

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: **DAIAMID MSP-TIO50**
Chemical Name/ Synonyms: Azacyclotridecane-2-one, homopolymer (And) Titanium Dioxide
INCI Name: Nylon-12 (And) Titanium Dioxide
Material Uses: Component in personal care products

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>CAS #</u>	<u>EINECS #</u>
Nylon-12	25038-74-8	Polymer
Titanium Dioxide	13463-67-7	236-675-5

SECTION 3: HAZARD IDENTIFICATION

Physical State and Appearance: Solid (odorless, white powder)
Emergency Overview: May cause respiratory tract, eye and skin irritation.
Routes of Entry: Eye 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.

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: N/A
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.
Auto-ignition temperature: > 350°C

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.

DAIAMID MSP-TIO50

- 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:** Use with adequate ventilation. Minimize dust generation and accumulation. May form flammable dust-air mixture. Avoid breathing dust or fumes. 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:** Keep container dry. Keep containers sealed until ready for use.

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>
Nylon 12 powder (mg/m ³)	15	5	10	3
TiO ₂ (mg/m ³)	15		10	

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)	: 165	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 powder. No odor

SECTION 10: STABILITY AND REACTIVITY

- Stable:** Stable
- Hazardous Polymerization:** Will not occur
- 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>Nylon-12</u>	<u>Titanium Dioxide*</u>
Primary Skin Irritation:	Non-irritating, primary irritation index: 0.00 (rabbit)	No data
Primary Eye Irritation:	No data	Non-irritating, Draize score = 0.00 (rabbit)
Acute Dermal Toxicity:	No data	LD ₅₀ > 10 g/kg (rabbit)
Acute Oral Toxicity:	LD ₅₀ > 5 g/kg	LD ₅₀ > 25 g/kg (rat)
Inhalation LC ₅₀ :	No data	>6.82 mg/L (4 hour)
Sensitization:	No data	No data

*: Trochimowicz.. et. Al., J. Appl. Tox., 8, 383-385 (1988)

- 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].
- MUTAGENIC EFFECTS:** Not available.
- TERATOGENIC EFFECTS:** Not available.
- DEVELOPMENTAL TOXICITY:** Not available.

DAIAMID MSP-TIO50

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

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By Neringa Kontrimiene

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.