

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® ARUBAN CORAL-I2**
Chemical Name/ Synonyms: Mica (And) Titanium Dioxide (And) Iron Oxide (C.I. 77491) (And) Isopropyl Titanium Triisostearate

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

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

SECTION 3: HAZARD IDENTIFICATION

No particular danger

SECTION 4: FIRST AID MEASURES

Effects and Symptoms:

Effects of Overexposure: May cause mechanical irritation to eyes.
Medical Conditions Aggravated by Exposure: Persons with respiratory conditions maybe at increased risk.
Primary Route(s) of Entry: Inhalation, Ingestion and eyes.

Emergency First Aid:

Eye Contact: Flush eyes with water for at least 15 min. See physician if irritation persists.
Skin Contact: Flush skin with soap and water for at least 15 min.
Inhalation: Remove to fresh air. If breathing is difficult give oxygen. See physician.
Ingestion: None needed for small amounts. For large amounts, if conscious, give water and call physician. Do not induce vomiting.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point (Closed Cup) : N/A
Flammable Limits LEL/UEL % : N/A
Extinguishing Media : Water, Dry Chemical, Foam, CO₂
Special Fire Fighting Procedures : Self-contained breathing apparatus and protective clothing.
Unusual Fire And Explosion Hazards: Can burn in fire, releasing toxic vapors. Vapors are heavier than air and can travel along ground to remote ignition sources.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions : Eye contact and inhalation.
Environmental Precautions: : Prevent material from contaminating soil or entering sewerage and drainage systems.
Spill response : Use appropriate NIOHS/MSHA approved respirator. Wear chemical gloves, goggles, and lab coat. Carefully contain spilled material. Deposit spilled material in appropriate waste container. Wash spill area with soap and water.

SECTION 7: HANDLING AND STORAGE

Handling : Use with adequate ventilation. Avoid contact with eyes. Wash thoroughly after handling and before mealtimes. Follow all MSDS and label precautions even after container is emptied since it may contain residual material.
Storage : Store containers closed in ambient location.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Levels: <u>Component</u>	OSHA		ACGIH	
	<u>TWA</u>	<u>PEL</u>	<u>TWA</u>	<u>TLV</u>
Iron Oxide		15 mg/m ³		10 mg/m ³
Mica		3 mg/m ³		3 mg/m ³
TiO ₂		15 mg/m ³		10 mg/m ³

Personal Protection:

- Eye Protection : Safety glasses with side shields or goggles
- Skin Protection : Rubber gloves, wash at meals and end of shifts
- Respiratory Protection : Use NIOSH/MSHA approved air-purifying respirator as needed to control exposure.
- Ventilation : Provide adequate general mechanical exhaust.

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	: Odorless Tan to Brown Powder

SECTION 10: STABILITY AND REACTIVITY

- Stable: Yes
- Hazardous Polymerization: Will not occur
- Conditions to Avoid: Open flames and sparks, extreme heat, oxidizing materials
- Incompatibility: Oxidizing materials and strong caustic materials can cause a reaction.
- Hazardous Decomposition Products: Incomplete combustion can form CO, CO₂, and dense smoke

SECTION 11: TOXICOLOGICAL INFORMATION

	<u>Mica</u>	<u>Iron Oxide</u>
Skin Irritation	: No data	No Data
Eye Irritation	: No data	Mild-Irritant (rabbit); Average Draize score = 0.00
Acute Oral Toxicity	: LD ₅₀ > 15,000 mg/kg (rat)	Non-toxic, LD ₅₀ > 15 g/kg (rat)
Inhalation LC ₅₀	: No data	No data

	<u>Titanium Dioxide*</u>
Skin Irritation	: Dermal LD ₅₀ > 10 g/kg (Rabbit)
Acute Oral Toxicity	: Non-toxic, LD ₅₀ > 25 g/kg (rat)
Inhalation LC ₅₀	: >6.82 mg/L (4 hour)

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

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 Oxides]. Classified A4 (not classifiable for human or animal) by AGIH. 3 (not classifiable for human) by IARC [Iron Oxides].
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

This product has not been evaluated for its ecotoxicity. However, the biodegradation of this product under aerobic conditions is expected to be very poor and there is no evidence to suggest they create ecological problems when released into the environment. Since this product is insoluble, it is believed to have minimal bioaccumulation and bioavailability characteristics.

SECTION 13: DISPOSAL CONSIDERATIONS

Method of Disposal : Dispose of in accordance with all applicable federal, state, and local regulations. Material may be sent to an approved landfill or licensed treatment, storage, and disposal facility.

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.

Date Prepared : December 22, 2003
 Date Revised : August 7, 2008
 By Nancy O’Shea
 Date Revised : March 20, 2009
 By Pamela Notino

Note:
 The statements made here 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.