

MATERIAL SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union standards



1. PRODUCT IDENTIFICATION

Kebony

CHEMICAL NAME/CLASS:

Modified Wood

PRODUCT USE:

Flooring, furniture, cladding, decking, interior and exterior

MANUFACTURER'S NAME:

Kebony AS

ADDRESS:

Hoffsveien 48
NO-0377 Oslo
Norway.

BUSINESS PHONE:

+47 06125

EMAIL ADDRESS:

info@kebony.com

DATE ISSUED:

December 4, 2012

PREVIOUS REVISION DATE:

October 14, 2011

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Product Description: Kebony is a result of a process where the properties of sustainable wood are being enhanced. In this process bio-based substances are fully cured inside the wood. The wood becomes harder and more stable, and its durability is improved. The process results in the wood cells being permanently swelled which, compared with untreated wood, reduces shrinkage and swelling by approximately 50%. The process increases the density of the materials and makes them stiffer and significantly harder than untreated wood.

Health Hazards: The primary health hazard posed by this product is dust inhalation from sawing, sanding or machining which can cause respiratory irritation. Dust contact with skin and eyes can also cause irritation.

Flammability Hazards: This product is Flammable only in presence of ignition source.

Reactivity Hazards: None known, except for storage of machining dust and machining chips that may self-ignite at prolonged storage or storage at high temperatures.

Environmental Hazards: The materials have no harmful effects on the environment.

Emergency Considerations: Emergency responders must wear the proper personal protective equipment (and have appropriate fire-suppression equipment) suitable for the situation to which they are responding.

EU LABELING AND CLASSIFICATION:

Sawdust and splinters are by-products of the manufacturing and handling of wood and traces may be found on Kebony products. Please pay attention to the following guidance relative to the consumer's eventual contact with sawdust.

Sawdust is classified by the European Union as follows:

Hazard Classification:

[Xi] Irritant;

Risk Phrases:

R36/37/38: Irritating to eyes, respiratory system and skin

Safety Phrases:

S36 / 37 Wear suitable protective clothing and gloves

Annex II Hazard Symbol



MATERIAL SAFETY DATA SHEET

HEALTH HAZARDS OR RISKS FROM EXPOSURE:

Acute Wood dust can cause eye irritation. Certain species of wood dust can elicit allergic contact dermatitis in sensitized individuals. Inhalation of wood dust may cause respiratory irritation, nasal dryness, coughing, sneezing, and wheezing

Chronic Wood Dust is listed as a carcinogen by NTP, OSHA, or IARC. IARC – Group 1: Carcinogenic to humans; sufficient evidence of carcinogenicity. This classification is primarily based on studies showing association exposure to wood dust and Aden carcinoma of the nasal cavities and Para nasal sinuses. IARC did not find sufficient evidence of an association between occupational exposure to wood dust and other cancers.

3. COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	EINECS #	ICSC #	WT %	HAZARD CLASSIFICATION; RISK PHRASES
Wood	N.E	N.E	N.E	50 – 80%	HAZARD CLASSIFICATION: NONE RISK PHRASES: NONE
Polymer	N.E	N.E	N.E	20 – 50 %	HAZARD CLASSIFICATION: NOT CLASSIFIED RISK PHRASES: NOT ESTABLISHED
Balance of water and other components. Each of the other components is present in less than 1 percent concentration (0.1% concentration for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens)					

N.E. = Not Established.

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2004 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard *JIS Z 7250: 2000*.

HAZARDS DISCLOSURE: Wood products are not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, wood dust generated by sawing, sanding, or machining these products may be hazardous.

See Section 2 for full text of Ingredient Risk Phrases and Safety Phrases

4. FIRST-AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to health professional with contaminated individual.

EYE CONTACT: Immediately flush eyes thoroughly with water being sure to lift both eye lids. Call physician if irritation persists.

SKIN CONTACT: Wash skin with soap and water. Call physician if irritation persists.

