

## SAFETY DATA SHEET

Revision Date: 06/15/2011

Print Date: 4/3/2013

MSDS Number: R0004161

Version: 1.8

ZINC OXIDE  
74514

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Nexo Solutions	Regulatory Information Number	1-800-325-3751
PO Box 2458	Telephone	1-800-531-7106
Columbus, OH 43216	Emergency telephone number	1-855-639-3648

Product name                      ZINC OXIDE

Product code                      74514

Product Use Description        No data

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance: solid

MAY BE HARMFUL IF INHALED.

#### Potential Health Effects

##### **Exposure routes**

Inhalation, Skin contact, Eye Contact, Ingestion

##### **Eye contact**

Dust can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

##### **Skin contact**

May cause skin irritation. Symptoms may include redness, burning, and swelling of skin.

##### **Ingestion**

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

##### **Inhalation**

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This material is a dust or may produce dust. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.). Exposure to freshly formed fumes from heated metal or to fine metal dust may cause "metal fume fever". This illness comes on a few hours after exposure. It is characterized by chills, fever, and other flu-like symptoms including nausea, coughing, and congestion. This illness is temporary and tends to be more severe on the first day of the work week.

**Aggravated Medical Condition**

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material; lung (for example, asthma-like conditions)

**Symptoms**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include; metallic taste, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Cough

**Target Organs**

No data

**Carcinogenicity**

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

**Reproductive hazard**

Based on the available information, risk to the fetus from maternal exposure to this material cannot be assessed.

<b>3. COMPOSITION/INFORMATION ON INGREDIENTS</b>
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Hazardous Components	CAS-No.	Concentration
ZINC COMPOUND	254504001-6050	<=100%

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### 4. FIRST AID MEASURES

#### Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

#### Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

#### Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

#### Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

#### Notes to physician

**Hazards:** No information available.

**Treatment:** No information available.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Water spray

#### Hazardous combustion products

metal oxides

#### Precautions for fire-fighting

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Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Avoid breathing dust.

#### Environmental precautions

Do not flush into surface water or sanitary sewer system.

#### Methods for cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Pick up and arrange disposal without creating dust.

#### Other information

Comply with all applicable federal, state, and local regulations.

### 7. HANDLING AND STORAGE

#### Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Avoid dust formation.

#### Storage

Store in a cool, dry, ventilated area.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Guidelines

ZINC COMPOUND		254504001-6050	
ACGIH	time weighted average	2 mg/m3	Respirable fraction.
ACGIH	Short term exposure limit	10 mg/m3	Respirable fraction.

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NIOSH	Recommended exposure limit (REL):	5 mg/m3	Dust
NIOSH	Recommended exposure limit (REL):	5 mg/m3	Fume.
NIOSH	Ceiling Limit Value and Time Period (if specified):	15 mg/m3	Dust
NIOSH	Short term exposure limit	10 mg/m3	Fume.
OSHA Z1	Permissible exposure limit	15 mg/m3	Total dust.
OSHA Z1	Permissible exposure limit	5 mg/m3	Fume.
OSHA Z1	Permissible exposure limit	5 mg/m3	Respirable fraction.

### General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Avoid breathing dust.

### Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects. Provide appropriate exhaust ventilation at places where dust is formed.

### Eye protection

Wear safety glasses or chemical splash goggles when dust exposure is possible.

### Skin and body protection

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves (consult your safety equipment supplier).

### Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	solid
Form	no data available
Colour	no data available
Odour	odourless
Boiling point/boiling range	no data available
Melting point/range	3,587 °F / 1,975 °C
Sublimation point	no data available
pH	not applicable
Flash point	not applicable
Ignition temperature	no data available
Evaporation rate	no data available
Lower explosion limit/Upper explosion limit	no data available
Particle size	no data available
Vapour pressure	12.000 mmHg @ 2,192 °F / 1,200 °C
Relative vapour density	no data available
Density	5.65 g/cm <sup>3</sup>
Bulk density	No data
Water solubility	insoluble
Solubility(ies)	no data available
Partition coefficient: n-octanol/water	no data available
log Pow	no data available
Autoignition temperature	no data available
Viscosity, dynamic	no data available
Viscosity, kinematic	no data available
Solids in Solution	no data available
Decomposition temperature	no data available
Burning number	no data available
Dust explosion constant	no data available
Minimum ignition energy	no data available

**10. STABILITY AND REACTIVITY**

Stability

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Stable.

