



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.

SAFETY DATA SHEET (SDS)

ZINC ALLOY INGOT

SDS

DATE ISSUED

09/2023

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
13329 Ector St.

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

EYE CONTACT:	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.
SKIN CONTACT:	Particle/Dust: No special requirements
INGESTION:	Particle/Dust: If swallowed no specific intervention is needed as this material is not hazardous. However, if you feel unwell seek medical attention.
INHALATION:	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/m³) (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 ³ · Particles	*None established – Soluble 10 mg/m ³ – Zinc Dust 5 mg/m ³ – Zinc Oxide Fume
Aluminum (Al)	10 mg/m ³	10 mg/m ³
Copper (Cu)	2 mg/m ³	1 mg/m ³

*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

APPEARANCE/PHYSICAL STATE Solid Bluish-White Metal	
ODOR/ODOR THRESHOLD None	VAPOR DENSITY Not applicable
MELTING POINT 717° - 734°F	SPECIFIC GRAVITY (H₂O = 1) 5.0 – 6.7
BOILING POINT 900° - 910°F	VAPOR PRESSURE 1 mm Hg. at 908.6°F
FLASH POINT Not applicable for solid castings	EVAPORATION RATE Not applicable
FLAMMABILITY Not flammable	SOLUBILITY IN WATER Insoluble
UPPER AND LOWER FLAMMABILITY LIMITS Not applicable for solid castings	pH Not applicable
AUTO IGNITION TEMPERATURE Not applicable	VISCOSITY Not applicable
DECOMPOSITION TEMPERATURE Not applicable	PARTITION COEFFICIENT Not applicable

SECTION 10—STABILITY & REACTIVITY

CHEMICAL STABILITY Stable as shipped	
CONDITIONS TO AVOID 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.	
REACTIVITY Castings are not reactive.	INCOMPATIBLE MATERIALS Avoid contact with acids and alkalis.
HAZARDOUS DECOMPOSITION PRODUCTS None	POSSIBILITY OF HAZARDOUS REACTIONS Not applicable to castings

SECTION 11—TOXICOLOGICAL INFORMATION

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

SECTION 12—ECOLOGICAL INFORMATION

ECOTOXICITY Not applicable	PERSISTENCE AND DEGRADABILITY Not applicable
BIOACCUMULATION POTENTIAL Not applicable	MOBILITY IN SOIL 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 CATAGORIES - 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 1329 Ector St.

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.