

Mixgran and Mixslab[®] ZnO 80

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION	
Manufacturer Shandong Yanggu Huatai Chemical Co., LTD No.217, Qinghexi Road Yanggu County, Shandong, China 252300	Emergency Contact Chemtrec: 1-800-424-9300 (USA) (1)330-542-8400 (outside USA)
Trade Name(s): Mixgran [®] ZnO 80, Mixslab [®] ZnO 80	Chemical Name: Zinc Oxide
Relevant identified uses of the substance or mixture and uses advised against: Not available.	Application of the substance/the preparation: Rubber vulcanizing agent
Issued By: Sovereign Chemical Company According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS	Date of Issue: April 15, 2024

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Information in accordance with US 29 CFR 1910.1200 (Hazcom 2012) and Regulation (EC) No 1272/2008



GHS09 Environment

Aquatic Acute 1

Aquatic Chronic 1

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008

The substance is classified and labeled according to the CLP regulation.

Hazard pictograms



This pictogram only applicable for EU regulations. Not for use in the United States (OSHA GHS).

GHS09

Signal word: Warning

Hazard statements

H410

Very toxic to aquatic life.

H400

Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273

Avoid release to the environment.

P391

Collect spillage.

P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Chemical Name	CAS No	EC No	Weight %	Classification
Zinc oxide	1314-13-2	215-222-5	80%	Aquatic Acute 1 H400, Aquatic Chronic 1 H410
EPDM	23627-24-9	N/A	20%	N/A

The remaining unspecified ingredients are impurities and are not hazardous.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General information: No special measures required.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact

Immediately wash with water, soap, and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing

Rinse out mouth thoroughly with water. Drink plenty of water. Get medical aid.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information is available.

4.3 Indication of any immediate medical attention and special treatment needed

If skin irritation or rash occurs, get medical advice/attention.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents: CO₂, sand, extinguishing powder. Do not use water.

For safety reasons, unsuitable extinguishing agents: Water.

5.2 Special hazards arising from the substance or mixture: Hazardous decompositions products: carbon monoxide, carbon dioxide.

5.3 Advice for firefighters

Protective equipment

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information: No further relevant information available.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Avoid formation of dust.

6.2 Environmental precautions

Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up

Pick up mechanically.
Dispose contaminated material as waste according to Section 13.
Send for recovery or disposal in suitable receptacles.

6.4 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Use personal protective equipment.
Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Keep container tightly closed and dry in a cool, well-ventilated place. Keep in original packaging, tightly closed.

Information about storage in one common storage facility

Store away from foodstuffs.

Do not store together with oxidizing and acidic materials.

Further information about storage conditions: Store receptacle in a well-ventilated area.

7.3 Specific end use(s): No further relevant information available.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see Section 7.

8.1 Control parameters

Occupational exposure limits : TWA 10 mg/m³(total respirable dust), TWA 4 mg/m³(respirable dust)(zinc oxide)

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Keep away from foodstuffs, beverages and feed.

Do not inhale dust/smoke/mist.

Avoid contact with the eyes.

Respiratory protection

Not required under normal conditions of use.

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device when high concentrations are present.

For spills, respiratory protection may be advisable.

Protection of hands



Protective gloves

The glove material must be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact breakthrough time must be found out by the manufacturer of the protective gloves and must be observed.

For the permanent contact gloves made of the following materials are suitable

Butyl rubber, BR

Neoprene gloves

Nitrile rubber, NBR

Eye protection



Safety glasses

Body protection: Protective work clothing.

Limitation and supervision of exposure to the environment: No further relevant information available.

Risk management measures

See Section 7 for additional information.

No further relevant information is available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General Information

Appearance Form: Granular or flakes. Color: White to off-white	Change in Condition Melting Point/Melting Range: >1000°C Boiling Point/Boiling Range: Undetermined.
Odor: Characteristic.	Octanol/Water Partition Coefficient: Not determined.
Odor threshold: Not determined.	pH value: Not applicable.
Vapor pressure: Not applicable.	Flash point: Not applicable.
Density at 20 °C: Not available.	Flammability (solid, gaseous): Not determined.
Relative density: Not determined.	Ignition temperature: Not determined.

