

Zinc Oxide, Micronized & Coated

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 /
March 26, 2012 / Rules and Regulation

Revision Date: 05-02-2015
Supersedes: 03-21-2014

1 PRODUCT & COMPANY IDENTIFICATION

Product Name: Zinc Oxide, Micronized & Coated
Synonyms: Zinc oxide, calamine
INCI Name: Zinc oxide, triethoxycaprylylsilane
CAS Number: 1314-13-2, 2943-75-1
Formula: Not available
Product Form: Microfine powder
Product Use: Cosmetic use

Distributor: MakingCosmetics.com Inc.
Address: 10800 231st Way NE
Redmond, WA 98053 (USA)
Phone / Fax: 425-292-9502 / 425-292-9601
Web: www.makingcosmetics.com

Emergency Telephone Number: 1-800-424-9300 (Chemtrec)

2 HAZARDS IDENTIFICATION

GHS Signal Word:

WARNING

GHS Hazard Pictograms:



GHS Hazard Statements:
GHS Precautionary Statements:
Potential Health Hazards:

H410: Very toxic to aquatic life with long lasting effects
P501: Dispose in accordance with local disposal regulations

Eyes:

Can cause irritation, tearing and mild temporary pain.

Inhalation:

Dust is non-toxic if inhaled, except of a few reported cases of metal fume fever. Some workers develop a tolerance after repeated daily exposure to zinc oxide fume. This tolerance is lost after short periods away from work.

Skin:

May cause skin irritation

Ingestion:

May cause vomiting, nausea, thirst, diarrhea and abdominal pain.

NFPA Ratings (704):

Health	2	Moderate
Flammability	1	Slight
Reactivity	0	Minimal
Specific Hazard	W	Use no water

3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Weight %</u>	<u>Molecular Weight</u>
Zinc Oxide	1314-13-2	96% - 99%	81.38 g/mol
Triethoxycaprylylsilane	2943-75-1	1% - 4%	276.49 g/mol

4 FIRST AID MEASURES

Eyes: In case of eye contact, rinse with plenty of water and seek medical attention if necessary
Inhalation: Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.
Skin: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary
Ingestion: Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.

5 FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Product is not flammable. Use appropriate media for adjacent fire. Cool unopened containers with water.
Special protective equipment & precautions for firefighters: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards: Emits toxic fumes under fire conditions. See also Stability and Reactivity section.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions:	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions:	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements
Methods and material for containment and cleaning up:	Pick up and arrange disposal without creating dust. Sweep up and place in suitable, closed containers for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations

7 HANDLING & STORAGE

Safe handling:	See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.
Safe storage:	Store in cool, dry well ventilated area. Keep away from incompatible materials.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Component</u>	<u>Exposure Limits</u>	<u>Basis</u>	<u>Entity</u>
Zinc Oxide	2.0 mg/m ³ -total dust	TWA	ACGIH
Zinc Oxide	10.0 mg/m ³ - total dust	STEL	ACGIH
Zinc Oxide	5.0 mg/m ³ - TWA respirable fraction	PEL	OSHA
Zinc Oxide	15.0 mg/m ³ - TWA total dust	PEL	OSHA
Zinc Oxide	5.0 mg/m ³ - TWA fume	PEL	OSHA
Zinc Oxide	10.0 mg/m ³ - STEL fume	PEL	OSHA
Zinc Oxide	5.0 mg/m ³ - total dust	REL	NIOSH
Zinc Oxide	15.0 mg/m ³ - 15min ceiling	REL	NIOSH

TWA: Time Weighted Average over 8 hours of work.
 TLV: Threshold Limit Value over 8 hours of work.
 REL: Recommended Exposure Limit
 PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.
 IDLH: Immediately Dangerous to Life or Health
 WEEL: Workplace Environmental Exposure Levels
 CEIL: Ceiling

Personal Protection:

Eyes:	Wear chemical safety glasses or goggles.
Inhalation:	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin:	Wear nitrile or rubber gloves, apron or lab coat.
Other:	Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance, Physical State:	Powdered solid	pH Value:	Not available
Odor:	Odorless	Vapor Density:	Not applicable
Color:	White	Evaporation Rate:	Not applicable
Medium Particle Size:	86 nm	Flash Point:	Not flammable
Molecular Weight:	81.38 g/mol	Specific Gravity:	5.606 g/cm ³ (water = 1)
Specific Surface Area (BET):	30-70 m ² /g	Solubility:	Insoluble in water (0.00016 g/100 ml cold water); soluble in acids and bases
Boiling Point:	1975 °C (3587 °F)		
Melting Point:	1975 °C (3587 °F)		

10 STABILITY AND REACTIVITY

Reactivity:	Product is stable
Chemical Stability:	Product is stable
Possibility of Hazardous Reactions:	Will not occur
Conditions to Avoid:	Not available
Hazardous Decomposition Products:	None
Incompatible Materials:	Zinc oxide and chlorinated rubber react violently at 215°C. Contact with magnesium and linseed oil can cause violent reaction. Contact with strong acids may cause vigorous reaction. Contact with strong bases will form water and soluble zincates. Contact between zinc oxide and hydrogen fluoride, aluminum and hexachloroethane, zinc chloride or phosphoric acid, and water should be avoided.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity (LD50):	240 mg/kg (intraperitoneal, rat), >8.4g/kg (oral, rat)
Carcinogenicity:	Not classified as carcinogenic material
Teratogenicity:	Zinc oxide at 2 to 38 mg/day had no effect on reproduction
Mutagenicity:	Zinc components have not been active in genetics assays
Embryotoxicity:	Not available
Specific Target Organ Toxicity:	Not available
Reproductive Toxicity:	Not available

12 ECOLOGICAL INFORMATION

Ecotoxicity:	It is very toxic to aquatic organisms. Since it take a very long time for zinc oxide to break down, it may cause adverse long-term effects in the aquatic environment.
Persistence and Degradability:	Not available
Bioaccumulative Potential:	Not available
Mobility in Soil:	Not available
PBT and vPvB Assessment:	Not available

13 DISPOSAL CONSIDERATIONS

Waste Residues:	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.
Product Containers:	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods

14 TRANSPORT INFORMATION

DOT (Dept. of Transportation, USA):	Not regulated
TDG (Transportation of Dangerous Goods, Canada):	Not regulated
IMDG (International Maritime Dangerous Goods):	Number UN3077, hazard class 9
IATA (International Air Transport Association):	Number UN3077, hazard class 9
ICAO (International Civil Aviation Organization):	Not regulated

15 REGULATORY INFORMATION

TSCA Inventory Status:	All ingredients are listed on the TSCA inventory
DSCL (EEC):	EC # 215-222-5
SARA 311/312:	Listed (acute)
SARA 313:	Compounds: Zn, Pb
U.S. EPA:	Reg. No. 71645-3, PC Code: 088502
U.S. TRI:	Reproductive Toxin - Yes, Development Toxin - Yes

16 OTHER INFORMATION

Revision Date:	05-02-2015
Compliance:	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
Disclaimer:	This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.