

GHS Material Safety Data Sheet

MSDS No. : ZNE04GAEG

Date Issued: 1997/11/07
Last updated: 2012/12/14

Section 1. Identification of the substance or mixture and of the supplier

1.1 Product Information

Product name: **Zn Zinc**

Product number:	Purity	Form	Size (mm)	Product number:	Purity	Form	Size (mm)
—	99%(2N)	powder	—850 μm	ZNE02RB	99.99%(4N)	tablet	10x t5
ZNE01GB	99.9%(3N)	grains	3-7	ZNE03RB	99.99%(4N)	tablet	20x t5
ZNE02GB	99.99%(4N)	grains	3-7	—	99.99%(4N)	tablet	Various sizes
ZNE10GB	99.99%(4N)up	grains	—	ZNE01CB	99.9%(3N)	chips	5x5xt1
ZNE07GB	99.999%(5N)	grains	3-5	ZNE02CB	99.9%(3N)	chips	10x10xt1
ZNE08GB	99.9999%(6N)	grains	3-5	ZNE01SB	99.9%(3N)	sheet	100x100xt1
—	99.999%(5N)G	grains	1-2	—	99.9%(3N)	sheet	Various sizes
ZNE01WB	99.9%(3N)up	wire	1	—	3N-5N	target	Various sizes
—	99.9%(3N)up	wire	2				

1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd
 1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284
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Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Serious eye damage/eye irritation : Category 2B	Hazardous to the aquatic environment, acute toxicity : Category1 chronic toxicity : Category1	Flammable solids : Not classified Pyrophoric solids : Not classified Self-heating substances and mixtures : Not classified

GHS Label: √



Pictograms or symbols

Warning word: **Warning**

Hazard information	Description of precaution
Causes eye irritation Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.	Avoid breathing dust/fume. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling. Avoid release to the environment and collect spillage. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell. Dispose of contents/ container in accordance with local / national regulations.

Additional hazard information :

Hazards mainly originate in dusting.
 Heating may liberate toxic fume or gas.
 With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients

Chemical or common name:	Zinc
Chemical formula:	Zn
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	7440-66-6
RTECS#:	ZG8600000
TSCA inventory:	listed
EINECS:	2311753

Section 4. First aid measures

(About dust originated from the products)

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact:	Promptly flush contaminated skin with soap or mild detergent and water. Contact physician if irritation continues.
Inhalation:	Remove the exposed person immediately and provide fresh air. Get medical attention.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.

Section 5. Fire fighting measures

Extinguishing media:

This product cannot catch fire. Use media appropriate for surrounding fire.

Fire fighting: Remove containers to safe place if possible.
Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire.

Specific hazards arising from the chemical:
Heating may liberate toxic fume or gas.

Section 6. Accidental release measures

(About dust originated from the products)

Personal Precautions: Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its dust/ fume.

Environmental hazard precautions:
Shut off leak if without risk.
Prevent flow out to river, etc. so as not to badly affect.

Method for containment and cleaning up:
DO NOT use water with spills.
Avoid unnecessary contacts with spills.
Eliminate all ignition sources
(No smoking, flares, sparks or flames in immediate area).
Indoor leakage: Ventilate as much as possible until the cleaning is completed.
Outdoor leakage: Work from the windward and evacuate the leeward crowd.
Gather up, pack in closed container as much as possible.
Carefully wash spill site with plenty of water after material pick up.

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling: Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen.

Precautions to be taken in storage:

General precautions: Store in a cool, dry place away from incompatible materials.
Keep container or bottle tightly closed.

Section 8. Exposure controls / personal protection

Exposure guideline: ACGIH(2012): No data available
OSHA (2006): No data available

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, face shields, protective gloves.
(In case of dust generating work.)
Wear appropriate NIOSH/MSHA-approved respirator, air-supplied respirator, safety goggles, face shields, protective gloves, protective clothing, apron, including boots.

Section 9. Physical and chemical properties

Color and Form: Bluish-white lustrous metal, odorless.

Chemical formula: Zn

Atomic weight: 65.41

Melting point: 419

Boiling point: 907

Density: 7.134 g/cm³ (20 °C)

Water solubility: Insoluble

Flammable: non-flammable substance

Oxidation: None

Section 10. Stability and reactivity

Stability: Stable in closed container.

Reactivity

Incompatibility: Amines, cadmium, chlorinated solvents, sulfur, strong acids, strong bases.

Condition to avoid: Moisture, air.

Section 11. Toxicological information

Hazards mainly originate in dusting.

Acute toxicity: (Oral, Inhalation) GHS: Not classified ; Falls below the lowest level.
Oral rat LD₅₀> 5000 mg/kg
Inhalation rat LC₅₀> 5410 mg/L

Acute toxicity(Dermal) : GHS : No data available

Skin corrosive / irritation: GHS : Not classified ; Falls below the lowest level.

Serious eyes damage / eye irritation: GHS : Category 2B ; Causes eye irritation

Respiratory sensitization: GHS : No data available

Skin sensitization:	GHS : Not classified ; Falls below the lowest level.
Germ cell mutagenicity:	GHS : No data available
Carcinogenicity:	GHS : No data available
Reproductive toxicity:	GHS : No data available
Specific target organ toxicity —single exposure:	GHS : No data available
Specific target organ toxicity —repeated exposure:	GHS : No data available
Aspiration hazard:	GHS : No data available

Other cautions: Mechanical stimulation by dust affects eyes, skin and respiratory system

Section 12. Ecological information

Ecotoxicity:	
Hazards to the aquatic environment	
—acute toxicity:	GHS : Category 1 ; Very toxic to aquatic life.
—chronic toxicity:	GHS : Category 1 ; Very toxic to aquatic life with long lasting effects.
Hazardous the ozone layer:	GHS : No data available
	No Freon or Halon
Fish toxicity :	Algae(<i>Pseudokirchneriella subcapitata</i>) ErC ₅₀ (72hour)= 0.15 mg /L (EHC(2001))
Degradability :	No data available
Bioaccumulative potential:	Zn biological half-life 933 day, Rate of absorption oral=0.1, Respiratory tract=0.3
Mobility in soil:	No data available

Section 13. Disposal considerations

Disposal method:	User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.
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Section 14. Transport information

UN number:	3077
IATA shipping name:	Environmentally hazardous substance, solid, n.o.s.
IATA classification:	Hazardous Class 9 (Miscellaneous dangerous substances)
IATA packing group:	
HS code:	7903.90 (powder) , 7904.00 (wire) 7905.00 (sheet, foil), 7907.00 (other)
Marine pollution:	Yes

Section 15. Regulatory information

TSCA inventory : listed.
Please refer to any other local / national measures that may be relevant.

Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.