

BRONZE

Revision date: 10/17/06

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NFPA Classification:

Health: 1

Flammability: 0

Instability: 0

Special Hazards:

HMIS Classification:

Health: 1

Flammability: 0

Physical Hazard: 0

Personal Protection: E

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical Name: Chemical Mixture

Product Use: Colorant.

Supplier: TKB Trading LLC,
1101 9th Avenue,
Oakland, CA 94606,
510-451-9011

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient CAS Number	Weight in Percent (%)	Notes
Titanium Dioxide 13463-67-7	2.0 - 4.0	None.
Mica 12001-26-2	58.0 - 66.0	None.
Iron Oxide - Fe ₂ O ₃ 1309-37-1	32.0 - 38.0	None.

3. HAZARDS IDENTIFICATION

Emergency Overview:

Color: Brown
Form: Powder
Odor: Odorless

Flash Point, °C: Not Applicable

Most Important Hazards: May cause irritation of the eyes, skin and respiratory system. Prolonged or repeated exposure may cause pulmonary problems.

Potential Health Effects:

Inhalation: May cause irritation of the respiratory tract. Prolonged or repeated exposure may result in difficulty breathing and pulmonary problems.

Ingestion: No adverse health effects are expected from swallowing.

Skin Contact: May cause skin irritation.

Eye Contact: Dust may cause irritation and inflammation.

Carcinogenicity:

Ingredient CAS Number	Weight in Percent (%)	NTP (Y/N)	IARC (See Notes)	OSHA (Y/N)	ACGIH (See Notes)
Titanium Dioxide 13463-67-7	2.0 - 4.0	N	N3	N	A4
Mica 12001-26-2	58.0 - 66.0	N	N	N	N
Iron Oxide - Fe ₂ O ₃ 1309-37-1	32.0 - 38.0	N	N	N	A4

Notes:

IARC: Y1=Carcinogenic to humans; Y2A=Probably carcinogenic to humans; Y2B=Possibly carcinogenic to humans; N3=Not classifiable as to its carcinogenicity; N=Not studied or probably not carcinogenic.

ACGIH: A1=Confirmed human carcinogen; A2=Suspected human carcinogen; A3=Confirmed animal carcinogen; A4=Not classifiable as a human carcinogen; A5=Not suspected as a human carcinogen; N=Not studied.

Chronic Health Hazards: Prolonged or repeated exposure to dust may cause pulmonary problems.

Aggravated Medical Conditions: Pulmonary disorders. Allergies.

4. FIRST AID MEASURES

Inhalation: Move person to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

Ingestion: If large quantities are ingested, seek medical advice. Not a hazard under normal use conditions.

Skin Contact: Wash with soap and water. Get medical attention if irritation persists.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point, °C: Not Applicable

Autoignition Temperature, °C: Not Applicable

Lower Explosive Limit, %: Not Applicable

Upper Explosive Limit, %: Not Applicable

Extinguishing Media: None - does not burn. Use extinguishing media appropriate for surrounding fire.

Fire Fighting Procedures: Positive pressure, self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Not a fire or explosion hazard.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Scoop up or vacuum into a container for reclamation or disposal. Avoid dusting.

7. HANDLING AND STORAGE

- Store in cool dry place.
- Avoid generating or breathing dust.
- Avoid contact with eyes.
- Material may be slippery when wet.
- Wash thoroughly after handling.
- Use only with adequate ventilation.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient CAS Number	Weight in Percent (%)	OSHA PEL	ACGIH TLV
Titanium Dioxide 13463-67-7	2.0 - 4.0	15 mg/m ³ (Total dust)	10 mg/m ³ (Total dust)
Mica 12001-26-2	58.0 - 66.0	20 mppcf	3 mg/m ³ (Respirable fraction)
Iron Oxide - Fe ₂ O ₃ 1309-37-1	32.0 - 38.0	10 mg/m ³ (as Fe, total particulate)	5 mg/m ³ (Respirable fraction)

Unless otherwise noted, all values are reported as 8-hour Time-Weighted Averages (TWAs) and total dust (particulates only). All ACGIH TLVs refer to the 2006 standards. Unless otherwise noted, all OSHA PELs refer to 29 CFR Part 1910 Air Contaminants: Final Rule, June 30, 1993.

