SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Zinc Acetylacetonate

Product Code: ZN-ACAC-04-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

Eyes
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

Ingestion
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
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 aq.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
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.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc, bis(2,4-pentanedionato -O,O')-, (T-4)-</td>
<td>14024-63-6</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

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 delayed 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 - 237-860-3 - X X X X X
Legend:
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 1997-2019 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.