### Conditions to avoid

Keep away from heat, flame, sparks and other ignition sources.

### Incompatible products

chlorinated rubber, lithium, magnesium

### Hazardous decomposition products

metal oxides

### Hazardous reactions

Product will not undergo hazardous polymerization.

### Thermal decomposition

No data

## 11. TOXICOLOGICAL INFORMATION

### Acute oral toxicity

ZINC COMPOUND

: LD 50 Mouse: 7,950 mg/kg

### Acute inhalation toxicity

ZINC COMPOUND

: LC 50 Mouse: (>) 5.7 mg/l; 4 h

### Acute dermal toxicity

ZINC COMPOUND

: no data available

## 12. ECOLOGICAL INFORMATION

### Biodegradability

ZINC COMPOUND

: no data available

### Bioaccumulation

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ZINC COMPOUND : no data available

### Ecotoxicity effects

#### Toxicity to fish

ZINC COMPOUND : 96 h LC 50 Fathead minnow (*Pimephales promelas*):  
2,246.00 mg/l Method: Static; Mortality

#### Toxicity to daphnia and other aquatic invertebrates.

ZINC COMPOUND : 48 h LC 50 Water flea (*Daphnia magna*): .09 mg/l  
Method: Static Mortality

#### Toxicity to algae

ZINC COMPOUND : no data available

#### Toxicity to bacteria

ZINC COMPOUND : no data available

#### Biochemical Oxygen Demand (BOD)

ZINC COMPOUND : no data available

#### Chemical Oxygen Demand (COD)

ZINC COMPOUND : no data available

#### Additional ecological information

ZINC COMPOUND : no data available

## 13. DISPOSAL CONSIDERATIONS

### Waste disposal methods



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Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact NEXEO's Environmental Services Group at 800-637-7922.

**14. TRANSPORT INFORMATION**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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**U.S. DOT - ROAD**

UN 3077	SUSTANCIA SOLIDA POTENCIALMENTE PELIGROSA PARA EL MEDIO AMBIENTE, N.E.P. (ZINC OXIDE)	9		III	
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**U.S. DOT - RAIL**

UN 3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)	9		III	
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**U.S. DOT - INLAND WATERWAYS**

UN 3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)	9		III	
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**TRANSPORT CANADA - ROAD**

UN 3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)	9		III	
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**TRANSPORT CANADA - RAIL**

UN 3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)	9		III	
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**TRANSPORT CANADA - INLAND WATERWAYS**

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UN	3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)	9	III
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**INTERNATIONAL MARITIME DANGEROUS GOODS**

UN	3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)	9	III
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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

UN	3077	Environmentally hazardous substances, solid, n.o.s. (ZINC OXIDE)	9	III
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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

UN	3077	Environmentally hazardous substances, solid, n.o.s. (ZINC OXIDE)	9	III
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**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

UN	3077	Environmentally hazardous substances, solid, n.o.s. (ZINC OXIDE)	9	III
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\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**15. REGULATORY INFORMATION**

**California Prop. 65**

WARNING! This product contains a chemical known to the State of California to cause cancer.	CADMIUM LEAD
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.	CADMIUM LEAD

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**SARA Hazard Classification**

No SARA Hazards

**SARA 313 Component(s)**

ZINC OXIDE 100.00 %

**New Jersey RTK Label Information**

ZINC COMPOUND 254504001-6050

**Pennsylvania RTK Label Information**

ZINC COMPOUND 254504001-6050

**Notification status**

US. Toxic Substances Control Act	y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA).	y (positive listing)
Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	y (positive listing)
Japan. Kashin-Hou Law List	y (positive listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	y (positive listing)
China. Inventory of Existing Chemical Substances	y (positive listing)

	HMIS	NFPA
Health	1	1
Flammability	0	0
Physical hazards	0	
Instability		0
Specific Hazard	--	--



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### 16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by NEXEO's Environmental Health and Safety Department (1-800-325-3751).