Personal Protective Equipment: Safety glasses with side shields. Wear suitable gloves.

Respiratory Protection: Use a NIOSH/MSHA approved respirator as necessary to protect from: dust. If respiratory protection is used, follow all requirements for respiratory programs set forth in OSHA regulations (29 CFR 1910.134).

Ventilation: General ventilation. Local exhaust ventilation is recommended to control exposures to within applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Powder
Color: Brown
Odor: Odorless

Melting Point, °C:	Decomposes
Density:	3.3Kg/L
Bulk Density:	17.1g/100 cc
Specific Gravity:	3.3
Solubility (in water):	Insoluble
pH:	6.0-11.0 (4% H ₂ O)
Particle Size Range, µ:	(95%) 6 - 90 µm

10. STABILITY AND REACTIVITY

Stability Data:	Stable
Conditions/Hazards to Avoid:	None known.
Incompatibility (Materials to Avoid):	None known.
Hazardous Decomposition Products:	None known.
Polymerization:	Will not occur.
Polymerization - Avoid:	None known.

11. TOXICOLOGICAL INFORMATION

Information on Product:

No data available.

Information on Components:

Ingredient CAS Number	Weight in Percent (%)	Acute Toxicity - Oral	Acute Toxicity - Inhalation	Acute Toxicity - Dermal	Acute Toxicity - Other
Titanium Dioxide 13463-67-7	2.0 - 4.0	> 5,000 mg/kg (rat)	Not Available	Not Available	Not Available
Mica 12001-26-2	58.0 - 66.0	Not Available	Not Available	Not Available	Not Available
Iron Oxide - Fe ₂ O ₃ 1309-37-1	32.0 - 38.0	Not Available	Not Available	Not Available	Not Available

12. ECOLOGICAL INFORMATION

Information on Product:

Environmental Fate:	Not expected to present deleterious adverse environmental effects.
Mobility:	Aquatic toxicity is unlikely due to low solubility
Persistence/Degradeability:	No data available to the best of our knowledge.
Ecotoxicological Information:	No data available.

13. DISPOSAL CONSIDERATIONS

US EPA Waste Number: Not Regulated

Disposal of Waste Method: This product, if disposed as received, is a non-hazardous waste. Local disposal laws and regulations will determine the proper waste disposal/recycling/reclamation procedure. Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected.

14. TRANSPORT INFORMATION

International Transport Regulations:

ICAO Class: Not Regulated

IMO Class: Not Regulated

US Transportation Regulations:

DOT Classification: Not Regulated

Canadian Transportation of Dangerous Goods (TDG):

TDG Classification: Not Regulated

15. REGULATORY INFORMATION

International Inventories:

United States: This product or its ingredients are listed on or compliant with the TSCA Inventory.
Canada: This product or its ingredients are listed on or compliant with the DSL.
Europe: This product or its ingredients are listed on or compliant with EINECS.
Japan: This product or its ingredients are listed on or compliant with MITI.
Australia: This product or its ingredients are listed on or compliant with AICS.
Korea: This product or its ingredients are listed on or compliant with the ECL.
Philippines: This product or its ingredients are listed on or compliant with PICCS.
China: This product or its ingredients are listed on or compliant with the IECSC.

US Federal Regulations:

Ingredient CAS Number	Weight in Percent (%)	Subject to SARA 313 Reporting
Titanium Dioxide 13463-67-7	2.0 - 4.0	No
Mica 12001-26-2	58.0 - 66.0	No
Iron Oxide - Fe ₂ O ₃ 1309-37-1	32.0 - 38.0	No

SARA 311/ 312 Hazard Categories:

Acute Health Hazard

CAA 602 Ozone Depleting Substances (ODS):

This product neither contains nor is manufactured with an ozone depleting substance subject to the labeling requirements of the Clean Air Act Amendments 1990 and 40 CFR Part 82.

VOC Content: None

US State Regulations:

VOC Content (CARB): None

Canadian Regulations:**WHMIS Classification:**

Not Regulated

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

16. OTHER INFORMATION

Revision number: 12

Section(s) Revised in this Version: Section 1: Chemical Product and Company Identification
Section 16: Other Information

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