

SAFETY DATA SHEET

Date Printed: 05/30/2024 Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Ferric Sulfate

Product Code: FE3-SAT-04

CAS Number: 10028-22-5

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 This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) Acute oral toxicity Category 4 Skin Corrosion/Irritation Category 2 Serious Eye Damage/Eye Irritation Category 1



Signal Word Danger Hazard Statements Harmful if swallowed Causes skin irritation Causes serious eye damage Precautionary Statements Prevention Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Wear protective gloves/protective clothing/eye protection/face protection Skin IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse Eyes IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician 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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Ferric sulfate CAS-No 10028-22-5

SECTION 4. FIRST AID MEASURES

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. Get medical attention.

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

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

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

Most important symptoms and effects

Causes eye burns. Causes severe eye damage.

Notes to Physician Treat symptomatically

SECTION 5. FIREFIGHTING MEASURES

Suitable Extinguishing Media Not combustible. 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 Sulfur oxides. Iron oxides. 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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

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

Information. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

Methods for Containment and Clean Up

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

SECTION 7. HANDLING AND STORAGE

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation. Storage Store under an inert atmosphere. Keep container tightly closed in a dry and well-ventilated place. Protect from moisture.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. 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 European Standard EN 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 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid Appearance No information available Odor Odorless Odor Threshold No information available pH No information available Melting Point/Range 480 °C / 896 °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 3.097 g/cm3 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 Fe2 (SO4)3 Molecular Weight 399.87

SECTION 10. STABILITY AND REACTIVITY

Reactive Hazard None known, based on information available Stability Hygroscopic. Conditions to Avoid Exposure to moist air or water. Incompatible Materials Oxidizing agent Hazardous Decomposition Products Sulfur oxides, Iron oxides Hazardous Polymerization Hazardous polymerization does not occur. Hazardous Reactions None under normal processing.

SECTION 11. TOXICOLOGICAL 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 a carcinogen. 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 12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains a substance which is:. Harmful to aquatic organisms. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system. Persistence and Degradability May persist

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

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 14. TRANSPORT INFORMATION

DOT Not regulated TDG Not regulated IATA Not regulated

SECTION 15. REGULATORY INFORMATION

U.S. Federal Regulations SARA 313 Not applicable SARA 311/312 Hazard Categories See section 2 for more information 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 Security This product does not contain any DHS chemicals.

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

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