

# Maximo and Oxzinal Zinc Oxide

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION	
Manufacturer Zinc Nacional, S.A. Serafín Peña 938 Sur. Monterrey N.L. México. C.P. 64000	Emergency Contact Chemtrec: 1-800-424-9300 (USA) (1)330-542-8400 (outside USA)
Trade Name(s): Maximo, Oxzinal	CAS Number: 1314-13-2
Chemical Name: Zinc Oxide	Recommended use: Zinc oxide is widely used as an additive to many products in the ceramic, rubber, paint, animal feed, zinc compounds, pharmaceuticals, industries, etc. Recommended restrictions: None known.
Issued By: Sovereign Chemical Company  According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS	Date of Issue: July 18, 2016

## 2. HAZARDS IDENTIFICATION

Classification of the substance: GHS Classification

Acute aquatic toxicity (Category 1) H400

Chronic aquatic toxicity (Category 1) H410

Label elements

Hazard symbol	
Signal word	Warning
Hazard statement	H400 and H410

Precautionary statement

P273  
 P391  
 P501

Hazard(s) not otherwise classified      None known.

Supplemental information      None.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EC Number	Trade names of zinc oxide products		
			Oxzinol 800 to 821	Máximo 318, 414, 417W, 730, 819 to 996	Máximo 720, 721 and 725
Zinc Oxide, ZnO	1314-13-2	215-222-5	> 99.6 %	> 99.0 %	> 89.6%
Appearance and Odor	NA	NA	White powder or granule, odorless	Creamy white powder or granule, odorless	Brown powder or granule, odorless

### 4. FIRST AID MEASURES

Inhalation	Move into fresh air and keep at rest. If the person is not breathing provide artificial respiration, if breathing is difficult, give oxygen. Get medical attention.
Skin contact	Wash with soap and water and launder clothing before re-use. If irritation occurs get medical attention.
Eye contact	Immediately flush with plenty of water for up to 15 minutes holding the eyelids open. Get medical attention.
Ingestion	Ingestion of large quantities, get medical attention, never induce vomiting unless indicated by medical personnel.

### 5. FIRE FIGHTING MEASURES

Suitable extinguishing	Use media appropriate to the environment. media
Specific hazards arising from the chemical	Emits toxic fumes.
Firefighting equipment/instructions	In case of fire in the environment, use protective equipment and self-protective clothing to prevent contact with skin and eyes

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions protective equipment and emergency procedures	Use personal protective equipment (see paragraph 8).
Methods and material for containment and cleaning up	Clean spills in a way that does not disperse dust into the air and place in suitable container. Dispose according to regulations. The disposal area can be cleaned with water but prevent it from spilling into a river or reservoir.
Environmental Precautions	Product dangerous to the environment in case of large spills or when the product contaminates lakes, rivers or sewers, inform appropriate authorities in accordance with local laws.

**7. HANDLING AND STORAGE**

**Precautions for safe handling:** No special handling required, we recommend the following general measures: Use personal protective equipment (see paragraph 8). Wash after handling.

**Conditions for safe storage, including any incompatibilities:** No special storage measures required; we recommend the following general measures: Store in a dry place. Do not expose to sun, heat or incompatible substances (see paragraph 10). Product life, unlimited if tightly closed and dry. Place away from sources of ignition. Do not store with food.

**8. EXPOSURE CONTROLS - PERSONAL PROTECTION**

Component	Mexico	USA	Canada	Europe
Zinc Oxide	<b>NOM-010-STPS (Mexico, 4/2014).</b> LMPE-PPT: 10 mg/m <sup>3</sup> 8 hours (powder). LMPE-CT: 10 mg/m <sup>3</sup> 15 min (smoke). LMPE-PPT: 2 mg/m <sup>3</sup> 8 hours (smoke).	<b>OSHA PEL (2/2013).</b> TWA: 5 mg/m <sup>3</sup> 8 hours (Fume). TWA: 5 mg/m <sup>3</sup> 8 hours (Respirable fraction). TWA: 15 mg/m <sup>3</sup> 8 hours (Total dust). <b>ACGIH TLV (4/2014).</b> STEL: 10 mg/m <sup>3</sup> 15 min (Respirable fraction). TWA: 2 mg/m <sup>3</sup> 8 hours (Respirable fraction).	<b>ACGIH 4/2014 / ON 1/2013</b> STEL: 10 mg/m <sup>3</sup> 15 min (Respirable fraction). TWA: 2 mg/m <sup>3</sup> 8 hours. (Respirable fraction) <b>AB 4/2009 / BC 7/2013</b> STEL: 10 mg/m <sup>3</sup> 15 min (Respirable). TWA: 2 mg/m <sup>3</sup> 8 hours (Respirable). <b>QC 1/2014</b> STEL: 10 mg/m <sup>3</sup> 15 min (smoke). TWA: 5 mg/m <sup>3</sup> 8 hours (smoke).	(WELS) / EH40 TWA 10 mg / m <sup>3</sup> 8 hours (Total dust). TWA 4 mg / m <sup>3</sup> 8 hours (Respirable fraction).

