

# 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 : **BTD-TTB2**  
INCI Name : Titanium Dioxide (And) Isopropyl Titanium Triisostearate (And) Triethoxysilylethyl Polydimethylsiloxylethyl Dimethicone

## SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	EINECS #
Titanium Dioxide	13463-67-7	236-675-5
Isopropyl Titanium Triisostearate	61417-49-0	262-774-8
Triethoxysilylethyl Polydimethylsiloxylethyl Dimethicone	---	Polymer

## SECTION 3: HAZARD IDENTIFICATION

No particular danger

## SECTION 4: FIRST AID MEASURES

### Effects and Symptoms:

Effects of Overexposure to Dust : May cause mechanical irritation to eyes.  
Medical Conditions Aggravated by Exposure : Persons with respiratory conditions may be at increased risk.  
Primary Route(s) of Entry : Inhalation or skin and eye contact.

### 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 to drink and induce vomiting. Call physician.

## 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.  
Unusual Fire and Explosion Hazards : May burn or explode upon ignition if suspended in air as a dust. Static charge on powders may ignite flammable atmosphere.

## 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 : Use with adequate ventilation. Avoid contact with eyes. Wash thoroughly after handling and before mealtimes. Handling of fine powders may result in static charges. Proper grounding of processing equipment is recommended. Follow all MSDS and label precautions even after container is emptied since it may contain residual material.  
Storage : Store containers closed in ambient location.

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

Exposure Levels: Component	OSHA		ACGIH	
	TWA	PEL	TWA	TLV
Titanium Dioxide	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	: Provide adequate general mechanical exhaust.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Boiling Point (°C)	: N/A	Percent Volatile By Vol. (%)	: < 1.0%
Freezing Point (°C)	: N/A	Vapor Density (Air=1)	: N/A
Melting Point (°C)	: > 1000 °C	Evaporation Rate (Buac=1)	: N/A
Vapor Pressure (mm hg)	: N/A	Solubility In Water	: Insoluble
Specific Gravity (g/cc.)	: 3.6 – 4.1	Appearance & Odor	: Fine white powder, slightly waxy odor

**SECTION 10: STABILITY AND REACTIVITY**

Stable	: Yes
Hazardous Polymerization	: Will not occur
Conditions to Avoid	: Keep away from extreme heat, sparks, flame, and other ignition sources
Incompatibility	: Acids and strong oxidizing agents
Hazardous Decomposition Products	: SiO <sub>2</sub> , CO and CO <sub>2</sub> gas.

**SECTION 11: TOXICOLOGICAL INFORMATION**

	Titanium Dioxide*
Skin Irritation	: Dermal LD <sub>50</sub> > 10 g/kg (Rabbit)
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)

**SECTION 12: ECOLOGICAL INFORMATION**

No Data

**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.
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**SECTION 14: TRANSPORT INFORMATION**

DOT Classification	: Not Regulated
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**SECTION 15: REGULATORY INFORMATION**

<b>International List</b>	Australia (NICNAS): TITANIUM DIOXIDE
	JAPAN (MITI): TITANIUM DIOXIDE
	Korea (TCCL): TITANIUM DIOXIDE
	Philippines (RA6969): TITANIUM DIOXIDE
<b>State Regulations</b>	Pennsylvania RTK: TITANIUM DIOXIDE: (generic environmental hazard)
	Massachusetts RTK: TITANIUM DIOXIDE
	New Jersey: TITANIUM DIOXIDE

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**SECTION 16: OTHER INFORMATION**

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

Health	1
Fire Hazard	0
Reactivity	0
Personal Protection	F

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

Date Prepared : June 21, 2005  
Date Revised : January 23, 2006  
Date Revised : March 10, 2006  
Date Revised : October 17, 2006  
By Eric Smith  
Date Revised : November 14, 2008  
By Neringa Kontrimiene  
Date Revised : March 24, 2010  
By Denise Fishman

**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.