

## 1. PRODUCT AND COMPANY IDENTIFICATION

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Product name	:	Zinc Oxide (USP) Raw Material
Synonyms	:	ZnO
INCI name	:	Zinc Oxide
CAS #	:	1314-13-2
Country of Origin	:	Canada
EINECS #	:	215-222-5
Product use	:	Domestic and Industrial
Supplier	:	New Directions Aromatics Inc.
Address	:	6781 Columbus Road, Mississauga, Ontario, CANADA L5T 2G9
Fax	:	905-362-1926
Telephone number	:	905-362-1915
Emergency phone number	:	(613)-996-6666 CANUTEC 24 HOUR EMERGENCY

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

### GHS Classification

This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29CFR1910.1200).

### GHS Label elements, including precautionary statements

Signal: Not applicable

### Hazard statement(s)

Not applicable.

### Precautionary statement(s)

Not applicable.

## 3. COMPOSITION / INFORMATION INGREDIENTS

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Product Name	CAS NO	EC NO	Concentration
Zinc oxide	1314-13-2	215-222-5	100 %

## 4. FIRST AID MEASURES

### Eye contact

Immediately flush eyes with plenty of cool water for at least 20 minutes. Get medical attention if irritation occurs.

### Skin contact

Remove contaminated clothing. Wash area with soap and water. If irritation occurs, get medical attention.

### Inhalation

If inhaled, removed to fresh air. Get medical attention if symptoms appear.

## **Ingestion**

Seek medical attention or contact local poison control center.

## **5. FIRE FIGHTING MEASURES**

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### **Suitable extinguishing media**

Carbon dioxide, foam, dry powder or water spray.

### **Unsuitable extinguishing media**

Water spray, water jet.

### **Special protective equipment and precautions for fire-fighters**

Wear proper protective equipment. Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers.

### **Special hazards arising from the substance or its combustible products**

Hazardous decomposition products may be formed at extreme heat or if burned.

### **Resulting gases**

Carbon oxides.

## **6. ACCIDENTAL RELEASE MEASURES**

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### **Personal precautions, protective equipment and emergency procedures.**

Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (See section 8).

### **Environmental precautions**

Water polluting material. May be harmful to the environment if released in large quantities. Hazardous to aquatic environment. May cause long-term adverse effects in the aquatic environment. Prevent leaking substances from running into the aquatic environment or the sewage system.

### **Methods and materials for containment and cleaning up**

Small Spill: Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large Spill: Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

## **7. HANDLING AND STORAGE**

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### **Precautions for safe handling**

Avoid breathing in dust. To prevent explosion hazards, do not allow dust to settle on surfaces. It is recommended that all dust control equipment and material transport systems involved in handling of this product contain explosion relief vents or explosion suppression systems. All conductive elements of the system that contact this material should be electrically bonded and grounded.

### **Conditions for safe storage, including any incompatibilities**

Provide local exhaust or general room ventilation to minimize dust and/or vapour concentrations. Keep container closed when not in use.

## **8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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### **Exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **Eyes**

Use tightly sealed goggles.

### **Skin**

If skin contact or contamination of clothing is likely, protective clothing should be worn. Use protective gloves.

### **Respiratory**

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Recommended: Use appropriate NIOSH approved dust respirator if PEL/TLV may be exceeded.

### **Exposure limit values**

NIOSH REL (United States, 6/2009).

CEIL: 15 mg/m<sup>3</sup> Form: Dust

TWA: 5 mg/m<sup>3</sup> 10 hour(s). Form: Dust and fumes

STEL: 10 mg/m<sup>3</sup> 15 minute(s). Form: Fume

OSHA PEL (United States, 11/2006).

TWA: 5 mg/m<sup>3</sup> 8 hour(s). Form: Fume

TWA: 5 mg/m<sup>3</sup> 8 hour(s). Form: Respirable fraction

TWA: 15 mg/m<sup>3</sup> 8 hour(s). Form: Total dust

ACGIH TLV (United States, 1/2009).

STEL: 10 mg/m<sup>3</sup> 15 minute(s).

TWA: 2 mg/m<sup>3</sup> 8 hour(s).

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

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Appearance	:	Fine white powder.
Odor	:	Odorless.
pH	:	Neutral.
Melting Point/Freezing Point	:	1975°C
Flash point	:	N/A
Relative density	:	5.61
Solubility (ies)	:	Insoluble in water.

## **10. STABILITY AND REACTIVITY**

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### **Reactivity**

This material presents no significant reactivity hazard.

### **Chemical stability**

Chemically stable.

### **Possibility of hazardous reactions**

Hazardous polymerization will not occur.

### **Conditions to avoid**

Avoid sparks, flame and other heat sources.

### **Incompatible materials**

Chlorinated rubber: Violent reaction or explosion with zinc oxide at 215°C.

Flax oil: Exothermic reaction with possibility of ignition.

Magnesium: If heated: explosive reaction.

Strong bases and acids: Possibility of violent reaction.

### **Hazardous decomposition products**

Carbon Oxides.

## **11. TOXICOLOGICAL INFORMATION**

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### **Acute toxicity**

Algae - EC50: 0.042 mg/L

Daphnia - LC50: 98 µg/L

Fish- LC50: 320 ppm

**Carcinogenicity**

No known significant effects or critical hazards.

**Teratogenicity**

No known significant effects or critical hazards.

**Mutagenicity**

No known significant effects or critical hazards.

**Respiratory or skin sensitization**

Dust may cause respiratory tract irritation.

**Inhalation**

No known significant effects or critical hazards.

**Skin contact**

No known significant effects or critical hazards.

**Eye contact**

No known significant effects or critical hazards.

**Ingestion**

No toxic effects are expected following ingestion of this product.

**12. ECOLOGICAL INFORMATION**

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**Ecotoxicity**

Toxic to aquatic organisms, may cause long-term adverse effects environment. Avoid any pollution of ground, surface or underground water.

**Persistence and degradability**

Not available.

**Bio - accumulative potential**

Not available.

**Mobility in soil**

Not available.

**Other adverse effects**

Not available.

**13. DISPOSAL CONSIDERATION**

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Dispose of product in accordance with local, state or provincial and federal regulations. Check with local municipal authority to ensure compliance.

**14. TRANSPORT INFORMATION**

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**UN Number**

3077

**UN proper shipping name**

Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)

**Transport hazard class**

9

**Packing group**

III

**US DOT Shipping Description (Land)**

3077

**Proper shipping name**

Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)

**Class**

9

**Packaging group**

III

**IMO-IMDG Shipping Description (Sea)**

3077

**Proper shipping name**

Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)

**Class**

9

**Packaging group**

III

**IMO-IMDG code**

3077

**IMDG-Marine pollution**

Yes.

**IATA Shipping Description (Air)**

3077

**Proper shipping name**

Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)

**Class**

9

**Packaging group**

III

**Emergency action in case of accident**

Notify police and fire department immediately

**15. REGULATORY INFORMATION**

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**TSCA**

All components are listed or exempted.

**SARA 302**

No products were found.

**SARA 304**

No products were found.

**SARA 311**

Zinc oxide: Immediate (acute) health hazard, Delayed (chronic) health hazard

**16. OTHER INFORMATION**

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## Disclaimer & Caution

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