MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Manufacturer/Distributor : Kobo Products, Inc.
Address : 3474 South Clinton Avenue
South Plainfield, NJ 07080
Emergency Telephone # : (908) 757-0033
Facsimile Number : (908) 757-0905

Trade Name : **KTZ®VIBRANT GOLD-I2**
Chemical Name/ Synonyms: Mica (And) Titanium Dioxide (And) Iron Oxide (And) Isopropyl Titanium Triisostearate
Material Uses : Pigment
Chemical Family : Inorganic Pigment

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	EINECS #	EU Phrases
Mica	12001-26-2	310-127-6	S22/25/36
Titanium Dioxide	13463-67-7	236-675-5	
Iron Oxide	1309-37-1	215-168-2	
Isopropyl Titanium Triisostearate	61417-49-0	262-774-8	

SECTION 3: HAZARD IDENTIFICATION

Physical State and Appearance: Solid. (Bright gold, odorless, sparkling powder)

Emergency Overview: May cause respiratory tract, eye and skin irritation.

Routes of Entry: Eye contact. Inhalation. Ingestion (not anticipated).

Potential Acute Health Effects

Eyes: May cause eye irritation. Symptoms include: itching and redness after contact.
Skin: May cause mild skin irritation. Symptoms include: itching and redness after contact.
Inhalation: May cause respiratory tract irritation. Symptoms include: coughing, wheezing or shortness of breath when inhaled.
Ingestion: Not an intended route of exposure. May be hazardous in case of ingestion. Symptoms include gastrointestinal tract upset and diarrhea.

Potential Chronic Health Effects

Additional information See Toxicological information (section 11)

Medical Conditions Overexposure: Aggravated by Repeated or prolonged inhalation of any dust particulate may aggravate respiratory medical conditions.

SECTION 4: FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If symptoms persist, seek medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reusing. Thoroughly clean shoes before reuse. If symptoms develop, seek medical attention.

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms persist, seek medical attention.

Ingestion: Do not ingest. If this material is swallowed, call a physician immediately. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

Flammability: Non-flammable

Fire Fighting Media And Instructions: In case of fire, use water spray (fog), foam, dry chemical, or CO2

Protective Clothing (fire): Wear self-contained breathing apparatus and full protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Small Spill and Leak Use a tool to scoop up solid or absorbed material and place into appropriate labeled waste container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional regulatory requirements.

Large Spill and Leak Use appropriate tools to put the spill material into a labeled waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional regulatory requirements. Check TLV in section 8 of MSDS and with local authorities.

Spill Kit information No specific spill kit required for this product.

SECTION 7: HANDLING AND STORAGE

Handling : Avoid generating dust. Avoid breathing dust. Use only with adequate ventilation. Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Keep container closed. Wash thoroughly after handling.

Storage : Keep container dry. Keep containers sealed until ready for use.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Levels:

	OSHA		ACGIH	
Component	TWA	PEL	TWA	TLV
TiO2	15 mg/m^3		10 mg/m^3	
Mica	3 mg/m^3		3 mg/m^3	
Iron Oxide	15 mg/m3		10 mg/m3	

Personal Protection:
Eye: Safety glasses with side shields or goggles
Body: Lab coat
Respiratory: Use NIOSH/MSHA approved air-purifying respirator as needed to control exposure.
Hand: Recommended: Gloves

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (°C)	:	N/A	Percent Volatile By Vol. (%)	:	N/A
Freezing Point (°C)	:	N/A	Vapor Density (Air=1)	:	N/A
Melting Point (°C)	:	> 1000	Evaporation Rate (Buac=1)	:	N/A
Vapor Pressure (mm hg)	:	N/A	Solubility In Water	:	Insoluble
Bulk Density (g/cbi.)	:	N/A	Appearance & Odor	:	Free Flowing Gold Powder. No Odor

SECTION 10: STABILITY AND REACTIVITY

Stable:	Stable
Hazardous Polymerization:	None
Incompatibility:	Oxidizing materials. Acids.
Hazardous Decomposition Products:	None

SECTION 11: TOXICOLOGICAL INFORMATION

	Titanium Dioxide*	Iron Oxide
Skin Irritation	: Dermal LD_{50} > 10 g/kg (Rabbit)	No Data (Rabbit)
Eye Irritation	: No data	Mild-Irritant (rabbit) Average Draize score = 0.00
Acute Oral Toxicity	: Non-toxic, LD_{50} > 25 g/kg (rat)	Non-toxic, LD_{50} > 15 g/kg (rat)
Inhalation LC_{50}	: >6.82 mg/L (4 hour)	LD_{50}>5,000 g/kg

*: Trochimowicz. et. Al., J. Appl. Tox. 8, 383-385 (1998)

	Mica
Skin Irritation	No data
Eye Irritation	No data
Oral Toxicity (rat)	LD_{50} > 15,000 mg/kg
Sensitization	Non-toxic

Chronic Effects on Humans **CARCINOGENIC EFFECTS:** Classified None by NIOSH [Titanium Dioxide]. Classified A4 (not classifiable for human or animal) by ACGIH. Classifiable Group 2B (Possibly carcinogenic to humans) by IARC [Titanium Dioxide].
Classified None by NIOSH [Iron Oxide]. Classified A4 (not classifiable for human or animal) by AGIH, 3 (not classifiable for human) by IARC [Iron Oxide].
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
Repeated or prolonged exposure to the substance at concentrations above exposure limits may cause respiratory damage.
Target Organs: eyes, lungs, skin.

Acute Effects on Humans May cause skin, eye, and respiratory irritation.

Sensitization Repeated or prolonged exposure to the substance at concentrations above the exposure limits may cause respiratory tract and lung sensitization.

Carcinogenic Effects This material is not known to cause cancer in animals or humans.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity of the Products Of Biodegradation: N/A

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of according to all federal, state and local regulations.

SECTION 14: TRANSPORT INFORMATION

DOT Classification Not regulated.
TDG Classification Not regulated.
IMO/IMDG Classification Not regulated.
ICAO/IATA Classification Not regulated.

SECTION 15: REGULATORY INFORMATION

This product or its components are on the following inventories: European Inventory of Existing Commercial Chemicals
Australia Inventory of Chemical Substances
Japan Inventory of Existing & New Chemical Substances
Canada DSL Inventory

SECTION 16: OTHER INFORMATION

Hazardous Material Information System (U.S.A.) [Ratings Key: 4= Highest hazard, 0= Lowest hazard]

Health	1
Fire Hazard	0
Reactivity	0
Personal Protection	E

EU S phrases : S22/25/36- Do not breathe dust, avoid contact with eyes and wear suitable protective clothing.

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Revised By : Nancy O'Shea
Date Revised : May 21, 2009
By Pam Notino

Note:
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