

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Manufacturer/Distributor: Kobo Products, Inc.
Address: 3474 South Clinton Avenue
South Plainfield, NJ 07080, USA
Emergency Telephone #: (908) 757-0033
Facsimile Number: (908) 757-0905
Trade Name: **KTZ® MOSS**
INCI: Mica (And) Titanium Dioxide (And) Iron Oxides (C.I. 77491) (And) Ferric Ferrocyanide
Chemical Name: Mica (And) Titanium Dioxide (And) Ferrous Oxide (And) Ferric Ferrocyanide
Material Uses: Pigment
Chemical Family: Inorganic Pigment

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	EINECS #
Mica	12001-26-2	310-127-6
Titanium Dioxide	13463-67-7	236-675-5
Iron Oxides	1309-37-1	215-168-2
Ferric Ferrocyanide	14038-43-8	237-875-5

SECTION 3: HAZARD IDENTIFICATION

Physical State and Appearance: Solid (odorless, green powder)

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

Routes of Entry: Skin contact and 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

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. 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

<u>Component</u>	<u>OSHA</u>		<u>ACGIH</u>	
	<u>TWA</u>	<u>PEL</u>	<u>TWA</u>	<u>TLV</u>
Mica	3 mg/m ³		3 mg/m ³	
TiO ₂	15 mg/m ³		10 mg/m ³	
Iron Oxides	15 mg/m ³		10 mg/m ³	

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	: Green powder. No odor

SECTION 10: STABILITY AND REACTIVITY

Stable: Stable

Hazardous Polymerization: None

Incompatibility: Strong oxidizing agents and strong acids

Hazardous Decomposition Products: Nature of decomposition products is not known

SECTION 11: TOXICOLOGICAL INFORMATION

	<u>Titanium Dioxide*</u>	<u>Iron Oxide</u>
Skin Irritation:	Dermal LD ₅₀ > 10 g/kg (Rabbit)	No Data
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 LC₅₀:	>6.82 mg/L (4 hour)	LD ₅₀ >5,000 g/kg

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

	<u>Mica</u>
Skin Irritation:	No data
Eye Irritation:	No data
Oral Toxicity:	LD ₅₀ > 15,000 mg/kg (rat)
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

Date Prepared : July 14, 2009
 By Neringa Kontrimiene

Note:
 The statements made here are based upon technical data that Kobo Products Inc. believes to be reliable, are intended to describe the product with regard to necessary safety precautions. They do not guarantee special characteristics. This information is furnished without warranty, expressed or implied, except that it is accurate to the best of our current knowledge.