



SAFETY DATA SHEET (SDS)

**ZINC ALLOY INGOT**

SDS

DATE ISSUED

**09/2023**

Meets the Requirements of OSHA Standard 29 CFR 1910.1200 Hazard Communication and EPA Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act.

**SECTION 1—PRODUCT IDENTIFICATION & COMPANY INFORMATION****PRODUCT NAME****ZINC ALLOY INGOT**

**OTHER DESIGNATIONS:** ASTM (American Society for Testing & Materials) Specification No's., (ACI (Alloy Casting Institute) Alloy Designations—Grades)

Includes all zinc alloys.

**PRODUCT IDENTIFICATION (Label Identifier)**

Zinc Alloy Ingot

**MANUFACTURER'S NAME**  
Custom Alloy Sales, Inc.

**STREET ADDRESS**  
13329 Ector St.,

**EMERGENCY TELEPHONE NO.**  
(626) 369-3641

**MAILING ADDRESS**  
13181 Crossroads Pkwy N. # 400

**TELEPHONE NO.**  
(800) 633-8253

**CITY, STATE, ZIP CODE, COUNTRY**  
City of Industry, CA 91746

**FAX NO.**  
(626) 369-2471

**E-MAIL ADDRESS/WEBSITE**  
CustomAlloySales.com

**RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE**

Solid casting; no restrictions

**SECTION 2—HAZARD IDENTIFICATION****CLASSIFICATION**

This preparation is not classified as a Hazardous Product.

**SECTION 3—COMPOSITION/INFORMATION ON INGREDIENTS**

CHEMICAL NAME/Common Name/Synonym	Wt %	CAS NUMBER
Zinc (Zn)	Balance	7440-66-6
Aluminum (Al)	4.0-27.0	7429-90-5
Copper (Cu)	0.0-3.0	7440-50-8
Others (Trace Amounts)		
Magnesium, Iron, Lead, Tin, Cadmium		

## SECTION 4—FIRST AID MEASURES

<b>EYE CONTACT:</b>	Particle/Dust: Cautiously rinse eye with lukewarm water or a first aid liquid eye wash. If eye irritation persists, see medical attention. Burns: Immediately seek medical attention.
<b>SKIN CONTACT:</b>	Particle/Dust: No special requirements
<b>INGESTION:</b>	Particle/Dust: If swallowed no specific intervention is needed as this material is not hazardous. However, if you feel unwell seek medical attention.
<b>INHALATION:</b>	Particle/Dust: If coughing and irritation occur seek fresh air and medical attention.

## SECTION 5—FIREFIGHTING MEASURES

### FLAMMABLE PROPERTIES

Non-combustible as supplied. Small chips, fine turnings and dust from processing may be readily ignitable.

### EXTINGUISHING MEDIA

Not applicable to metal castings. Use Class D extinguishing agents on fines, dust, or molten metal. Use coarse water spray on chips and turnings. DO NOT USE water on molten metal. DO NOT USE halogenated extinguishing agents on small chips/fines.

**PROTECTION OF FIREFIGHTERS:** Unusual Fire and Explosion Hazards: 1500E Metal vapor burns in air with a bright greenish-yellow flame to produce zinc oxide fume (PEL-5 mg/m<sup>3</sup>) (CAS No. 1314-13-2). Zinc/Zinc Oxide Dust may form explosive mixtures in contact with air or water when exposed to heat or flames. Contact with acids and alkalis (corrosives) can create hydrogen gas which may also reach explosive concentrations.

## SECTION 6—ACCIDENTAL RELEASE MEASURES

**Emergency Procedures:** If possible, safely control source of the release. Molten metal should be allowed to cool and harden before cleanup.

**Environmental Precautions:** Zinc metal poses no immediate ecological risks. Avoid dispersal of spilled material and runoff with contact with soil, waterways, drains and sewers.

## SECTION 7—HANDLING & STORAGE

### RECOMMENDED STORAGE

Keep zinc metal dry.

### PROCEDURES FOR HANDLING

Proper hand and foot protection is recommended. Respiratory protection is recommended where zinc fume/dust is airborne.

## SECTION 8—EXPOSURE CONTROLS/PERSONAL PROTECTION

### ENGINEERING CONTROLS

None Required. There are no health hazards from castings in solid form.

SUBSTANCE	ACGIH TLV 1mm at 908.6EF	OSHA PEL
Zinc (Zn)	None established – Soluble 10 mg/m <sup>3</sup> · Particles	*None established – Soluble 10 mg/m <sup>3</sup> – Zinc Dust 5 mg/m <sup>3</sup> – Zinc Oxide Fume
Aluminum (Al)	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Copper (Cu)	2 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>

\*Note the OSHA PEL final rule limits are currently not enforceable due to a previous court decision.

**Protective Clothing:** Gloves, coveralls or other work appropriate clothing are recommended to prevent prolonged or repeated direct skin contact when zinc is processed.

**Eye Protection:** Safety eyewear should be used when necessary to avoid exposure to liquid splashes, gases, or dusts.

**Respiratory Protection:** Use a properly fitted, NIOSH/MSHA approved self-contained apparatus where Zinc Oxide Dust or Fumes are generated and cannot be controlled to within acceptable levels.

**General Hygiene Considerations:** Refrain from eating, drinking or smoking areas. No special packaging materials are required.

**Ventilation:** Use adequate local ventilation or general ventilation to keep airborne levels below recommended exposure limits. Supply sufficient replacement air to make up for air removed by the exhaust system.

