

Zinc Oxide, Micronized

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

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Supersedes: 04/25/2017

1 PRODUCT & COMPANY IDENTIFICATION

Product Name: Zinc Oxide, Micronized
Synonyms: Zinc oxide, calamine
INCI Name: Zinc Oxide
CAS Number: 1314-13-2
Formula: ZnO
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:

H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects

GHS Precautionary Statements:

P273: Avoid release into the environment.
P391: Collect spillage.
P501: Dispose in accordance with local disposal regulations

Potential Health Hazards:

Eyes: May cause irritation.
Inhalation: Avoid inhalation of dusts.
Skin: No data available
Ingestion: No data available

NFPA Ratings (704):

Health	1	Slight
Flammability	0	Minimal
Reactivity	0	Minimal
Specific Hazard	N/A	N/A

3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Weight %</u>	<u>Molecular Weight</u>
Zinc Oxide	1314-13-2	100.0%	No data available

4 FIRST AID MEASURES

Eyes: In case of eye contact, rinse with plenty of water for at least 15 minutes and seek medical attention if necessary
Inhalation: Move affected individual to fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.
Skin: Immediately flush with plenty of water for at least 15 minutes. Wash thoroughly with soap and water. Get medical attention if necessary
Ingestion: Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. Immediately rinse mouth and then drink plenty of water. Get medical attention if necessary.
Most important symptoms: Overexposure may cause: metal fume fever, metallic taste in mouth, tightness in the chest, fever, coughing, headache.

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 aerosol formation. Avoid formation of dusts. Take precautionary measures against static discharges.
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	15 mg/m ³ - total dust	PEL	OSHA
Zinc Oxide	5 mg/m ³ - respirable fraction	PEL	OSHA
Zinc Oxide	5 mg/m ³ - fumes/smoke	PEL	OSHA
Zinc Oxide	10 mg/m ³ - fumes/smoke	STEL	OSHA
Zinc Oxide	10 mg/m ³ - total dust	TWA	OSHA
Zinc Oxide	5 mg/m ³ - respirable fraction	TWA	OSHA
Zinc Oxide	5 mg/m ³ - fumes/smoke	TWA	OSHA
Zinc Oxide	2 mg/m ³ - respirable fraction	TWA	ACGIH
Zinc Oxide	10 mg/m ³ - respirable fraction	STEL	ACGIH

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:	Safety glasses with side-shields.
Inhalation:	Wear a NIOSH-certified (or equivalent) particulate respirator.
Skin:	Body protection must be chosen based on level of activity and exposure.
Other:	Avoid contact with eyes. Avoid inhalation of dusts. Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance, Physical State:	Powder	pH Value (50 g/L, 20 °C):	Approximately 7.0
Odor:	Odorless	Vapor Density:	Non-volatile solid
Color:	White	Evaporation Rate:	Non-volatile solid
Primary Particle Size:	<200 nm	Flash Point:	Study scientifically not justified
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)	Flammability:	Not flammable
Melting Point:	Approximately 1970 °C	Autoignition:	Not determined
Sublimation Point:	No data available	Bulk Density:	Approximately 500-700 kg/m ³
Explosion Limits:	Not relevant for solids	Self-Ignition Temperature:	Not self-igniting
Vapor Pressure:	Not determined	Viscosity (dynamic):	N/A for solid products
Partitioning coefficient n-octanol/water:	Study scientifically not justified	Solubility in Water:	1.5 g/L
Thermal Decomposition:	No decomposition if used as directed	Solubility (qualitative):	No data available
Viscosity (kinematic):	N/A for solid products		
Solubility (quantitative):	No data available		

Molar Mass: 81.39 g/mol

10 STABILITY AND REACTIVITY

Reactivity: No hazardous reactions if stored and handled as prescribed/indicated.
Chemical Stability: Product is stable
Possibility of Hazardous Reactions: Will not occur if stored and handled as prescribed/indicated
Conditions to Avoid: Sources of ignition: heat, sparks, open flame.
Hazardous Decomposition Products: None known
Incompatible Materials: Hydrogen peroxide, magnesium acids, strong bases, reducing agents.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity: Virtually non-toxic after a single ingestion. Virtually non-toxic by inhalation.
Carcinogenicity: The chemical structure does not suggest a specific alert for such an effect.
Teratogenicity: Did not cause malformations.
Mutagenicity: No data available
Embryotoxicity: No data available
Specific Target Organ Toxicity: No specific target organ toxicity to be expected after a single exposure.
Reproductive Toxicity: Studies give no indication of a developmental toxic effect.

12 ECOLOGICAL INFORMATION

Ecotoxicity: Very toxic (acute effect) to aquatic organisms.
Aquatic Vertebrates: LC50 (96h): >0.1-1 mg/L
Aquatic Invertebrates: EC50 (48h): 0.1-1 mg/L
Terrestrial: EC50 (72h): 0.1-1 mg/L
Persistence and Degradability: Inorganic product which cannot be eliminated from water by biological purification processes.
Bioaccumulative Potential: 1,130 - Ephemeroptera
 432 - Jordanella floridae
 4,680 - Marine algae
 16,600 - Marine algae
 16,700 - Oyster
Mobility in Soil: Study scientifically not justified
PBT and vPvB Assessment: No data 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): No data available
SARA 311/312: Not hazardous
SARA 313: Zinc Oxide (CAS: 1314-13-2)
NJ Right to Know: Zinc Oxide (CAS: 1314-13-2)

PA Right to Know: Zinc Oxide (CAS: 1314-13-2)

16 OTHER INFORMATION

Revision Date: 06/21/2019

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.