method - No information available Autoignition Temperature No information available **Explosion Limits** Upper No data available Lower No data available Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available Specific Hazards Arising from the Chemical Keep product and empty container away from heat and sources of ignition. Hazardous Combustion Products None known. Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. NFPA Health - 2

SECTION 5. FIREFIGHTING MEASURES

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoiddust

formation.

Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological

Information.

Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closedcontainers for disposal.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Donot get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation. Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 7. HANDLING AND STORAGE

Exposure Guidelines This product does not contain any hazardous materials with occupational exposurelimitsestablished by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as describedbyOSHA's eye and face protection regulations in 29 CFR 1910.133 or EuropeanStandardEN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or EuropeanStandardEN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Physical State Solid Appearance White Odor Odorless Odor Threshold No information available pH No information available Melting Point/Range 1560 °C / 2840 °F Boiling Point/Range No information available Flash Point No information available Evaporation Rate Not applicable Flammability (solid,gas) No information available Flammability or explosive limits Upper No data available Lower No data available Vapor Pressure No information available Vapor Density Not applicable Specific Gravity No information available Solubility No information available Partition coefficient; n-octanol/water No data available Autoignition Temperature No information available Decomposition Temperature No information available Viscosity Not applicable Molecular Formula Ba(PO3)2 Molecular Weight 295.25

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Reactive Hazard None known, based on information available Stability Stable under normal conditions. Conditions to Avoid Incompatible products. Incompatible Materials Strong oxidizing agents Hazardous Decomposition Products None under normal use conditions Hazardous Polymerization Hazardous polymerization does not occur. Hazardous Reactions None under normal processing.

SECTION 10. STABILITY AND REACTIVITY

Acute Toxicity **Product Information Component Information Toxicologically Synergistic** Products - No information available Delayed and immediate effects as well as chronic effects from short and long-term exposure Irritation No information available Sensitization No information available Carcinogenicity The table below indicates whether each agency has listed any ingredient as acarcinogen Mutagenic Effects No information available Reproductive Effects No information available. Developmental Effects No information available. Teratogenicity No information available. STOT - single exposure None known STOT - repeated exposure None known Aspiration hazard No information available Symptoms / effects, both acute and delayed No information available Endocrine Disruptor Information No information available Other Adverse Effects The toxicological properties have not been fully investigated.

SECTION 11. TOXICOLOGICAL INFORMATION

Ecotoxicity Do not empty into drains. Persistence and Degradability No information available Bioaccumulation/ Accumulation No information available. Mobility No information available.

SECTION 12. ECOLOGICAL INFORMATION

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification

SECTION 13. DISPOSAL CONSIDERATIONS

DOT **UN-No UN1564** Proper Shipping Name Barium compound, n.o.s. Technical Name (Barium metaphosphate) Hazard Class 6.1 Packing Group III TDG UN-No UN1564 Proper Shipping Name Barium compound, n.o.s. Hazard Class 6.1 Packing Group III ΙΑΤΑ **UN-No UN1564** Proper Shipping Name Barium compound, n.o.s. Hazard Class 6.1 Packing Group III IMDG/IMO **UN-No UN1564** Proper Shipping Name Barium compound, n.o.s. Hazard Class 6.1 Packing Group III

SECTION 14. TRANSPORT INFORMATION

TSCA 12(b) - Notices of Export Not applicable SARA 311/312 Hazard Categories See section 2 for more information CWA (Clean Water Act) Not applicable Clean Air Act Not applicable OSHA - Occupational Safety and Health Administration Not applicable CERCLA Not applicable California Proposition 65 This product does not contain any Proposition 65 chemicals. U.S. Department of Transportation Reportable Quantity (RQ): N DOT Marine Pollutant N DOT Severe Marine Pollutant N U.S. Department of Homeland

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.