

## Titanium Dioxide


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

Revision Date: 04-20-2015  
Supersedes: 03-21-2014

### 1 PRODUCT & COMPANY IDENTIFICATION

<b>Product Name:</b> Titanium Dioxide	<b>Distributor:</b> MakingCosmetics.com Inc.
<b>Synonyms:</b> Titanic anhydride, anatase	<b>Address:</b> 10800 231 <sup>st</sup> Way NE
<b>INCI Name:</b> Titanium dioxide	Redmond, WA 98053 (USA)
<b>CAS Number:</b> 13463-67-7	<b>Phone / Fax:</b> 425-292-9502 / 425-292-9601
<b>Formula:</b> TiO <sub>2</sub>	<b>Web:</b> <a href="http://www.makingcosmetics.com">www.makingcosmetics.com</a>
<b>Product Form:</b> Powder	
<b>Product Use:</b> Cosmetic use	<b>Emergency Telephone Number:</b> 1-800-424-9300 (Chemtrec)

### 2 HAZARDS IDENTIFICATION

**GHS Classification:** Skin irritation (category 3), carcinogenicity (category 2)  
**GHS Signal Word:** DANGER  
**GHS Hazard Pictograms:** 

**GHS Hazard Statements:**  
H319: Causes serious eye irritation  
H335: May cause respiratory irritation  
H372: Causes damage to organs through prolonged or repeated exposure  
P281: Use personal protective equipment as required  
**GHS Precautionary Statements:** Eyes: Causes eye irritation.  
**Potential Health Hazards:** Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.  
Skin: May be harmful if absorbed through skin. Causes skin irritation.  
Ingestion: May be harmful if swallowed.

**NFPA Ratings (704):**

Health	1
Flammability	0
Reactivity	0
Specific Hazard	n/a

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Weight %</u>	<u>Molecular Weight</u>
Titanium Dioxide	13463-67-7	100%	79.87 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 arising from the chemical:** Emits toxic fumes (titanium oxides) under fire conditions. See also Stability and Reactivity section.

## 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment & emergency procedures:**  
**Environmental precautions:**

See section 8 for recommendations on the use of personal protective equipment.

**Methods and material for containment and cleaning up:**

Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements  
 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

**Precautions for safe handling:**  
**Conditions for safe storage, incl. any incompatibilities:**

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.  
 Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Component</u>	<u>Exposure Limits</u>	<u>Basis</u>	<u>Entity</u>
Titanium Dioxide	10 mg/m <sup>3</sup> 15 mg/m <sup>3</sup> (total dust)	TLV PEL	ACGIH OSHA

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

<b>Appearance, Physical State:</b>	Powdered solid	<b>Vapor Pressure:</b>	Not applicable
<b>Odor:</b>	Odorless	<b>Vapor Density:</b>	Not applicable
<b>Taste:</b>	Tasteless	<b>Evaporation Rate:</b>	Not applicable
<b>Color:</b>	White	<b>Flammability:</b>	Not flammable
<b>Molecular Weight:</b>	79.87 g/mol	<b>Upper/lower Explosive Limit:</b>	Not explosive
<b>pH (1% sol. in water)</b>	Not applicable	<b>Solubility:</b>	Insoluble in cold water, hydrochloric acid, nitric acid, diluted sulfuric acid, organic solvents. Soluble in hot sulfuric acid, hydrofluoric acid, alkali
<b>Boiling Point:</b>	2750°C (4982°F)		
<b>Melting Point:</b>	1855°C (3371°F)		
<b>Flash Point:</b>	Not flammable		
<b>Specific Gravity:</b>	4.26 (water = 1)		

## 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  
**Incompatible Materials:** Reactive with acids, slightly reactive with metals  
**Hazardous Decomposition Products:** Titanium oxides  
**Special Remarks:** Reaction of titanium dioxide and lithium occurs at around 200°C with a flash of light. The temperature can reach 900°C. A violent or incandescent reaction with metals (aluminum, calcium, magnesium, potassium, sodium, zinc, and lithium) may occur at high temperatures. Polymerization and corrosion will not occur.

## 11 TOXICOLOGICAL INFORMATION

<b>Acute Toxicity:</b>	Not classified
<b>Skin:</b>	LD50 Dermal (rabbit) > 10,000 mg/kg
<b>Eyes:</b>	Causes irritation, redness, watering eyes
<b>Respiratory:</b>	Causes irritation, coughing, wheezing
<b>Ingestion:</b>	LD50 Oral (rat) > 10,000 mg/kg, causes irritation, nausea, vomiting, diarrhea
<b>Carcinogenicity:</b>	<b>IARC:</b> 3-Group 3: Not classifiable for human (Titanium dioxide) <b>ACGIH:</b> A4: Not classifiable for human or animal (Titanium dioxide) <b>NTP:</b> No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP <b>OSHA:</b> No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen
<b>Teratogenicity:</b>	Not available
<b>Germ Cell Mutagenicity:</b>	Mutagenetic for somatic cells
<b>Embryotoxicity:</b>	Not available
<b>Specific Target Organ Toxicity:</b>	May cause damage to lungs and upper respiratory tract
<b>Reproductive Toxicity:</b>	Not available
<b>Respiratory/Skin Sensitization:</b>	Not available

## 12 ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	
<b>Aquatic Vertebrate:</b>	LC50 - other fish - > 1,000 mg/l - 96 h
<b>Aquatic Invertebrate:</b>	EC0 -Daphnia magna (Water flea) -1,000 mg/l - 48 h
<b>Terrestrial:</b>	Not available
<b>Persistence and Degradability:</b>	Not available
<b>Bioaccumulative Potential:</b>	Not available
<b>Mobility in Soil:</b>	Not available
<b>PBT and vPvB Assessment:</b>	Not available
<b>Other Adverse Effects:</b>	Not available

## 13 DISPOSAL CONSIDERATIONS

<b>Waste Residues:</b>	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.
<b>Product Containers:</b>	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

<b>DOT (Dept. of Transportation, USA):</b>	Not dangerous goods
<b>TDG (Transportation of Dangerous Goods, Canada):</b>	Not dangerous goods
<b>IMDG (International Maritime Dangerous Goods):</b>	Not dangerous goods
<b>IATA (International Air Transport Association):</b>	Not dangerous goods
<b>ICAO (International Civil Aviation Organization):</b>	Not dangerous goods

## 15 REGULATORY INFORMATION

<b>TSCA Inventory Status:</b>	All ingredients are listed on the TSCA inventory
<b>DSCL (EEC):</b>	All ingredients are listed on the DSCL inventory
<b>California Proposition 65:</b>	Not listed
<b>SARA 302:</b>	Not listed
<b>SARA 304:</b>	Not listed
<b>SARA 311:</b>	Listed: Titanium Dioxide
<b>SARA 312:</b>	Listed: Titanium Dioxide
<b>SARA 313:</b>	Not listed

## 16 OTHER INFORMATION

**Revision Date:** 04-20-2015

**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.