**SECTION 9—PHYSICAL & CHEMICAL PROPERTIES**

<b>APPEARANCE/PHYSICAL STATE</b> Solid Bluish-White Metal	
<b>ODOR/ODOR THRESHOLD</b> None	<b>VAPOR DENSITY</b> Not applicable
<b>MELTING POINT</b> 717° - 734°F	<b>SPECIFIC GRAVITY (H<sub>2</sub>O = 1)</b> 5.0 – 6.7
<b>BOILING POINT</b> 900° - 910°F	<b>VAPOR PRESSURE</b> 1 mm Hg. at 908.6°F
<b>FLASH POINT</b> Not applicable for solid castings	<b>EVAPORATION RATE</b> Not applicable
<b>FLAMMABILITY</b> Not flammable	<b>SOLUBILITY IN WATER</b> Insoluble
<b>UPPER AND LOWER FLAMMABILITY LIMITS</b> Not applicable for solid castings	<b>pH</b> Not applicable
<b>AUTO IGNITION TEMPERATURE</b> Not applicable	<b>VISCOSITY</b> Not applicable
<b>DECOMPOSITION TEMPERATURE</b> Not applicable	<b>PARTITION COEFFICIENT</b> Not applicable

**SECTION 10—STABILITY & REACTIVITY**

<b>CHEMICAL STABILITY</b> Stable as shipped	
<b>CONDITIONS TO AVOID</b> Not applicable to castings. Fine metal dust or powder produced by grinding or polishing aluminum metal can burn or explode and must be protected from ignition sources such as grinding sparks, etc.	
<b>REACTIVITY</b> Castings are not reactive.	<b>INCOMPATIBLE MATERIALS</b> Avoid contact with acids and alkalis.
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b> None	<b>POSSIBILITY OF HAZARDOUS REACTIONS</b> Not applicable to castings

**SECTION 11—TOXICOLOGICAL INFORMATION**

<b>POTENTIAL HEALTH EFFECTS</b>	
<b>EYE CONTACT:</b> No known significant effects or critical hazards.	
<b>SKIN:</b> No known significant effects or critical hazards.	
<b>INGESTION:</b> No known significant effects or critical hazards.	
<b>INHALATION:</b> No known significant effects or critical hazards.	

**SECTION 12—ECOLOGICAL INFORMATION**

<b>ECOTOXICITY</b> Not applicable	<b>PERSISTENCE AND DEGRADABILITY</b> Not applicable
<b>BIOACCUMULATION POTENTIAL</b> Not applicable	<b>MOBILITY IN SOIL</b> Not applicable

**OTHER ADVERSE EFFECTS**

Not applicable

**SECTION 13—DISPOSAL CONSIDERATIONS**

Recover or recycle if possible. Dispose of according to federal, state, and local regulations.

**SECTION 14—TRANSPORT INFORMATION****US DEPARTMENT OF TRANSPORTATION (DOT)-HMR**

Not Regulated

**CANADIAN TRANSPORTATION OF DANGEROUS GOODS (TDG)**

Not regulated

**UN SHIPPING NAME**

Not regulated

**UN NUMBER**

Not regulated

**TRANSPORT HAZARD CLASS**

Not regulated

**PACKING GROUP**

Not regulated

**ENVIRONMENTAL HAZARDS**

None

**LABEL(S) REQUIRED?**

No

**TRANSPORT IN BULK**

Not applicable

**SPECIAL SHIPPING INFORMATION**

Not applicable

**SECTION 15 — REGULATORY INFORMATION****USA-OSHA (Hazard Communication Standard)**

HAZARDOUS UNDER HAZARD COMMUNICATION STANDARD - No

**USA-EPA (Toxic Substances Control Act—TSCA)**

All components of these products are on the TSCA inventory list or are excluded from the listing.

**USA-EPA (SARA Title III)**

EPCRA SECTION 302 EXTREMELY HAZARDOUS SUBSTANCE - No

EPCRA SECTION 311/312 HAZARD CATEGORIES - No hazard categories apply.

EPCRA SECTION 313 TOXIC RELEASE INVENTORY - This product does not contain any toxic chemicals subject to the Toxic Release reporting requirements. However, potential by-products from this product, Zinc Oxide Fume/Dust are reportable.

**SECTION 16 — OTHER INFORMATION****SDS SHEET PREPARED BY**

Custom Alloy Sales

**DATE**

09/2023

**NOTE**

This data and label information is offered in good faith as typical values and not as a product specification. No warranty either expressed or implied is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review the recommendations in specific context of the intended use and determine if they are appropriate.

**PRODUCT IDENTIFIER**

# ZINC CASTINGS

**SUPPLIER IDENTIFICATION**

Company Name Custom Alloy Sales \_\_\_\_\_

Street Address 13329 Ector St. \_\_\_\_\_

Mailing Address 13181 Crossroads Pkwy N. # 400 \_\_\_\_\_

City City of Industry State CA

Zip/Postal Code 91746 Country USA \_\_\_\_\_

Emergency Phone Number (800) 633-8253

Other Info \_\_\_\_\_

**HAZARD PICTOGRAMS**

None\*

**SIGNAL WORD**

None\*

**PRECAUTIONARY STATEMENTS**

None\*

**HAZARD STATEMENTS**

None\*

\*Castings do not present hazards in their original form.

**OTHER INFORMATION**

1. Grinding castings that have not been cleaned or that contain embedded sand may generate significant amounts of dust containing crystalline silica.
2. Fumes from hot processes may contain other compounds with different exposure limits. Dust or fumes generated by machining, grinding, welding or thermal cutting of the casting may produce airborne contaminants. Consult Sections 3 & 8 of the SDS for further information.