

# MATERIAL SAFETY DATA SHEET

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## SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

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Manufacturer/Distributor : Kobo Products, Inc.  
Address : 3474 South Clinton Avenue  
So. Plainfield, NJ 07080  
Emergency Telephone # : (908) 757-0033  
Facsimile Number : (908) 757-0905  
Trade Name : **FSA-52 TiO2 CR-50**  
INCI Name : Titanium Dioxide (And) C9-15 Fluoroalcohol Phosphates (And)  
Acrylates/Dimethicone Copolymer (And) Aluminum Hydroxide

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## SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

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<u>Ingredients</u>	<u>CAS</u>	<u>EINECS #</u>	<u>EU Phrase</u>
Titanium Dioxide	13463-67-7	236-675-5	S22/25/36
Alumina Hydroxide	21645-51-2	244-492-7	
Acrylates/Dimethicone Copolymer	----	----	
C9-15 Fluoroalcohol Phosphates	---	---	

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## SECTION 3: HAZARD IDENTIFICATION

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**Physical State and Appearance:** Solid. (odorless, white fine 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.

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## SECTION 4: FIRST AID MEASURES

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**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.

**FSA-52 TiO2 CR-50****SECTION 5: FIRE FIGHTING MEASURES**

Flash Point (Closed Cup)	: N/A
Flammable Limits LEL/UEL %	: N/A
Extinguishing Media	: Water, Dry Chemical, Foam, and CO2
Special Fire Fighting Procedures	: Self-contained breathing apparatus and protective clothing.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Personal Precautions	: Avoid skin and eye contact
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 :**

Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling and before mealtimes.

**Storage :**

Store in a normal temperature and a normal humidity room. Avoid high temperature and high humidity.

**SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION**

<b>Exposure Levels:</b> <u>Component</u>	OSHA		ACGIH	
	<u>TWA</u>	<u>PEL</u>	<u>TWA</u>	<u>TLV</u>
TiO2		15 mg/m <sup>3</sup>		10 mg/m <sup>3</sup>

**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	: The use of local exhaust ventilation is recommended.

**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)	: N/A	Evaporation Rate (Buac=1)	: N/A
Vapor Pressure (mm hg)	: N/A	Solubility In Water	: Insoluble
Bulk Density (g/cbi.)	: N/A	Appearance & Odor	: White Fine Powder. Characteristic Odor.
Specific Gravity (H <sub>2</sub> O=1)	: N/A		

**SECTION 10: STABILITY AND REACTIVITY**

Stable	: Stable under all condition.
Hazardous Polymerization	: Will not occur
Conditions to Avoid	: No information is available.
Incompatibility	: None known when used under normal conditions.
Hazardous Decomposition Products	: Not Applicable

**SECTION 11: TOXICOLOGICAL INFORMATION**

	<u>Titanium Dioxide*</u>
Skin Irritation	: Dermal LD <sub>50</sub> > 10 g/kg (Rabbit)
Eye Irritation	: No data

## FSA-52 TiO2 CR-50

Acute Oral Toxicity : Non-toxic, LD<sub>50</sub> > 25 g/kg (rat)  
Inhalation LC<sub>50</sub> : >6.82 mg/L (4 hour)  
\*: Trochimowicz. et. Al., J. Appl. Tox. 8, 383-385 (1998)

Intramuscular Injection : TDLO>360mg/kg/2 years (rat)  
TD>260 mg/kg/84 weeks (rat)

### Chronic Effects on Humans

**CARCINOGENIC EFFECTS:** Classified None. By NIOSH [Titanium Dioxide]. Classified A4 (not classifiable for human or animal.) by ACGIH, 3 (not classifiable for human.) by IARC [Titanium Dioxide]. Classified None.  
**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.

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### SECTION 12: ECOLOGICAL INFORMATION

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Acute Fish Toxicity : Not available  
Other Information : Not available

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### SECTION 13: DISPOSAL CONSIDERATIONS

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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.  
Do not dump this material into sewers, on the ground or into any body of water.

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### SECTION 14: TRANSPORT INFORMATION

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

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### SECTION 15: REGULATORY INFORMATION

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**U.S. Federal Regulations** Clean Water Act (CWA) 307: No products were found.  
Clean Water Act (CWA) 311: No products were found.  
Clean Air Act (CAA) 112 accidental release prevention: No products were found.  
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.  
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

**WHMIS (Canada)** Not controlled under WHMIS (Canada)

#### International Regulations

**DSCL (EEC)** S22/25/37- Do not breathe dust, avoid contact with eyes and wear suitable gloves.

#### International List

Australia (NICNAS): TITANIUM DIOXIDE

**FSA-52 TiO2 CR-50**

JAPAN (MITI): TITANIUM DIOXIDE

Korea (TCCL): TITANIUM DIOXIDE

Philippines (RA6969): TITANIUM DIOXIDE

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**SECTION 16: OTHER INFORMATION**

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Date Prepared : November 25, 2002  
Date Revised : October 27, 2003  
Last Revision : February 23, 2004  
Revised by  
Eric Smith

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

Health	1
Fire Hazard	0
Reactivity	0
Personal Protection	E

EU S phrases : S22/25/37- Do not breathe dust, avoid contact with eyes and wear suitable gloves.

**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.