

## GHS Safety Data Sheet

SDS No. : ZNE01PAEG

Date Issued: 2017/07/12

### 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 ( $\mu$ m)
ZNE01PB	99% (2N)	powder	ca.7
ZNE03PB	99.9%(3N)	powder	$\leq$ 150
ZNE04PB	99.9%(3N)	powder	$\leq$ 75
ZNE06PB	99.99%(4N)	atomized powder	$\leq$ 75
ZNE07PB	99.999%(5N)	powder	$\leq$ 75
—	99.5%	powder	10-20

#### 1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd.

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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	Pyrophoric solids : Not classified Substances and mixtures which, in contact with water, emit flammable gases : Category 2

GHS Label: F, V



Pictograms or symbols

Warning word: DANGER

#### Hazard information

**In contact with water releases flammable gas**  
**Causes eye irritation**  
**Very toxic to aquatic life**  
**Very toxic to aquatic life with long lasting effects**

#### Description of precaution

Keep away from any possible contact with water, because of violent reaction and possible flash fire.  
 Protect from moisture. Handle under inert gas.  
 Avoid breathing dust/mist/gas/fume/vapors/spray. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling.  
 Avoid release to the environment and collect spillage.  
 IN CASE OF FIRE: Wear protective gloves/eye protection/face protection. Use Dry sand, Perlite ,Metal fire extinguishers for extinction.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 IF ON SKIN: Remove immediately all contaminated clothing and rinse skin with water/shower. Then wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention.  
 Call a POISON CENTER or doctor/physician if you feel unwell.  
 Protect from sunlight. Store in a cool, dry and well-ventilated place. Keep container tightly closed.  
 Dispose of contents/ container in accordance with local/national regulations.

#### Additional hazard information :

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

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:	Dry sand, Perlite ,Metal fire extinguishers. Do not use water, foam or carbon dioxide.
Fire fighting:	Contact with water may liberate flammable gases. Remove containers to safe place if possible. In case of fire, the product may liberate toxic gases/ fume. Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire.

### Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its dusts/ 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:	Remove all sources of ignition. DO NOT use water with spills 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 DOT-approved waste container as much as possible. Carefully collect remnant and move to a safe place.

### 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. Keep away from any heat, sparks, and flames. Use explosion-proof electrical/ventilating/lighting equipment.
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**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 (2013): 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, protective gloves.

**Section 9. Physical and chemical properties**

Color and Form: Bluish-white lustrous powder.

Chemical formula: Zn

Atomic weight: 65.41

Melting point: 419 °C

Boiling point: 907 °C

Density: 7.134 g/cm<sup>3</sup> at 20 °C

Solubility: Water: Insoluble  
Dissolves in acids or aqueous alkaline solutions with liberation of hydrogen.

Flammable: Flammable substance

Oxidation: None

**Section 10. Stability and reactivity**

Stability: Stable in closed container.  
Contact with water liberates heat and may ignite spontaneously according to the circumstances.

Reactivity: Strong reducing agents

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

Condition to avoid: Air, moisture

**Section 11. Toxicological information**

Acute toxicity (Oral, Inhalation): GHS ; Not classified.; Falls below the lowest level.  
Oral rat LD<sub>50</sub> > 2000 mg/kg  
Inhalation rat LC<sub>50</sub> > 5410 mg/kg

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

## Section 12. Ecological information

Ecotoxicity:

Hazards to the aquatic environment

—acute toxicity:

GHS ; Category 1 ; Very toxic to aquatic life.

Algae(Pseudokirchneriella subcapitata) ErC<sub>50</sub> (72hour)= 0.15 mg /L  
(EHC(2001))

Hazards to the aquatic environment

—chronic toxicity:

GHS ; Category 1 ; Very toxic to aquatic life with long lasting effects.

Hazardous to the ozone layer:

GHS ; No data available

No Freon or Halon

Fish toxicity:

No data available

Degradability:

No data available

Bioaccumulative potential:

No data available

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.

## Section 14. Transport information

UN number:

1436

IATA shipping name:

ZINC POWDER or ZINC DUST

IATA classification:

Hazardous Class 4.3 ;substances which, in contact with water, emit flammable gases

IATA packing group:

II

HS code:

7903.90

Marine pollution:

Yes

Precautions:

Container should be transported in a secure position, in a well-ventilated vehicle.

## 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.