

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

<u>CHEMICAL NAME/CLASS:</u>	Kebony wood. Modified Wood
<u>PRODUCT USE:</u>	Flooring, furniture, cladding, decking, interior and exterior
<u>MANUFACTURER'S NAME:</u>	Kebony Norge AS
<u>ADDRESS:</u>	Havnevegen 35 NO-3739 Skien Norway Kebony US 812 S Riverside Ave St. Clair MI 48079
<u>BUSINESS PHONE:</u>	855.230.5656
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<u>DATE ISSUED:</u>	July 13, 2016
<u>PREVIOUS REVISION DATE:</u>	July 17, 2013

2. HAZARD IDENTIFICATION

Product Description: Kebony wood is produced from sustainable wood, treated with a bio-based renewable additive. In this process, bio-based substances are fully cured inside the wood. The wood becomes harder and more stable, and its durability is improved.

Health Hazards: The primary health hazard related to this product is inhalation of dust 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 the presence of an ignition source.

Reactivity Hazards: None known for the product.

Environmental Hazards: The product or chips/fiber/dust from the product have no known harmful effects to the environment.

Emergency considerations: Personnel intervening must use appropriate personal protective equipment and fire extinguishing equipment to respond to wood fire.

Other hazards: Another MSDS is available for the handling and storage of waste resulting from the machining and sawing of the product. The storage of machining waste (wood chips/fiber/ wood dust) in volumes over 1m³ at temperatures above 30 °C represent a self-ignition hazard.

EU LABELING AND CLASSIFICATION:

Wood dust and chips 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 exposure to **wood dust**.

Hazard Classification for wood dust:	Carcinogen Category 2 Eye Irritation Category 2B Skin Irritation Category 3 STOT SE Category 3
Risk Phases for wood dust:	H315: Causes skin irritation H319: Causes serious eye irritation.

MATERIAL SAFETY DATA SHEET

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H335: May cause respiratory irritation

Safety Phrases for wood dust:

P280: Wear protective gloves/protective clothing/eye protection/face protection
P261: Avoid breathing dust

Hazard Symbol for **wood dust**



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
Furfuryl alcohol polymer	N.E	N.E	N.E	20 – 50 %	HAZARD CLASSIFICATION: NOT CLASSIFIED
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*.

HAZARD DISCRIPTION: The wood product is not hazardous in itself according to the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, wood dust generated from sawing, sanding or machining the product may be hazardous.

4. FIRST-AID MEASURES

General	The following is relative to wood dust exposure. If symptoms persist seek medical attention and bring a copy of this MSDS.
Eye contact	Immediately flush eyes thoroughly with water being sure to lift both eyelids. If irritation persists seek medical attention.
Skin contact	Wash skin with soap and water. If irritation persists seek medical attention.
Inhalation	Remove to fresh air. Seek medical help if coughing and other symptoms do not subside.
Ingestion	If wood chips or wood dust is swallowed, seek immediately medical advice – Do not induce vomiting.
Other information	Pre-existing upper respiratory and lung diseases may be aggravated by exposure to wood dust.

5. FIRE-FIGHTING MEASURES

Fire and explosion hazard:	The product is only combustible when in contact with an ignition source. The product is not explosive with mechanical shock or static electricity. Wood chips/fiber/dust from the product has self-ignition properties. These are reactive even in the absence of oxygen. See Kebony's MSDS for machining waste.
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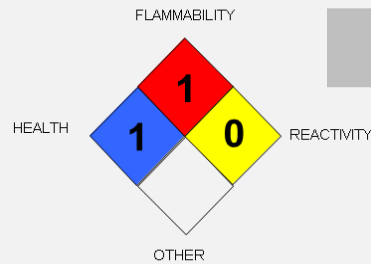
Wood dust mixed with oxygen represents an explosion hazard when in contact with an ignition source. This is dependent on the humidity and particle size.
The lower explosion level (LEL) for wood dust is 40 g/m³.

Suitable fire-fighting media: Water, carbon dioxide, sand

Hazardous decomposition products: Carbon dioxide (CO₂), Carbon monoxide (CO)

Special fire-fighting procedures: Incipient fire responders should wear eye protection. Structural fire fighters must wear Self-Contained Breathing Apparatus and full protective equipment.

NFPA rating:



Hazard Scale:
0 = Minimal 1 = Slight 2 = Moderate
3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Avoid dust formation.
Protective equipment should be used to avoid contact with wood dust.

Environmental precautions Not harmful to the environment.

Containing and cleaning-up Vacuum or wet sweeping is the preferred method for the dry fine materials to reduce airborne dust.
Scrape up wet material and place in an appropriate container.
Avoid dry sweeping, which creates dust.

7. HANDLING and STORAGE

Handling Handle in well-ventilated areas and avoid dust formation.
Avoid eye and skin contact and inhalation of wood dust. Use protective equipment (see point 8).
Do not eat, drink or smoke while handling this product.
Follow good hygiene. Wash hands before eating or smoking.