**Exposure Controls:** Local and general ventilation, to ensure that concentration does not exceed the limits for occupational exposure. Consider enclosing the process. Ensuring control of process conditions. Replacement air supply to supply air continuously removed. Provide showers and eyewash stations.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection:** Wear approved safety goggles.

**Skin protection/ Hand protection:** Rubber gloves are recommended. Wash hands and face before eating, drinking or smoking

**Other:** The material may be utilized in molten form. Proper protective splash resistant clothing, thermal gloves, splash resistant shoes and eye shields must be worn to prevent injury. Use molten material in well ventilated areas. When working in confined areas, use of appropriate respiratory gear is recommended.

**Respiratory protection:** If ventilation is insufficient, suitable respiratory protection must be provided

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance Form: Powder or granule. Color: White, creamy white or brown.	Melting point/freezing point: 3587 °F (1975 °C) Initial boiling point/range: Not applicable.
Odor: Odorless.	Octanol/Water Partition Coefficient: Not data available.
Odor threshold: No data available.	pH Value: Not applicable.
Vapor pressure: Not applicable.	Flash point: Not applicable.
Vapor pressure temp: : Not applicable.	

Relative density: Not applicable. Relative density temp: Not applicable.	Flammability (solid, gaseous): Not applicable.
Vapor Density: Not applicable.	Ignition temperature: No data available.
Evaporation rate: Not applicable.	Molecular weight (gr/mol): 81.39
Solubility (water): Insoluble. Soluble in acids, ammonia, ammonium carbonate and alkali. Solubility temp (water): Not applicable.	Explosion limits Lower: No data available. Upper: No data available.
Specific Gravity: 5.606	Oil/Water Partition Coefficient: < 0.01

**10. STABILITY AND REACTIVITY**

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur.
Conditions to avoid	None.
Incompatible materials	Strong alkalis and acids.
Hazardous decomposition products	None.

**11. TOXICOLOGICAL INFORMATION**

Toxicity Data	LD50 (oral, mouse): 7950 mg / kg. LC50 (inhalation, mouse): 2500 mg/m <sup>3</sup>
Acute toxicity	Powder or zinc oxide fumes can irritate the respiratory tract. Prolonged exposure of the skin may lead to dermatitis. Exposure to high levels of dust or smoke can lead to fever, muscle pain, headache and dry throat and mouth.
Chronic effects	No known significant effects or critical hazards. There is no information that prolonged or repeated exposure aggravates medical conditions.

**12. ECOLOGICAL INFORMATION**

Ecotoxicity	CE50 (Selenastrum capricornutum, 72 hours): 170 mg ZnO / l (LISEC 1997).
Persistence and degradability	Not applicable.
Bioaccumulative potential	Not applicable.
Mobility in soil	Not applicable.



Other adverse effects    Not applicable.

**13.    DISPOSAL CONSIDERATIONS**

Disposal instructions    Avoid or minimize the generation of waste wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products must meet the requirements of environmental protection legislation and waste disposal and the requirements of local authorities.

**14.    TRANSPORTATION INFORMATION**

DOT                                    Not regulated as dangerous goods.

Type of transport	Classification	UN Number	Proper shipping name	Class	Group Packing	Label	Additional information
Land: Road Railroad	ADR RID	UN 3077	Environmentally Hazardous Substance, Solid, N.O.S. (Zinc Oxide)	9	III	 	Hazard No. 90 Transportation Guide: 90G02
Sea	IMO / IMDG						Emergency Plans (EmS) F-A, S-F
Air	IATA / DGR						---

**15.    REGULATORY INFORMATION**

US federal regulations    This product is not known to be a “hazardous chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the US EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification	Listed.
CERCLA Hazardous Substance List	Not regulated.
OSHA Specifically Regulated Substances	Not regulated.
SARA Section 302 Extremely hazardous substance	Not listed.
SARA Section 311/312 Hazardous chemical	Yes (Acute).
SARA Section 304 Emergency release notification	Not regulated.
SARA Section 313 Specific toxic chemical listings	Zn and Pb compounds.
Clean Air Act Section 112	Not regulated.
Safe Drinking Water Act	Not regulated.
European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed.
European List of Notified Chemical Substances (ELINCS)	Not listed.
Inventory of Existing Commercial Chemical Substances (IECSC)	Listed.
Canadian Non-Domestic Substances List (NDSL)	Listed.
Canadian Domestic Substances List (DSL)	Listed.
Toxic Substances Control Act (TSCA) Inventory	Listed.
Australian Inventory of Chemical Substances (AICS)	Listed.
Japanese Inventory of Existing and New Chemical Substances (ENCS)	Listed.
Korean Existing Chemicals List (ECL)	Listed.

New Zealand Inventory	Listed.
Philippine Inventory of Chemicals and Chemicals Substances	Listed.
Taiwan Chemical Substance Inventory (TCSI)	Listed.

California Prop 65      Yes (Pb, Cd).

**16. OTHER INFORMATION**

HMIS ratings              Health: 1  
                                   Flammability: 0  
                                   Reactivity: 0  
                                   Personal Protection: E

**GHS Definitions**

Hazard statements  
 H400: Very toxic to aquatic life  
 H410: 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 to... (in accordance with local/regional/national/international regulation).

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.