

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

- 1.1 Product Name:** Titanium Dioxide (Pigment)
Product Code: 513-742X
- 1.2 Intended Use:** Compound used in customer substance/mixture/product.
- 1.3 Supplier:** Majestic Mountain Sage Inc
2490 S 1350 W
Nibley, Utah 84321 - United States of America
T 435.755.0863 - F 435.755.2108
www.TheSage.com
- 1.4 Emergency Telephone Number**
No additional information available.

SECTION 2: Hazards Identification

This mixture has not been tested as a whole. It contains ingredients which could be released from the mixture in concentrations which would exceed an established OSHA permissible exposure limit or ACGIH Threshold Limit Value, or could present a health risk to employees.

2.1 Classification of the Chemical

The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

Combustible Dust USH003: May form combustible dust concentrations in air.

2.2 Label Elements

The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazard Statements

USH003 May form combustible dust concentrations in air.

2.3 Ingredient(s) with Unknown Acute Toxicity

None.

2.4 Hazards Not Otherwise Classified

Dust may be irritating to eyes.; Dust may be irritating to skin; Dust may be irritating to lungs and cause sneezing.

SECTION 3: Composition/Information on Ingredients

3.1 Substances

Not available.

3.2 Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

Quantity	Name	Identification Number	Classification	Registration Number
90-100%	Titanium Dioxide	CAS: 13463-67-7 EC: 236-675-5	Comb. Dust, USH003	01-211948937 9-17-0000

SECTION 4: First Aid Measures

4.1 First Aid Measures

Skin Contact: Remove contaminated clothes. Wash thoroughly with water and soap. Contact physician if symptoms persist.

Eye Contact: Flush immediately with water for at least 15 minutes. Remove contacts if present and safe to do so. Contact physician if symptoms persist.

Ingestion: Do not induce vomiting, rinse mouth with water and obtain medical advice.

Inhalation: Remove from exposure site to fresh air and keep at rest. Obtain medical advice if symptoms persist.

4.2 Most Important Symptoms/Effects, Acute and Delayed

Not available.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Not available.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

Suitable: Water, CO₂, foam, chemical powders, according to the materials involved in the fire.

Unsuitable: None in particular.

5.2 Special Hazards Arising from the Chemical

Do not inhale explosion and combustion gases. Burning produces heavy smoke.

Hazardous Combustion Products: Not available.

Explosive Properties: Not available.

Oxidizing Properties: Not available.

5.3 Special Protective Equipment and Precautions for Firefighters

Use suitable breathing apparatus. Collect contaminated fire extinguishing water separately, this must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protection equipment. Remove all personnel to safety. See protective measures under Section 7 and 8.

6.2 Methods and Material for Containment and Cleaning Up

Suitable Material For Taking Up: Dry and inert adsorbing material (e.g. vermiculite, sand, earth). Wash with plenty of water.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

Avoid contact with skin and eyes, inhalation of vapors and mists. Do not eat or drink while working. See also Section 8 for recommended protective equipment.

7.2 Conditions for safe storage, Including Any Incompatibilities

Storage Temperature: Not available.

Incompatible Materials: Strong oxidizing agents, peroxides, acids, alkali metals.

Storage Premises: Adequately ventilated premises.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Community Occupational Exposure Limits (OEL)

OEL Type	Long/Short Term mg/m ³	Long/Short Term ppm	Notes
OSHA	15	Not available	
ACGIH	10	Not available	A4 - Not classifiable as a human carcinogen; lower respiratory tract irritation
EU	10.000	Not available	

Predicted No Effect Concentration (PNEC) Values

PNEC Limit	Exposure Route	Exposure Frequency	Remarks
1.000 mg/L	Fresh Water	-	-
1000.000 mg/kg	Freshwater Sediments	-	-
0.127 mg/L	Marine Water	-	-
100.000 mg/kg	Marine Water Sediments	-	-
100.000 mg/kg	Soil (Agricultural)	-	-
100.000 mg/kg	Microorganisms in Sewage Treatments	-	-
1667.000 mg/kg	Food Chain	-	-

Derived No Effect Level (DNEL) Values

	Levels mg/m3	Exposure Route	Exposure Frequency Remarks
Worker Industry	10.000	Inhalative	Long Term, Local Effects
Worker Professional	10.000	Inhalative	Long Term, Local Effects
Consumer	700.000	Oral	Long Term, Systemic Effects

Appropriate Engineering Controls: Not available.

