

SAFETY DATA SHEET

Date Printed: 05/18/2024 Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Magnesium Chloride Monohydrate

Product Code: MG-CL-04-C.1HYD

CAS Number: 22756-14-5

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 Label elements **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 = 0Physical Hazard = 1

Other hazards Results of PBT and vPvB assessment PBT: N/A vPvB: N/A

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MAGNESIUM CHLORIDE, MONOHYDRATE Cas Number: 22756-14-5

SECTION 4. FIRST AID MEASURES

First aid procedures Eye contact Rinse with water. Get medical attention if irritation develops and persists. Skin contact Rinse skin with water/shower. Get medical attention if irritation develops and persists. Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist. Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately. General advice If you feel unwell, seek medical advice (show the label where possible).

SECTION 5. FIREFIGHTING MEASURES

Fire Fighting Measures Flammable properties The product is not flammable. No unusual fire or explosion hazards noted. Extinguishing media Suitable extinguishing media Water. Use extinguishing agent suitable for type of surrounding fire. Fire fighting equipment/instructions In the event of fire, cool tanks with water spray. Specific methods Cool containers exposed to flames with water until well after the fire is out.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Environmental precautions Prevent further leakage or spillage if safe to do so. Do not contaminate water. Methods for cleaning up Should not be released into the environment. This product is miscible in water. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

SECTION 7. HANDLING AND STORAGE

Handling Avoid release to the environment. Handle and open container with care. Storage Use care in handling/storage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment Eye / face protection Not normally needed. Skin protection Normal work clothing (long sleeved shirts and long pants) is recommended. Respiratory protection No personal respiratory protective equipment normally required. General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Crystalline Form Solid. Color White. Odor Odorless. Odor threshold Not available. pН Not available. Vapor density Not available. **Boiling point** 2573.6 °F (1412 °C) anhydrous Melting point/Freezing point 1313.6 °F (712 °C) anhydrous Solubility (water) Very soluble. Specific gravity Not available. Relative density Not available. Flash point Not available.

Flammability limits in air, upper, % by volume Not available. Flammability limits in air, lower, % by volume Not available. Auto-ignition temperature Not available. Molecular weight 113.23 Molecular formula MgCl2.H2O Other data Decomposition temperature When heated to decomp emits toxic fumes of hydrogen chloride.

SECTION 10. STABILITY AND REACTIVITY

Chemical stability Material is stable under normal conditions. Conditions to avoid None under normal conditions. Incompatible materials Not available. Hazardous decomposition products Hydrogen chloride.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicological data Product MAGNESIUM CHLORIDE, MONOHYDRATE (22756-14-5) LD50 Rat Oral 2800 mg/kg LD50 Mouse Other 14 mg/kg * Estimates for product may be based on additional component data not shown. Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Due to lack of data the classification is not possible. Skin corrosion/irritation Due to lack of data the classification is not possible. Mutagenicity Due to lack of data the classification is not possible. Reproductive effects Due to lack of data the classification is not possible. Further information This product has no known adverse effect on human health.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains a substance which causes risk of hazardous effects to the environment. Environmental effects An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Persistence and degradability Not available. Mobility in environmental media This product is miscible in water.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Wash to drains with lots of water. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations. Waste from residues /unused products

N/A

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

DOT Not regulated as dangerous goods. IATA Not regulated as dangerous goods. IMDG Not regulated as dangerous goods.

SECTION 15. REGULATORY INFORMATION

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. CERCLA/SARA Hazardous Substances - N/A Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2)Not regulated. DEA Essential Chemical Code Number Not regulated. Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Not regulated. **DEA Exempt Chemical Mixtures Code Number** Not regulated. CERCLA (Superfund) reportable quantity None Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories

Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Section 302 extremely hazardous substance No Section 311 hazardous chemical No

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.