

MATERIAL SAFETY DATA SHEET

Micronized Titanium Dioxide

Section 1. Product and Company Identification

Product Name:	Micronized Titanium Dioxide
Chemical Name/Family:	Micronized Titanium Dioxide
CAS No.:	Mixture
Product Use:	Personal Care
Restrictions:	For Industrial Use Only
Company:	TKB TRADING, LLC
Address:	1101 9th Avenue, Oakland CA 94606 U.S.A.
Telephone:	510-922-9027

Section 2. Hazards Identification

GHS Classification:

Physical Hazards	Not classified
Health Hazards	
Acute toxicity, oral	Category 5
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Specific target organ toxicity, repeated exposure	Category 2
Environmental Hazards	Not Classified

GHS Label:

Symbol:



Signal Word: **Warning**

Hazard Classification:

Hazard Statement:

May be harmful if swallowed
Causes serious eye irritation
Suspected of causing cancer
May cause lung irritation, chest pain, and pulmonary edema through prolonged or repeated exposure.



MATERIAL SAFETY DATA SHEET

Precautionary Statement:

Prevention

Wash hands and exposed skin thoroughly after handling.

Wear eye protection/face protection.

Obtain instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

Do not breathe dust/fume/gas/mist/vapours/spray.

Response

Call a POISON CENTER/doctor/physician if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Storage:

Store locked up.

Disposal:

Dispose of contents/container in accordance with local/regional/international regulations.

Other Hazards and Potential Health Effects:

May cause irritation of the digestive tract. Ingestion of large amounts may cause pain, constipation or diarrhea. Do not eat, drink or smoke when using this product.

May be harmful if inhaled. Prolonged or repeated exposure may cause lung irritation, chest pain, and pulmonary edema.

Section 3. Composition/Information on Ingredients

Ingredients	CAS No.	Percent
Titanium dioxide	13463-67-7	73 – 83
Aluminum hydroxide	21645-51-2	7 – 17
Stearic Acid	57-11-4	5 – 15

Section 4. First Aid Measures

Skin Contact: IF ON SKIN: Gently wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Eye Contact: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion: IF SWALLOWED: Rinse mouth.
Call a POISON CENTER or doctor/physician if you feel unwell.

Section 5. Firefighting Measures

Specific Hazards in Case of Fire: The product is non-flammable.

Fire Extinguishing Media: Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable Extinguishing Media: None

Special Protective Equipment and Precaution for Firefighters: Evacuate personnel to a safe area. Wear self-contained breathing apparatus. Wear full protective equipment.

Unusual Fire & Explosion Hazards: None

Section 6. Accidental Release Measures

Personal Precautions & Protective Equipment: Wear proper protective equipment.

Environmental Precautions: Prevent spills from entering sewers, watercourses or low areas.
Avoid raising dust.

Methods and Materials for Containment and Cleaning up: Sweep up, place in a bag and hold for waste disposal. Collect spillage with a HEPA vacuum cleaner without raising dust.

Section 7. Handling and Storage

Handling Conditions: Avoid contact with eyes. Avoid raising dust. Handle in accordance with industrial hygiene measures. Provide appropriate exhaust ventilation at places where dust is formed.

Storage Conditions: Store in dry, well-ventilated place at temperatures below 120°F. Keep container tightly closed. Protect against direct sunlight. Avoid high stacking.

Section 8. Exposure Control/Personal Protection

Exposure Limits: Titanium dioxide (IV)
ACGIH(1992) TWA: 10 mg/m³ (LRT irr.)
OSHA-PEL: TWA 15 mg/m³

Stearic Acid
ACGIH(1985) TWA: 10 mg/m³ (Eye, skin & URT irr)

Appropriate engineering controls: Exhaust/ventilator should be available.
Eye wash station should be available.
Washing facilities should be available.

Personal protective equipment:

Respiratory Protection: NIOSH approved respirator as needed.

Hand Protection: Rubber or plastic gloves should be worn.

Eye Protection:	Safety glasses/goggles should be worn.
Skin and Body Protection:	Rubber apron.
Other Protective Equipment:	Eye wash equipment and safety shower.
Hygiene Measures:	Do not eat, drink or smoke when using this product. Wash hands and exposed skin thoroughly after handling.

