

SAFETY DATA SHEET

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

SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Zinc Acetylacetonate

Product Code: ZN-ACAC-05-C.AHYD

CAS Number: 14024-63-6

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

Classification This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) Label Elements Signal Word Warning Hazard Statements Harmful if swallowed Causes skin irritation Causes serious eye irritation May cause respiratory irritation



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 Avoid breathing dust/fume/gas/mist/vapors/spray

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 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 **Eves** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention Indestion IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth Storage Store in a well-ventilated place. Keep container tightly closed Store locked up Disposal Dispose of contents/container to an approved waste disposal plant Hazards not otherwise classified (HNOC) May form combustible dust concentrations in air

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component CAS-No Weight % Zinc, bis(2,4-pentanedionato-O,O')-, (T-4)- 14024-63-6 >95

SECTION 4. FIRST AID MEASURES

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

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Obtain medical attention.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately. Most important symptoms/effects No data available.

Notes to Physician Treat symptomatically

SECTION 5. FIREFIGHTING MEASURES

Suitable Extinguishing Media Water spray. Carbon dioxide (CO 2). Dry chemical. chemical foam. Unsuitable Extinguishing Media No data available Flash Point No data available Method - No data available Autoignition Temperature 580 °C / 1076 °F

Explosion Limits Upper No data available Lower No data available Sensitivity to Mechanical Impact No data available Sensitivity to Static Discharge No data available Specific Hazards Arising from the Chemical Fine dust dispersed in air may ignite. Hazardous Combustion Products Carbon monoxide (CO) Carbon dioxide (CO2) 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 Flammability 1 Instability 0 Physical hazards N/A

SECTION 6. ACCIDENTAL RELEASE MEASURES

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

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean

Up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment. Avoid dust formation.

SECTION 7. HANDLING AND STORAGE

Handling Ensure adequate ventilation. Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. Minimize dust generation and accumulation. Wash hands before breaks and immediately after handling the product.

Storage Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits

established by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

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

No protective equipment is needed under normal use conditions.

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Powder Solid Appearance Off-white Odor No data available Odor Threshold No data available pH 10 4 g/L ag.sol Melting Point/Range 124 - 126 °C / 255.2 - 258.8 °F Boiling Point/Range 129 - 131 °C / 264.2 - 267.8 °F @ 10 mmHg Flash Point No data available Evaporation Rate N/A Flammability (solid,gas) No data available Flammability or explosive limits Upper No data available Lower No data available Vapor Pressure No data available Vapor Density N/A Relative Density No data available Solubility No data available Partition coefficient; n-octanol/water No data available Autoignition Temperature 580 °C / 1076 °F Decomposition Temperature > 170°C Viscosity N/A Molecular Formula C10 H14 O4 Zn Molecular Weight 263.59

SECTION 10. STABILITY AND REACTIVITY

Reactive Hazard None known, based on information available Stability Stable under normal conditions. Conditions to Avoid Avoid dust formation. Incompatible products. Exposure to moist air or water. Incompatible Materials Acids, Strong oxidizing agents, Strong bases Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2) Hazardous Polymerization No data available. Hazardous Reactions None under normal processing.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity Product Information Component Information Toxicologically Synergistic

Products No data available Delayed and immediate effects as well as chronic effects from short and long-term exposure Irritation Irritating to eyes, respiratory system and skin Sensitization No data available Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. Component CAS-No IARC NTP ACGIH OSHA Mexico Zinc. bis(2,4-pentanedionato -O,O')-, (T-4)-14024-63-6 Not listed Not listed Not listed Not listed Not listed Mutagenic Effects No data available **Reproductive Effects** No data available. Developmental Effects No data available. Teratogenicity No data available. STOT - single exposure Respiratory system STOT - repeated exposure None known Aspiration hazard No data available Symptoms / effects, both acute and delaved No data available Endocrine Disruptor Information No data available Other Adverse Effects The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains.

Persistence and Degradability Soluble in water Persistence is unlikely based on information available. Bioaccumulation/ Accumulation No data available.

Mobility Will likely be mobile in the environment due to its water solubility.

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 IMDG/IMO Not regulated

SECTION 15. REGULATORY INFORMATION

International Inventories Component TSCA DSL NDSL EINECS ELINCS NLP PICCS ENCS AICS IECSC KECL Zinc. bis(2,4-pentanedionato-O,O') -, (T-4)-X X - 237-860-3 - X X X X X Leaend: X - Listed E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA. F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA. N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used. P - Indicates a commenced PMN substance R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA. S - Indicates a substance that is identified in a proposed or final Significant New Use Rule T - Indicates a substance that is the subject of a Section 4 test rule under TSCA. XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B). Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater. Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule. **U.S. Federal Regulations** TSCA 12(b) N/A **SARA 313 N/A** Component CAS-No Weight % SARA 313 - Threshold Values % Zinc, bis(2,4-pentanedionato-O,O')-, (T-4)- 14024-63-6 >95 1.0 SARA 311/312 Hazardous Categorization Acute Health Hazard Yes Chronic Health Hazard No Fire Hazard Yes Sudden Release of Pressure Hazard No Reactive Hazard No Clean Water Act N/A **Component CWA - Hazardous Substances CWA** - Reportable Quantities CWA - Toxic Pollutants CWA - Priority Pollutants Zinc. bis(2,4-pentanedionato-O,O')-, (T-4)-- - X -Clean Air Act N/A OSHA Occupational Safety and Health Administration N/A CERCLA N/A

California Proposition 65 This product does not contain any Proposition 65 chemicals State Right-to-Know N/A Component Massachusetts New Jersey Pennsylvania Illinois Rhode Island Zinc. bis(2.4-pentanedionato-O ,O')-, (T-4)-- X X - -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. Other International Regulations Mexico - Grade No data available Canada This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR WHMIS Hazard Class D1B Toxic materials **D2B** Toxic materials

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.