Vapor density: Not applicable.	Decomposition temperature: Not determined.
Evaporation rate: Not applicable.	Self-igniting: Product is not self-igniting.
Solubility in / Miscibility with water: Partly miscible.	Danger of explosion: Product does not present an explosion hazard.
Viscosity Dynamic: Not applicable. Kinematic: Not applicable.	Explosion limits Lower: Not determined. Upper: Not determined.
Solvent content: Organic solvents: Not determined.	Solids content: Not determined.

9.2 Other information: No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition/conditions to be avoided

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

No further relevant information is available.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products

Carbon monoxide and carbon dioxide.

Toxic metal oxide smoke.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:		
1314-13-2 zinc oxide		
Oral	LD50	>5000 mg/kg (rat)

Primary irritant effect

On the skin: Slight irritant effect on skin and mucous membranes.

On the eye: Irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information

The product shows the following dangers according to the calculation method of the General EU

Classification

Guidelines for Preparations as issued in the latest version: Irritant

12. ECOLOGICAL INFORMATION

12.1 Toxicity
 Aquatic toxicity: Toxic for aquatic organisms.

Acute toxicity	Time	Species	Method	Evaluation	Remarks
LC50 N/A	96h	Fish	OECD 203	N/A	N/A
EC50 N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50 N/A	72h	Algae	OECD 201	N/A	N/A

12.2 Persistence and degradability: No further relevant information available.

12.3 Bio-accumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

Additional ecological information
 12.5 Results of PBT and vPvB assessment
 PBT: Not applicable.
 vPvB: Not applicable.





12.6 Other adverse effects: No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
 Must not be disposed together with household garbage. Do not allow product to reach sewage system.
 Contact waste processors for recycling information.
 Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
 Un-cleaned packaging
 Recommendation: Disposal must be made according to official regulations.
 Recommended cleansing agents: Water, if necessary, together with cleansing agents.

14. TRANSPORTATION INFORMATION

14.1 UN-Number	
DOT	Not regulated
ADR, IMDG, IATA	UN3077
14.2 UN proper shipping name	
DOT	Not regulated
ADR	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S (zinc oxide)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)
14.3 Transport hazard class(es)	
DOT	Not regulated

<p>IMDG, IATA</p>   <p>Class Label ADR</p>   <p>Class Label</p>	<p>9 Miscellaneous dangerous substances and articles. 9</p> <p>9 (M7) Miscellaneous dangerous substances and articles. 9</p>
<p>14.4 Packing group DOT ADR, IMDG, IATA</p>	<p>Not regulated III</p>
<p>14.5 Environmental hazards</p> <p>Marine pollutant</p> <p>Special Marking (ADR) Special Marking (IATA)</p>	<p>Product contains environmentally hazardous substances: zinc oxide Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)</p>
<p>14.6 Special precautions for user Danger code (Kemler) EMS Number</p>	<p>Warning: Miscellaneous dangerous substances and articles 90 F-A, S-F.</p>
<p>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable. Transport/Additional information ADR Limited quantities (LQ) Transport category Tunnel restriction code UN "Model Regulation"</p>	<p>5 kg 3 E UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide), 9, III</p>

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture United States (USA)

SARA Section 355 (extremely hazardous substances)	None of the ingredients is listed.
SARA Section 313 (Specific toxic chemical listings)	1314-13-2 zinc oxide
TSCA (Toxic Substances Control Act)	All ingredients are listed.
Proposition 65 (California)	

Chemicals known to cause cancer	None of the ingredients is listed
Chemicals known to cause reproductive toxicity for females	None of the ingredients is listed
Chemicals known to cause reproductive toxicity for males	None of the ingredients is listed
Chemicals known to cause developmental toxicity	None of the ingredients is listed
Carcinogenic Categories	
EPA (Environmental Protection Agency)	1314-13-2 zinc oxide D, I, II
IARC (International Agency for Research on Cancer)	None of the ingredients is listed
TLV (Threshold Limit Value established by ACGIH)	None of the ingredients is listed
NIOSH-Ca (National Institute for Occupational Safety and Health)	None of the ingredients is listed
OSHA-Ca (Occupational Safety & Health Administration)	None of the ingredients is listed
Canada	
Canadian Domestic Substances List (DSL)	All ingredients are listed.
Canadian Ingredient Disclosure list (limit 0.1%)	None of the ingredients is listed
Canadian Ingredient Disclosure list (limit 1%)	1314-13-2 zinc oxide

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.