8.2 Individual Protection Measures

Eye/Face Protection: Not needed for normal use. Anyway, operate according to good working practices.

Skin Protection: No special precaution must be adopted for normal use.

Hand Protection: Not needed for normal use.

Respiratory Protection: Control worker exposure to below detectable levels. However, if an effective ventilation system is not in use, use a NIOSH-approved respirator for organic vapors and/or dusts. Where appropriate, use closed systems to transfer and process this material. If appropriate, isolate mixing rooms and other areas where this material is used or openly handled. Maintain these areas under negative air pressure relative to the rest of the plant. Use local exhaust as required to capture all airborne vapors or dust.

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical State:	Solid
Appearance:	Powder, White
Odor:	Characteristic
Odor Threshold:	Not available
pH:	Not available
Melting Point/Range:	1800°C (3272°F)
Boiling Point/Range:	Not available
Flash Point:	Not applicable
Evaporation Rate:	Not available

Upper/Lower Flammability or Explosive Limits:	Not available
Vapor Density:	Not available
Vapor Pressure (20 °C):	Not available
Density (20 °C):	Not available
Water Solubility:	Insoluble
Lipid Solubility:	Not available
Partition Coefficient (N-octanol/water):	Not available
Auto-ignition Temp:	Not available
Decomposition Temp:	Not available
Viscosity (20 °C):	Not available
Explosive Properties:	Not available
Oxidizing Properties:	Not available
Flammability (Solid, Gas):	Not available

9.2 Other Information

Substance Group	
Relevant Properties:	Not available
Miscibility:	Not available
Fat Solubility:	Not available
Conductivity:	Not available

SECTION 10: Stability and Reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical Stability

Data not available.

10.3 Possibility of Hazardous Reactions

Burning products carbon monoxide and/or carbon dioxide.

10.4 Conditions to Avoid

Stable under normal conditions of temperature and pressure.

10.5 Incompatible Materials

Avoid strong oxidizing agents, peroxides, acids, alkali metals.

10.6 Hazardous Decomposition Products

Burning products carbon monoxide and/or carbon dioxide.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

Toxicological Information of the Substance:

Titanium Dioxide	a) acute toxicity	LD50 > 10000.00000 mg/kg	Rat
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Toxicological Information on Main Components of the Mixture:

Titanium Dioxide	a) acute toxicity	LD50 > 5000.00000 mg/kg	Rat - Oral
Titanium Dioxide	a) acute toxicity	LD50 > 6.82000 mg/L 4h	Rat - Inhalation

If not differently specified, the information required in the regulation and listed below must be considered as N/A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) Listed on the IARC Monographs: Titanium Dioxide Group 2B

Substance(s) Listed on OSHA Carcinogen(s): Titanium Dioxide

Substance(s) Listed on NIOSH Carcinogen(s): Titanium Dioxide

Substance(s) Listed on the NTP Report on Carcinogens: None.

SECTION 12: Ecological Information

12.1 Toxicity

Adopt good working practices so that the product is not released into the environment.

12.2 Persistence and Degradability

Not available.

12.3 Bioaccumulative Potential

Not available.

12.4 Mobility in Soil

Not available.

12.5 Other Adverse Effects

Not available.

SECTION 13: Disposal Considerations

13.1 Waste Treatment Method

Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environmental agency for specific rules). Do not dump into sewers, any body of water or onto the ground. Recover if possible. In so doing, comply with the local and national regulation currently in force.

SECTION 14: Transport Information

14.1 UN Number

ADR-UN Number:	N/A
DOT-UN Number:	N/A
IATA-UN Number:	N/A
IMDG-UN Number:	N/A

14.2 Proper Shipping Name

ADR-Shipping Name:	N/A
DOT Proper Shipping Name:	N/A
IATA-Technical Name:	N/A
IMDG-Technical Name:	N/A

14.3 Transport Hazard Class(es)

ADR-Class:	N/A
DOT Hazard Class:	N/A
IATA-Class:	N/A
IMDG-Class:	N/A

14.4 Packing Group

ADR-Packing Group:	N/A
Exempted for ADR:	N/A
IATA-Packing Group:	N/A
IMDG-Packing Group:	N/A

14.5 Environmental Hazards

Marine Pollutant: No
Environmental Pollutant: Not available.