INHALATION: Remove to fresh air. Seek medical help if coughing and other symptoms do not subside.

INGESTION: If wood or wood dust is swallowed, get immediate medical attention or advice – Do not induce vomiting.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing upper respiratory and lung diseases may be aggravated by exposure to wood dust.

RECOMMENDATIONS TO PHYSICIANS: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

MATERIAL SAFETY DATA SHEET

5. FIRE-FIGHTING MEASURES

FLASH POINT: NA

AUTOIGNITION TEMPERATURE: Variable Typ. 280-340°C

FLAMMABLE LIMITS (in air by volume, %): NA

FIRE EXTINGUISHING MATERIALS: Water, carbon dioxide, sand

UNUSUAL FIRE AND EXPLOSION HAZARDS: Depending on the moisture content and particle size, wood dust may become an explosion hazard in the presence of an ignition source. An airborne concentration of 40 grams of dust per cubic meter of air is often used as the LEL for wood dusts. Wood dust and chips can represent a self ignition hazard. Dust and chips are reactive even in absence of air. Laboratory experiments reveal that Kebony wood chips should not be stored in piles that exceed 1 meter, to avoid auto accelerated temperature increase. Critical temperatures for storage of 1 m³ of wood chips is 45 °C

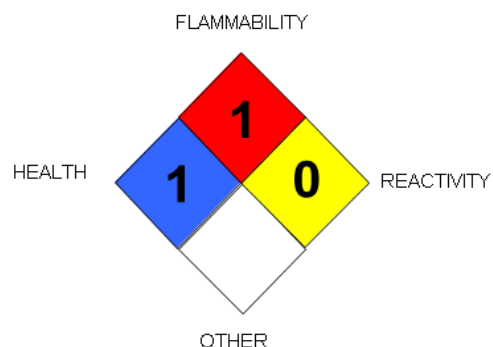
Explosion Sensitivity to Mechanical Impact: Not Sensitive

Explosion Sensitivity to Static Discharge: Not Sensitive

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment.

Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING



Hazard Scale:

0 = Minimal 1 = Slight 2 = Moderate
3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Proper protective equipment should be used. Personnel should be trained for spill response operations.

SPILLS: Vacuum or wet sweeping is the preferred method for the dry fine materials to reduce airborne dust. Avoid dry sweeping which creates dust. Apply water spray to prevent airborne dust. Scrape up wet material and place in an appropriate container.

7. HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing dust generated by this product. Use in a well-ventilated location. Remove contaminated clothing after use.

STORAGE AND HANDLING PRACTICES: Normal temperatures and pressures do not affect the material. Store in a well ventilated area. Promptly remove dusty clothing and launder before reuse. Wash thoroughly after exposure to dust.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EYE PROTECTION: It is recommended to wear safety glasses with shields or goggles.

SKIN PROTECTION: Protective clothes and gloves to avoid dust contact with skin and mechanical irritation from handling.

RESPIRATORY PROTECTION: Avoid actions that cause dust exposure to occur. Use local or general ventilation to

MATERIAL SAFETY DATA SHEET

control exposures below applicable exposure limits. NIOSH or MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA Respiratory Protection Standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced. Respirator and/or filter cartridge selection should be based on American National Standards Institute (ANSI) Standards Z88.2 Practices for Respiratory Protection.

VENTILATION: Use local exhaust or general dilution ventilation to control exposure within applicable limits.

WORK/HYGIENE PRACTICES: Follow good hygiene and housekeeping practices

9. PHYSICAL and CHEMICAL PROPERTIES

DENSITY: 550 – 900 kg/m³

EVAPORATION RATE (vs. H₂O): Not Applicable

SPECIFIC GRAVITY @ 20°C: Not Applicable

SOLUBILITY IN WATER: Not Soluble

VAPOR PRESSURE, mm Hg @ 20°C (68°F): Not Applicable

pH: NA

APPEARANCE, ODOR and COLOR: Brown, Dark Brown, or Black wood product with a Mild odor

10. STABILITY and REACTIVITY

STABILITY: Stable.