Section 9. Physical and Chemical Properties

Physical State:	Powder
Color:	White
Odor:	Odorless
Odor Threshold:	No information available.
% Non-volatile by Weight:	N.A.
pH:	N.A.
Specific Gravity (77°F):	>1
% Volatile by Weight:	No information available.
Melting Point:	No information available.
Freezing Point:	No information available.
Boiling point:	No information available.
Flash Point:	No information available.
Evaporation Rate (BuAc=1):	N.A.
Flammability:	No information available.
Explosion Limits:	No information available.
Vapor Pressure (mmHg):	N.A.
Vapor Density (Air=1):	No information available.
Solubility:	Insoluble in water
Partition Coefficient:	No information available.
Auto-ignition Temperature:	No information available.
Viscosity:	No information available.
Decomposition Temperature:	No information available.

Section 10. Stability and Reactivity

Chemical Stability:	Stable
Hazardous Polymerization:	May Not Occur
Conditions to Avoid:	None
Incompatible Materials:	None
Hazardous Decomposition Products:	None

Section 11. Toxicological Information

Primary Routes of Entry:

Eye:	Yes	Skin:	No	Inhalation:	Yes	Ingestion:	No
------	-----	-------	----	-------------	-----	------------	----

Signs and Symptoms of Exposures: No information available.

Acute Toxicity: Oral (Titanium dioxide (IV))
 Rat LD50>20000 mg/kg
 Dermal (Titanium dioxide (IV))
 Rabbit approx. LD50>10000 mg/kg (IUCLID (2000))
 Dust /Mists Inhalation (Titanium dioxide (IV))
 Rat LC>6.82 mg/L 4hours (IUCLID (2000))

Irritant Properties: Skin corrosion/irritation
 The description of mild irritation from 0.5g, 24-hour application in testing using rabbits and no irritation from 0.1g, 24-hour application (IUCLID 2000)).
 Serious eye damage/irritation
 There are results of mild irritation in testing using rabbits; however, results of no irritation have also been obtained from separate testing where washing was performed 5 minutes after application (IUCLID 2000)).
 Skin sensitization
 There is a result of no sensitization (IUCLID 2000)) in skin sensitization testing using guinea pigs. And there is another result concluding no evidence of sensitization from 48-hour patch testing on a group of 290 subjects with dermatitis in which no reaction was observed in any subject (IUCLID (2000)). However both these results are list 2 data and guinea pig testing is not a test method recommended for classification.

Chronic Toxicity: No information available
Mutagenicity: The negative description in bone marrow cell micronucleus testing and chromosome aberration testing of intraperitoneal administration to mice.

Carcinogenicity: In lung inhalation exposure testing on rats, mice and hamsters, tumor incidence was only observed with high-dose administration to rats. Furthermore, a similar trend is seen in rats with inert poorly soluble particles and carcinogenicity is thought to be influenced by the action of the rat-specific immune system. A causal relationship between titanium dioxide and carcinogenicity has not been displayed in human epidemiological population studies conducted in Europe and North America.

IARC: [2B

NTP: [No

OSHA: No

Section 12. Ecological Information

Ecotoxicity (Aquatic and Terrestrial): No information available.
Bioaccumulative Potential No information available.
Mobility in Soil: No information available.
PBT and vPvB Assessment: No information available.
Other Adverse Effects: No information available.

Section 13. Disposal Considerations

Product & Contaminated Packaging: Dispose of contents / container in accordance with local / regional / national /international regulation.

Section 14. Transport Information

Land Transport (DOT): Not Regulated
Sea Transport (IMDG): Not Regulated
Air Transport (IATA): Not Regulated
Environmental Hazards (e.g., Marine pollutant): No information available.

Section 15. Regulatory Information

International Inventories:

TSCA (USA): No information available.
DSL (Canada): No information available.
ENCS (Japan) No information available.
REACH (Europe): No information available.
IECSC (China): No information available.
KECL (Korea): No information available.
PICCS (Philippines): No information available.
AICS (Australia): No information available.
ERMA (New Zealand): No information available.

Federal Regulations:

SARA 313: No information available.
SARA 311/312: No information available.
Clean Water Act: No information available.
Clean Air Act, Section 112 HAPs (See 40CFR61): No information available.

State Regulations:

Massachusetts Right to Know Components: No information available.
New Jersey Right to Know Components: No information available.
Pennsylvania Right to Know Components: No information available.
California Proposition 65: No information available.

Section 16. Other Information

WHMIS Classification: No information available.

HMIS Rating:

Health Hazard 1
Flammability: 0
Reactivity: 0
Personal Protection Equipment: X