

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Manufacturer/Distributor : Kobo Products, Inc.
Address : 690 Montrose Avenue
So. Plainfield, NJ 07080
Emergency Telephone # : (908) 757-0033
Facsimile Number : (908) 757-0905
Trade Name : **TTO-V-4**
Chemical Name/ Synonyms : Titanium Dioxide (And) Aluminum Hydroxide (And) Stearic Acid
INCI Name : Titanium Dioxide (And) Aluminum Hydroxide (And) Stearic Acid

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	EINECS #
Titanium Dioxide	13463-67-7	2366755
Aluminum Hydroxide	21645-51-2	2444927
Stearic Acid	57-11-4	2003134

SECTION 3: HAZARD IDENTIFICATION

Emergency Overview : Odorless white powder. Chemically stable, inert nuisance dust. Incombustible.
May have a drying affect on mucous membranes.
Inhalation : Temporary irritation to mucous membranes may result from excessive exposure.
Eye Contact : Inert foreign body hazard only
Skin Contact : May have a drying affect on the skin
Ingestion : This material is unlikely to be hazardous by ingestion
Carcinogenicity : None of the components in this material is listed by the IARC as a carcinogen.
Toxicity : None of the components in this material is listed as toxic.

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 : Wash well with water and mild soap.
Inhalation : Remove to fresh air.
Ingestion : In case of excessive ingestion, drink a quart or more of water, followed by a glass of milk. Call a physician.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point (Closed Cup) : Incombustible
Flammable Limits LEL/UEL % : N/A
Extinguishing Media : None required. Use media required for other substances in the area.
Special Fire Fighting Procedures : None
Unusual Fire And Explosion Hazards : None

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.

TTO-V-4

Spill response : Use any feasible mechanical means to remove spilled material, such as broom,, brush, scoop, vacuum, or wet absorbent materials. Avoid breathing dust during clean-up.

SECTION 7: HANDLING AND STORAGE

Store in clean, dry place. Keep work area free of spills.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Levels: Component	OSHA		ACGIH	
	TWA	PEL	TWA	TLV
TiO ₂	15 mg/m ³		10 mg/m ³	

Personal Protection:

Eye Protection : Safety glasses with side shields or goggles
 Skin Protection : Gloves and other protective clothing may be worn to protect skin from contact with dust.
 Respiratory Protection : Use approved respirators if airborne dust concentration exceeds permissible level.
 Ventilation : Local exhaust to maintain airborne dust concentrations below permissible level.

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)	: > 1500 °C	Evaporation Rate (Buac=1)	: N/A
Vapor Pressure (mm hg)	: N/A	Solubility In Water	: Insoluble
Specific Gravity (g/cc.)	: 3.5-4.2	Appearance & Odor	: white powder, none

SECTION 10: STABILITY AND REACTIVITY

Stable : Inert to most chemicals and reagents. Stable under normal conditions.
 Hazardous Polymerization : Will not occur.
 Conditions To Avoid : None.
 Incompatibility : None expected.
 Hazardous Decomposition Products : No decomposition should occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Titanium Dioxide*
 Skin Irritation : Dermal LD₅₀ > 10 g/kg (Rabbit)
 Acute Oral Toxicity : Non-toxic, LD₅₀ > 25 g/kg (rat)
 Inhalation LC₅₀ : >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.

SECTION 14: TRANSPORT INFORMATION

No Data

SECTION 15: REGULATORY INFORMATION

No Data

SECTION 16: OTHER INFORMATION

Date Prepared : June 18, 2002

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.