

## SAFETY DATA SHEET

### MOSO BAMBOO 1-PLY PANEL (HD)

#### 1) CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: MOSO® Bamboo 1-Ply Panel  
High Density version

Supplier: Moso International BV                      T +31(0)229 265732  
De Marowijne 43                                      F +31(0)229 267759  
NL-1689 AR Zwaag                                  info@moso.eu  
The Netherlands                                      www.moso.eu

Description: The Moso bamboo products are composed of bamboo strips and possible other materials, bonded with adhesives from third party manufacturers.

#### 2) HAZARDS IDENTIFICATION

Important hazards: Sawing, sanding or machining bamboo products can produce dust which can cause an explosion hazard. Dust or splinters may cause upper respiratory tract, eye and skin irritation.

Inhalation: Dust may cause respiratory irritation, nasal dryness, coughing, sneezing, wheezing, headache and sinusitis. Repeated or prolonged exposure at elevated dust levels may result in allergic responses or respiratory sensitization in some individuals.

Skin contact: Certain species of bamboo/wood may cause allergic contact dermatitis in sensitized individuals. If an allergy preexists or develops, it may be necessary to remove the sensitized worker from further exposure to dust.

Eye contact: Dust or splinters may cause irritation or injury to the eyes.

Ingestion: Not applicable under normal use. If ingested, may cause gastrointestinal tract irritation.

Chemical product specific hazards: During manufacturing, there may be a slight release of formaldehyde from uncovered products; however, the tested concentration is at or below the emission class E1. The release of formaldehyde decreases over time according to well established decay dynamics. The concentration will reach its peak value in a confined area. Ventilation in areas where product is stored is recommended.

Outline of an anticipated emergency:

HMIS rating: Health = 0, Fire = 1, Physical Hazard = 0, Personal Protection = 0

Hazard Scale: 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe, \* = Chronic hazard

### 3) COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS #	Content (% Weight)
Bamboo ( <i>Phyllostachys pubescens</i> )	n.a.	93 - 94 %
Phenol Formaldehyde Resin (PF)	9003-35-4	< 6 %

Wood and wood products are manufactured articles and are not considered hazardous under OSHA Hazard Communication Standard 29 CFR 1910.1200. Wood/Bamboo dust, a by-product generated from sawing, sanding or machining bamboo and bamboo products, may be hazardous.

### 4) FIRST-AID MEASURES

- Inhalation:** If inhaled, immediately remove the affected person to fresh air. If persistent irritation, severe coughing or breathing difficulty occurs, get medical attention.
- Skin contact:** For skin contact, wash immediately with soap and water. If irritation persists, get medical attention.
- Eye contact:** Do not rub your eyes. Particles may cause the eye to be scratched. Remove contact lenses if worn. Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, contact a physician.
- Ingestion:** Not applicable under normal use. If ingested, may cause gastrointestinal tract irritation.

### 5) FIRE-FIGHTING MEASURES

Sawing, sanding or machining bamboo/wood or bamboo/wood products can produce dust which is a strong to severe explosion hazard if a dust "cloud" contacts an ignition source. An airborne concentration of 40 grams of dust per cubic meter of air is often used as the lower explosion limit (LEL) for bamboo/wood dust.

**Extinguishing media:** Water spray, carbon dioxide or dry chemical

**Specific hazards:** Burning of bamboo/wood can produce irritating fumes and gases including carbon monoxide, aldehydes and organic acids.

**Specific extinguishing methods:** Firefighters should wear protective clothing including self-contained breathing apparatus (SCBA) to avoid breathing any wood combustion products. Partially burned dust is especially hazardous if dispersed into the air. Wet down dust to reduce likelihood of ignition or dispersion. Remove burned or wet dust to open, secure area after fire is extinguished.

## 6) ACCIDENTAL RELEASE MEASURES

Not applicable for product in its purchased form. Sweep or vacuum dust generated from sawing, sanding or manufacturing for recovery or disposal. Wet down accumulated wood dust to reduce the likelihood of ignition or dispersion of dust into the air. Use with adequate ventilation. Do not inhale dusts during clean up. Use approved dust mask or filtering face piece where ventilation is not possible and exposure limits could be exceeded.

