

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 : **SUNSIL-150HAS**
Chemical Name/ Synonyms : Silicon Dioxide (and) Triethoxyoctylsilane
INCI Name : Silica (And) Triethoxycaprylylsilane

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient:	CAS #:	EINECS #:
Silica	7631-86-9	231-545-4
Triethoxycaprylylsilane	2943-75-1	220-941-2

SECTION 3: HAZARD IDENTIFICATION

Effects and Symptoms:

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

Chronic (Cancer Info.) : Not listed as a carcinogen by IARC, NTP, Z List or OSHA.
Target Organs : Lung.
Medical Conditions Aggravated : Individuals with pre-existing respiratory conditions such as asthma or skin conditions such as dermatitis may be at greater risk from exposure to material.

SECTION 4: FIRST AID MEASURES

Emergency First Aid:

Eye Contact : Flush eyes with water for at least 15 min. See physician if irritation persists.
Skin Contact : Flush skin with water.
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
Auto Ignition Temp : Non-flammable
Extinguishing Media : N/A
Special Fire Fighting Procedures : N/A
Unusual Fire and Explosion Hazards : Prevent the accumulation of air borne dust/dust cloud. May become highly charged with electricity.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions : Eye contact and excessive skin 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.

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 and dry location.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION**Silica Inhalation Standards**

- TLV (US) = 10 mg/m³ total dust for particles not otherwise classified.
 PEL (US) = 6 mg/m³ for nuisance dust.
 MAK TRGS 900 (Germany) = 4 mg/m³ inhalable dust.
 OES (UK) = 6 mg/m³ total inhalable, 2.4 mg/m³ respirable dust.
 TLV (Australia) = 10 mg/m³ total dust containing no asbestos and < 1% crystalline silica.

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) | : >2000 | Percent Volatile By Vol. (%) | : N/A |
| Freezing Point (°C) | : N/A | Vapor Density (Air=1) | : N/A |
| Melting Point (°C) | : >1700 | Evaporation Rate (Buac=1) | : N/A |
| Vapor Pressure (mm hg) | : N/A | Solubility In Water | : 120ppm @ 25°C |
| Bulk Density (Kg/M ³) | : N/A | Appearance & Odor | : Spherical white powder, odorless |
| Specific Gravity (H ₂ O=1) | : N/A | | |

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

- Amorphous Silica
- Skin Irritation : Primary Irritation Index: 0.0. Non-irritant.
 Primary Eye Irritation : No-irritant. Avg. Draize Scores: 0.0 after 48 hours.
 Acute Oral Toxicity : Non-toxic, LD₅₀ > 5 g/kg (rat)
 Sensitization : No data

SECTION 12: ECOLOGICAL INFORMATION

- Ecotoxicity : Not tested.
 Mobility : Not soluble in water, not mobile in soil.
 Persistence/Degradability : Not Applicable
 Bio-Accumulation : Not Applicable
 WGK Water Hazard Class : nwg (not water hazardous).

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.

Amorphous silica is not a special waste under UK Special Waste Regulations 1996. Dispose of in accordance with local regulations. These regulations implement EC Directive 91/689 and Decision 94/904.

EU: Waste code (EU) : See industry specific waste code. See European Waste Catalogue (75/442/EEC).

SECTION 14: TRANSPORT INFORMATION

UN Number : Not applicable
UN Proper Shipping Name : Not regulated
UN Class : Not applicable
UN Packing Group : Not applicable
GGVS/GGVE/RID/ADR/IMDG Code/ICAO-TI Information : Not regulated
US Rail Regulations : Not regulated
DOT Regulation : Not regulated

SECTION 15: REGULATORY INFORMATION

National Registries

United States : TSCA (Toxic Substance Control Act inventory): Not Listed.
Europe(EU) : EINECS (European Inventory of Existing Commercial Chemical Substances): All components are listed on or exempt under EINECS or have been notified to ELINCS.
Canada : CEPA (Canadian Environmental Protection Act): All components are listed on or exempt under the DSL.
Japan : MITI (Ministry of International Trade and Industry): List of Existing Chemical Substances, No. 1-548(1-810).
Australia : AICS (Australian Inventory of Chemical Substances): All components are listed on or exempt under the AICS.
Korea : ECL (Existing Chemicals List): All components are listed on or exempt under the ECL.
Philippines : PICCS (Philippine Inventory of Chemicals and Chemical Substances): All components are listed on or exempt under the PICCS.

Hazard Classification

United Kingdom : Control of Substances Hazardous to Health Regulations 1994—listed in Guidance Note EH40. Chemicals (Hazard Information and Packaging for Supply) Regulations 1994—Not listed.
Europe (EU) Hazard Classification : This material is not defined as a dangerous substance regarding EU directive 67/548/EEC and its various amendments and adaptations.
Canada : Not classified.

US Federal Regulations

Clean Water Act (CWA, 40 CFR 116): Not listed.
Clean Air Act Amendments of 1990 (CAA Section 112, 40 CFR 82): No components are listed as hazardous air pollutants. The product is not made with nor does it contain any Class 1 or Class 2 ozone depleting substances as defined under the 1990 Amendments to the act.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, 40 CFR 302): This material is not a hazardous substance under CERCLA.

Superfund Amendments and Reauthorization Act, Title III (SARA):

Emergency Planning and Community Right-to-Know Act (EPCRA, 40 CFR 355): Does not contain any constituents that are identified as extremely hazardous substances.

SARA Section 311 (40 CFR 370)—MSDS Requirements: Not regulated.

SARA Section 312 (40 CFR 370): Apply if the material is present at any one time in amounts equal to or greater than 10,000 pounds.

SARA Section 313 (40 CFR 372): Does not contain any of the substance identified under Section 313 as toxic chemicals in excess of the *de minimis* concentrations necessary to be subject to this rule.

US State Regulations

US CONEG Legislation: Not determined.

SECTION 16: OTHER INFORMATION

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... Do not breathe dust.
S37... Wear suitable gloves.

Date Prepared : May 20, 2008
By Eric Smith

Note:

The statements made here are based upon technical data that Kobo Products Inc. believes to be reliable, 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.