Titanium Dioxide, Micronized

SAFETY DATA SHEET

According to Federal Register / Vol. 77, No. 58 / March 26, 2012 / Rules and Regulation

Revision Date: 05-02-2015
Supersedes: 04-12-2015

1 PRODUCT & COMPANY IDENTIFICATION

Product Name: Titanium Dioxide, Micronized
Distributor: MakingCosmetics.com Inc.
Address: 10800 231st Way NE, Redmond, WA 98053 (USA)

Synonyms: Titanic anhydride, anatase
INCI Name: Titanium dioxide, aluminum hydroxide, lauric acid
CAS Number: 13463-67-7, 1333-84-2, 143-07-7
Phone / Fax: 425-292-9502 / 425-292-9601
Web: www.makingcosmetics.com

Formula: Not available
Product Form: Powder
Product Use: Cosmetic use
Emergency Telephone Number: 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

GHS Precautionary Statements:
P281: Use personal protective equipment as required

Potential Health Hazards:
Eyes: Causes eye irritation.
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):

<table>
<thead>
<tr>
<th>Health</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Specific Hazard</td>
<td>n/a</td>
</tr>
</tbody>
</table>

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Weight %</th>
<th>Molecular Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide</td>
<td>68411-27-8</td>
<td>78-84%</td>
<td>79.87 g/mol</td>
</tr>
<tr>
<td>Aluminum Hydroxide</td>
<td>1333-84-2</td>
<td>Proprietary</td>
<td>78.01 g/mol</td>
</tr>
<tr>
<td>Lauric Acid</td>
<td>143-07-7</td>
<td>Proprietary</td>
<td>200.32 g/mol</td>
</tr>
</tbody>
</table>

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 (titanium oxides) under fire conditions. See also section 10.
6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment & emergency procedures:
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. 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:
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 spills.

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

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure Limits</th>
<th>Basis</th>
<th>Entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide</td>
<td>10 mg/m³</td>
<td>TLV</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td>15 mg/m³ (total dust)</td>
<td>PEL</td>
<td>OSHA</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Appearance, Physical State:</th>
<th>Powdered solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor:</td>
<td>Odorless</td>
</tr>
<tr>
<td>Density:</td>
<td>4 g/cm³ at 20°C (68°F)</td>
</tr>
<tr>
<td>Color:</td>
<td>White</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>Not available</td>
</tr>
<tr>
<td>pH:</td>
<td>6.5 at 111g/l at 20°C</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>&gt;1,800°C (3,272°F)</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Soluble in alkali and hot sulphuric acid</td>
</tr>
</tbody>
</table>

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
Acute Toxicity: Not classified
Skin: LD50 Dermal (rabbit) > 10,000 mg/kg
Eyes: Causes irritation, redness, watering eyes
Respiratory: Causes irritation, coughing, wheezing
Ingestion: LD50 Oral (rat) > 10,000 mg/kg, causes irritation, nausea, vomiting, diarrhea
Carcinogenicity: IARC: 3-Group 3: Not classifiable for human (Titanium dioxide)
ACGIH: A4: Not classifiable for human or animal (Titanium dioxide)
NTP: 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
OSHA: No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen

Teratogenicity: Not available
Germ Cell Mutagenicity: Mutagenetic for somatic cells
Embryotoxicity: Not available
Specific Target Organ Toxicity: May cause damage to lungs and upper respiratory tract
Reproductive Toxicity: Not available
Respiratory/Skin Sensitization: Not available

12 ECOLOGICAL INFORMATION

Ecotoxicity:
Aquatic Vertebrate: LC50 - other fish - > 1,000 mg/l - 96 h
Aquatic Invertebrate: EC0 - Daphnia magna (Water flea) - 1,000 mg/l - 48 h
Terrestrial: Not available
Persistence and Degradability: Not available
Bioaccumulative Potential: Not available
Mobility in Soil: Not available
PBT and vPvB Assessment: Not available
Other Adverse Effects: 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 dangerous goods
TDG (Transportation of Dangerous Goods, Canada): Not dangerous goods
IMDG (International Maritime Dangerous Goods): Not dangerous goods
IATA (International Air Transport Association): Not dangerous goods
ICAO (International Civil Aviation Organization): Not dangerous goods

15 REGULATORY INFORMATION

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

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 suitableness & completeness of such information for his own particular use.