Storage Insure good ventilation.
Normal temperature and pressure do not impact the product.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

Administrative standards Wood dust from hard exotic wood, oak and beech, total dust: **1 mg/m³**, carcinogen
Wood dust from Nordic wood with the exception of oak and beech, total dust: **2 mg/m³**, carcinogen
(Arbeidstilsynet, Norwegian labour inspection)

General Follow good hygiene and housekeeping practices.
Ensure good ventilation.

Respiratory protection Use dust masks with P3-filter if ventilation and extraction are not sufficient.

Hand protection Use protective gloves to avoid splinters when handling the product.

Eye protection Use eye protection when handling the product
Saline eyewash should be available in locations where the product is handled.

MATERIAL SAFETY DATA SHEET

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Skin protection Use protective clothing when handling the product.

9. PHYSICAL and CHEMICAL PROPERTIES

Appearance	Wood
Color	Brown or dark brown
Smell	Characteristic, similar to turpentine
Density	550 – 900 kg/m ³
Solubility in water	Not soluble
Auto-ignition temperature	250 – 320 °C

10. STABILITY and REACTIVITY

Stability	Stable
Materials to avoid	Avoid contact with oxidizing agents
Conditions to avoid	<ul style="list-style-type: none">• Avoid open flame.• Product may ignite at temperatures in excess of 250 – 320 °C• Avoid storage of chips/fibers/dust at temperatures above 30 °C• Avoid storage of chips/fibers/dust longer than three weeks• Core temperature in any storage of chips/fibers/dust must not exceed 45 °C <p>Additional precautions should be taken when storing more than 1 m³ of waste. Please refer to MSDS - Waste from the manufacturing of Kebony wood -</p>
Decomposition products	Carbon monoxide (CO), Carbon dioxide (CO ₂) may form during combustion.

11. TOXICOLOGICAL INFORMATION

General	Exposure to the product itself is unlikely. However exposure to wood dust related to the handling and manufacturing of the product is possible. The following information is related to wood dust exposure.
Eye contact	Irritation and burning sensation.
Skin contact	Irritation.
Inhalation	Irritation of the respiratory track, coughing and sneezing.
Ingestion	Ingestion is an unlikely exposure route.
Allergies	Repeated and long-term exposure to wood dust can result in an allergic reaction.
Toxicity	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). <i>Source: OSHA Regulated hazardous Substances, Government Institutes, Inc.</i>

MATERIAL SAFETY DATA SHEET

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Carcinogenicity **Wood dust** is classified as carcinogenic by Arbeidstilsynet (Norwegian Labour Inspectorate). IARC classification of wood dust: Group 1 - carcinogenic to humans, sufficient evidence of carcinogenicity in humans. This classification is primarily based on studies that show a correlation between wood dust exposure and nose and sinus cancers. IARC has found no evidence of correlation between wood dust and other forms of cancer.

Reprotoxicity Data does not indicate that wood dust may have an effect on the reproduction system.

12. ECOLOGICAL INFORMATION

General	None
Eco-toxicity	No data available
Mobility	Not soluble in water
Persistence/degradation	The product is fully biodegradable
Bioaccumulation potential	The product does not bioaccumulate
Other	-

13. DISPOSAL CONSIDERATIONS

General	Not classified as hazardous waste According to Decision 2000/532/EC, the concentration of furfuryl alcohol monomer in the product is below the limit for classification as hazardous waste. Always dispose waste material according to local, state and federal regulations. In households, it is safe to fire stoves and fireplaces with Kebony wood.
Waste code EAL	Construction and demolition wastes (including excavated soil from contaminated sites): 17 02 01 (wood) Municipal wastes (household waste and similar commercial, industrial and institutional waste) including separately collected fractions): 20 01 38 (wood other than that mentioned in 20 01 37)
Handling of packaging	Dispose according to local regulations. Recycle when possible.

14. TRANSPORTATION INFORMATION

General The product is not classified as dangerous goods (ADR/RID, IMDG, IATA/ICAO, IMO, US DOT, Transport Canada).

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:

SARA Reporting Requirements No

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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.

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 for the product (not wood dust):

Hazard symbol	None
Hazard classification	None
H-phrases	None
P-phrases	P261: Avoid breathing dust P280: Wear protective gloves/protective clothing/eye protection/face protection

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

16. OTHER INFORMATION

Additional information

Wood dust can be generated when manufacturing the product.
Wood dust is classified as irritant, carcinogen cat 2 and STOT SE cat 3
H315: Causes skin irritation
H319: Causes serious eye irritation.
H335: May cause respiratory irritation

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Sources used to prepare this MSDS OSHA, Regulated hazardous Substances, Government Institutes
Arbeidstilsynet, Veiledning om Administrative normer for
forurensning i arbeidsatmosfære
EU nr. 453/2010

Changes from last version Changes made to MSDS dated June 24, 2013.
No changes made to the classification or labeling of the product.

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Revised by Per Brynildsen and Stig Lande, Kebony AS

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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