14.6 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code

Not available.

14.7 Special Precautions

Department of Transportation (DOT/TDG):

DOT-Special Provision(s): N/A
DOT Label(s): N/A
DOT Symbol: N/A
DOT Cargo Aircraft: N/A
DOT Passenger Aircraft: N/A
DOT Bulk: N/A
DOT Non Bulk: N/A

Road and Rail (ADR-RID):

ADR-Label: N/A
ADR-Upper Number: N/A
ADR-Tunnel Restriction Code: N/A

Air (IATA):

IATA-Passenger Aircraft: N/A
IATA-Cargo Aircraft: N/A
IATA-Label: N/A
IATA-Sub Risk: N/A
IATA-Erg: N/A
IATA-Special Provisioning: N/A

Sea (IMDG):

IMDG-Stowage Code: N/A
IMDG Stowage Note: N/A
IMDG-Sub Risk: N/A
IMDG-Special Provisioning: N/A
IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: N/A
IMDG-MFAG: N/A

SECTION 15: Regulatory Information

15.1 U.S. Federal Regulations

TSCA - Toxic Substances Control Act

TSCA Inventory: All component(s) are listed on the TSCA inventory.

TSCA Listed Substances: Titanium Dioxide is listed in TSCA Section 8b.

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances: No substances listed.

Section 304 - Hazardous Substances: No substances listed.

Section 313 - Toxic Chemical List: No substances listed.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substances listed under CERCLA: No substances listed.

CAA - Clean Air Act

CAA listed substances: No substances listed.

CWA - Clean Water Act

CWA listed substances: No substances listed.

15.2 U.S. State Regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

Titanium Dioxide is listed as carcinogen.

Massachusetts Right to Know

Substance(s) listed under Massachusetts Right to Know: Titanium Dioxide.

Pennsylvania Right to Know

Substance(s) listed under Pennsylvania Right to Know: Titanium Dioxide.

New Jersey Right to Know

Substances listed under New Jersey Right to Know: Titanium Dioxide.

S1. This product contains a chemical that is on the Proposition 65 list of chemicals known to the State of California to cause cancer (Titanium Dioxide). However, the listing of Titanium Dioxide applies only to airborne, unbound particles of respirable size (mass median aerodynamic diameter 10 microns or smaller). Based on particle size analysis, the Titanium Dioxide present in this product, as shipped, is not of a respirable size. The customer is responsible for determining whether its use of this product in its application is subject to Proposition 65.

15.3 Canada Regulations

DSL-list (Canada)

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

SECTION 16: Other Information

16.1 Definitions

Code	Description
USH003	May form combustible dust concentration in air.

Legend to Abbreviations and Acronyms Used in the Safety Data Sheet:

ADR: European Agreement concerning the International Carriage of dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Good by Rail

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

CLP: Classification, Labeling, Packaging

EINECS: European Inventory of Existing Commercial Chemical Substances

INCI: International Nomenclature of Cosmetic Ingredients

CAS: chemical Abstracts Service (division of the American Chemical Society)

GefStoffVO: Ordinance on Hazardous Substances, Germany

LC50: Lethal Concentration, for 50 percent of test population

LD50: Lethal dose, for 50 percent of test population

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

TLV: Threshold Limiting Value

TWATLV: Threshold Limit Value for the Time Weighting Average 8 hour day.
(ACGIH Standard)

STEL: Short Term Exposure Limit

STOT: Specific Target Organ Toxicity

WGK: German Water Hazard Class

KST: Explosion coefficient

N/A: Not applicable

Notes:

This safety data sheet is based on the properties of the material known at the time the data sheet was issued. The safety data sheet is intended to provide information for a health and safety assessment of the material and the circumstances, under which it is packaged, stored or applied in the workplace. For such a safety assessment holds no responsibility. This document is not intended for quality assurance purposes.