DECOMPOSITION PRODUCTS: Carbon dioxide may form during combustion.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Avoid contact with oxidizing agents

HAZARDOUS DEPOLYMERIZATION: Hazardous polymerization will not occur

CONDITIONS TO AVOID: Avoid open flame. Product may ignite at temperatures in excess of 280-340°C

Avoid storage of machining chips and machining dust from Kebony wood at temperatures above 30 °C or storage times above three weeks.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA: The specific toxicology data available for components greater than 1% in concentration are as follows.

Wood dust (softwood or hardwood) OSHA hazard rating = 3.3; moderately toxic with probable oral lethal dose to humans being 0.5 – 5 g/kg (about 1 pound for a 150 pound person).

Source: OSHA Regulated hazardous Substances, Government Institutes, Inc.

SUSPECTED CANCER AGENT: The components of this product are listed by agencies tracking the carcinogenic potential of chemical compounds as follows:

Carcinogenity (Wood Dust)

NTP Regulated Yes

IARC Regulated Yes

OSHA
Regulated No

IRITANCY OF PRODUCT: Wood dust from this product can irritate the skin, eyes, and respiratory system.

SENSITIZATION TO THE PRODUCT: These products are not known to cause human skin or respiratory sensitization.

REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects of this product and its components on the human reproductive system.

Mutagenicity: The components of this product are not reported to produce mutagenic effects in humans.

Embryotoxicity: The components of this product are not reported to produce embryotoxicity effects in humans.

MATERIAL SAFETY DATA SHEET

Teratogenicity: The components of this product are not reported to produce teratogenic effects in humans.
Reproductive Toxicity: An epidemiology study under conditions of normal occupational exposure indicated no effect on fertility.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

Ecotoxicity

BOD5 and COD

**Products of
Biodegradation**

Toxicity

Other Ecological Remarks No data available

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: If disposed of or discarded, treat as untreated wood. Always dispose of waste material according to local, state and federal regulations.

14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

DOT Classification	Non-regulated material
Special Provisions for Transport	None
DOT Labeling Requirements	None
IATA Labeling Requirements	None

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is not classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): This product is not classified as Dangerous Goods, by rules of IATA:

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION: This product is not classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not classified by the United Nations Economic Commission for Europe to be dangerous goods.

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:

MATERIAL SAFETY DATA SHEET

**SARA Reporting
Requirements
Marine Pollutant**

No

U.S. CERCLA REPORTABLE QUANTITY (RQ): Not applicable.

U.S. TSCA INVENTORY STATUS: All of the components of this product are listed in the TSCA Inventory or have applied for listing.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does not contain any component above the 0.1% level which is listed as a California Proposition 65 chemical. Note the

CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are not on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This is not considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations and is therefore not subject to the labeling and MSDS requirements of the Workplace Hazardous Materials Information System (WHMIS).

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

European Economic Community Guidelines.

Hazard Classification: [Xi] Irritant;

Risk Phrases: R36/37/38: Irritating to eyes, respiratory system and skin

Safety Phrases: S36 / 37 Wear suitable protective clothing and gloves

Annex II Hazard Symbol:



AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: All components of this product are listed on the AICS.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Not all components Listed

Australian Inventory of Chemical Substances (AICS): Not all components Listed

Korean Existing Chemicals List (ECL): Not all components Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Not all components Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Not all components Listed

Swiss List of Toxic Substances: Not all components Listed

U.S. TSCA: Listed or have applied for listing

MATERIAL SAFETY DATA SHEET

16. OTHER INFORMATION

PREPARED BY: Paul Eigbrett MSDS Authoring PLUS
DATE OF PRINTING: January 8, 2013

All chemicals may pose unknown hazards and should be used with cautions. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Kebony ASA assumes no responsibility for the completeness or accuracy of the information contained herein. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and protection of the environment