## 7) HANDLING AND STORAGE

**Handling:** Use this product with adequate ventilation. Avoid frequent or prolonged inhalation of wood dust. Goggles or safety glasses are recommended to protect eyes from flying particles. Avoid contact with skin and wash exposed areas thoroughly. Change protective clothing and gloves when signs of contamination appear. Bamboo and bamboo products are combustible and, therefore, should not be subjected to temperatures exceeding the auto ignition temperature. Wet down bamboo dust generated by sawing, sanding, or machining to reduce the likelihood of ignition or dispersion of dust into the air.

**Storage:** Store flat, supported and protected from direct contact with the ground, in a well-ventilated, cool, dry place, avoid high moisture and humidity, away from open flames or temperatures high enough to ignite or cause smoldering combustion.

## 8) EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Engineering controls:** Due to the explosive potential of dust when suspended in air, precautions should be taken when sawing, sanding, or machining bamboo and bamboo products to prevent sparks or other ignition sources in ventilation equipment. Local exhaust ventilation is recommended when sawing, sanding, machining this product. General dilution ventilation is recommended in processing and storage areas.

**Personal protective equipment:**

**General:** Follow good hygienic and housekeeping practices. Clean up areas where dust settles to avoid excessive accumulation of the combustible material. Minimize generation of airborne dust concentrations.

**Respiratory protection:** An approved dust mask or filtering face piece is recommended in dusty environments and where ventilation is not sufficient to keep dust levels below permissible exposure limits.

**Eye protection:** Goggles or safety glasses are recommended when sawing, sanding or machining this product.

**Skin and body protection:** Protective clothing and gloves are recommended when sawing, sanding, machining or otherwise handling bamboo and bamboo products. Wash exposed area thoroughly after working with the bamboo, before eating, drinking, and use of tobacco products.

## 9) PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Veneer, available in various styles, colors and sizes.  
Physical state: Solid  
Density: approx. 700 kg/m<sup>3</sup>  
Solubility (H<sub>2</sub>O): Insoluble

## 10) STABILITY AND REACTIVITY

Chemical stability: This product is stable under ordinary conditions of use. There may be a slight release of formaldehyde from uncovered products; however, the tested concentration is at or below the emission class E1. The release of formaldehyde decreases over time according to well established decay dynamics. The concentration will reach its peak value in a confined area.

Conditions to avoid: Avoid excess heat, open flames, and sparks. Avoid contact with incompatible materials. Avoid prolonged direct sunlight and moisture/humidity.

Hazardous reactions: Will not occur

Incompatible materials: Will not occur

Hazardous decomposition products: Burning of any bamboo/wood can produce irritating fumes and gases including carbon monoxide, carbon dioxide, aldehydes and organic acids.

## 11) TOXICOLOGICAL INFORMATION

Acute and chronic toxicity: Bamboo dust generated from sawing, sanding, or machining may cause temporary nasal dryness, irritation of the eyes and upper respiratory system, coughing. Allergic skin and lung reactions have been reported with exposure to various wood dusts due to the chemicals present in the wood.

Carcinogenicity: Not available for product in purchased form.

Formaldehyde vapor and water solution may irritate the nose, throat, eyes and skin. Formaldehyde solution may cause irritation and skin allergies. The International Agency for Research on Cancer (IARC) has reported that formaldehyde vapor is harmful to human health and may increase the possibility of lung cancer. From animal experiments, it is clear that prolonged exposure to a high concentration of formaldehyde vapor may lead to lung cancer.

Over 150,000 people are involved in occupational disease research, but research can provide limited evidence that formaldehyde emission leads to the increase of lung cancer and rhinal throat cancer.

## 12) ECOLOGICAL INFORMATION

No data available for this product. This product is expected to be inherently biodegradable.

### 13) DISPOSAL CONSIDERATIONS

Dispose of material according to local, state, federal and provincial regulations.

### 14) TRANSPORT INFORMATION

This product is not regulated as a hazardous material by the United States (DOT) or Canadian (TDG) transportation regulations.

### 15) REGULATORY INFORMATION

This list does not represent an all-inclusive-selection of regulations.

OSHA: Wood and wood products are considered manufactured articles and are exempt under OSHA's Hazard Communication Standard (29 CFR 1910.1200). Wood dust, a by-product generated from sawing, sanding or machining wood and wood products, is considered hazardous under OSHA's Hazard Communication Standard (29 CFR 1910.1200).

### 16) OTHER INFORMATION

Disclaimer: **IMPORTANT:** The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Moso International BV, makes no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Moso International BV, will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.