

SECTION 1. IDENTIFICATION OF THE SUBSTANCE AND OF SUPPLIER

Product name : AMTETRA (Zinc Oxide)

Product number : WZ-0501, WZ-0501L, WZ-0511, WZ-0511L, WZ-0531, WZ-05B1, WZ-05E1, WZ-05F1

Manufacture details :

AMTEC Co.,Ltd.

1-8-7 Hirano-machi, Chuo-ku, Osaka-shi 541-0046, Japan

Emergency telephone number : +81-6-6866-8508

SECTION 2. HAZARD IDENTIFICATION

GHS Classification

GHS Hazards Statements

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

Label Elements

Hazards Symbols :

Signal word : Warning



Precautionary statements:

P273: Avoid release to the environment.

P391: Collect spillage.

P501: Dispose of contents/container according to the local ordinance.

SECTION 3. CONPOSITION AND INGREDIENT INFORMATION

Substance/Mixture	substance		
Chemical name	cas#	ENCS No.	Content
Zinc oxide	1314-13-2	1-561	= < 99%
Other	—	—	= > 1%
* In hydrolyzed state			

SECTION 4. FIRST AID MEASURES

Eye contact:

Flush with plenty of water immediately. In case of continuous pain, tears in excess, or continuous congestion etc., consult physician for medical attention.

Skin contact:

Wash off in flowing water or soapsuds. In case of pain, or inflammation etc., consult physician for medical attention.

Inhalation:

In case of coughing, losing breath, or feeling stimulation in the throat and the respiratory organ etc, move to the fresh air at once.
If symptom doesn't settle, consult physician for medical attention.

SECTION 5. FIRE FIGHTING MEASURES

Fire-extinguishing method:

Extinguish fire by the method suitable for the surroundings.

(This material itself is nonflammable.)

Unsuitable extinguishing agent: Water jet.

Protection for fire-extinguishing people:

During a fire, wear self-contained breathing apparatus and other protective equipments.

SECTION 6. MEASURE FOR SPILL

Precautions for human body:

Wearing a suitable protective equipment, do not contact eyes/skin and do not inhale the gas. Remove by vacuum cleaner etc, avoiding powder to be airborne.

Environmental precautions:

Do not let the substance enter the environment. Collect the dust after it is dampened by water if necessary.

Enclosure and Depuration/Equipment: Stop leakage if it is not dangerous.

Prevention of Secondary disaster: Avoid inflow to the drain, subway or the close place.

SECTION 7. PRECAUTIONS FOR HANDLING AND STORAGE

Handling

Technical measure:

Take measures of as described in chapter "8. EXPOSURE CONTROLS / PERSONAL PROTECTION" and wear an appropriate protective equipment.

Local-ventilation/ Whole-ventilation:

Set local exhaust or general ventilation of as described in chapter "8. EXPOSURE CONTROLS/ PERSONAL PROTECTION".

Precautions for safety handling:

- Do not eat, drink, or smoke when using this product.
- Use only outdoors or in well ventilated areas.
- Do not contact, inhale and ingest.

Contact evasion: Refer to 10. STABILITY AND REACTIVITY.

Storage

Technical measure: Technical measure is not specially needed.

Storage condition: Keep containers tightly closed and storage in well ventilated areas.
The storehouse should be locked.

Packing materials: There is no regulation for packaging or container. However storage in the container which is tightly closed and cannot be damaged.

SECTION 8. EXPOSURE PREVENTION AND PROTECTION MEASURES

Control concentration: Not specified.

Permissible concentration: Japan Association of Industrial Health(2005)

Level 2 Respirable dust 1mg/m³

Total dust 4mg/ m³

ACGIH(2005) TLV-TWA 2mg/ m³

TLV-STEL 10mg/ m³ (dust)

Facility and equipment measures:

Equip the partial exhauster in the work area where dust may generate.

Protective device: Wear dust mask, eye shield, protective gloves if necessary.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state,form,color	: White powder
Smell	: No odor
Melting point	: 1975°C
Flash point	: Nonflammable
Explosion properties	: No data
Specific gravity	: 5.78
Solubility	: No soluble in water
Natural ignition temperature	: No data
Decomposition temperature	: No data
Combustibility	: Not applicable
Viscosity	: No data

SECTION 10. STABILITY AND REACTIVITY

Stability : Stable for normal storage and handling.

Possibility of hazardous reactions:

Reacts with aluminum, magnesium powder, and chlorinated rubber if heated.

Conditions to be avoided: Contacts incompatible materials.

SECTION 11. HAZARDOUS PROPERTY INFORMATION

Acute toxicity(Oral) : Not classified due to "rat ,LD50>5000mg/kg(EU-RAR43:2004)"

Acute toxicity(skin) : Not applicable due to "rabbit ,LD50>5000mg/kg(EPA Pesticide:1992)".

Acute toxicity(inhalation: dust): Not classified according to JIS classification
, due to "rat LC50>5.7mg/L(EU-RAR43(2004))".

Skin corrosion/ irritation: Not classified due to "no irritation by the experiment of the rabbit.
which was quoted to ACGIH(2003) and EU-RAR43:2004".

Serious eye damage/eye irritation: No classified due to "no irritation at one report and light irritation at two reports
out of three reports which were recorded in EU-RAR(2004)".

SECTION 12. ENVIRONMENTAL INFLUENCE INFORMATION

Aquatic acute toxicity:

Category 1 due to "EC50=0.17mg/L (The value of the conversion of the density
of zinc oxide 0.21mg/L) of 72 hours of the alga". Very strong toxicity for aquatic life.

Aquatic chronic toxicity:

Category 1 because of "the metallic compound and the unknown behavior in the aqua while accumulation of
aquatic life is low as BCF=217(the existing chemical safety inspection data)".

Very strong toxicity for aquatic life by the long influence.

SECTION 13. PRECAUTIONS FOR DISPOSAL

Residual waste:

- Disposal should obey the relevant law and the official regulation.
- Consign to the waste treatment company having the official approval of regulation or to the local government,
if they treat the waste.
- Notify the dangerous and hazardous information thoroughly to waste treatment company
,when the processing of waste is consigned.

Pollution container and packing: Used containers could be recycled by cleaning or should be disposed in accordance
with the official treatment.

In case of disposal, remove all contents.

SECTION 14. PRECAUTIONS FOR TRANSPORTATION

U.N. classification : Class 9 (environmental hazards)
U.N. number : UN3077
U.N. proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Zinc Oxide)
Container class : III
Special provision (IATA) : SP A197 applies if the net volume of the container does not exceed 5kg
or 5L and the container used meets the defined criteria.
Marine pollution substance : Applicable

Special cautions:

- Confirm that there are no damage, no corrosion, or no leakage etc of the container before the transportation. Load without fall or damage, and deal with prevention of the cargo collapse.

SECTION 15. APPLICABLE LAWS AND REGULATIONS

Industrial Safety and Health Act : Notifiable substances

(Article 57-2 of Act, appended table 9 of article 18-2 of Order)

(The 188th of government ordinance numbers)

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Law):

3-Glycidyloxypropyltrimethoxysilane is subject to PRTR regulation, it has been excluded from the scope because most of it is fixed to the base material as a hydrolyzate and amount of released components is less than 1%.

SECTION 16. OTHER INFORMATION

Handling of written contents: The contents of descriptions above are based on documents, information, and data currently available. We, however, do not give any guarantee about physical-chemical property, hazard, and toxicity. Precautions are intended for normal handling. Take necessary safety measures matched to purpose and usage in the case of special handling.