

## MATERIAL SAFETY DATA SHEET

### BioCore™ SOLIDWOOD

BioCore Technologies, LLC

IMPORTANT NOTICE: This Material Safety Data Sheet (MSDS) is written by BioCore Technologies, LLC in accordance with WORKSAFE Australia and OSH New Zealand guidelines. As such, the information contained herein must not be altered, deleted or added to. BioCore Technologies, LLC will issue a new MSDS when there is a change in product specifications and/or guidelines or regulations. BioCore Technologies, LLC will not accept responsibility for changes made to its MSDS in content by any other person.

#### IDENTIFICATION

<b>Product Names</b>	BioCore™
<b>Chemical Name:</b>	Not applicable
<b>UN Number:</b>	None allocated
<b>Registered Trade Name:</b>	DreamDex
<b>Dangerous Goods Class:</b>	None allocated
<b>Hazchem, Code:</b>	None allocated
<b>Poisons Schedule:</b>	Not applicable

#### PHYSICAL DESCRIPTION/PROPERTIES

<b>Appearance:</b>	The products are manufactured as dressed timber boards ranging in thickness from 22mm to 47mm, made from <i>Pinus radiata</i> wood impregnated with solids and resin.
<b>Odour:</b>	After fixation of the treatment there is no distinctive odour
<b>Boiling Point:</b>	Not applicable
<b>Vapour Pressure:</b>	Not applicable
<b>Vapour Density:</b>	Not applicable
<b>Melting Point:</b>	Not applicable
<b>Solubility in Water:</b>	Highly insoluble
<b>Flashpoint:</b>	Not applicable
<b>Specific Gravity:</b>	0.50-1.00
<b>Flammability in air:</b>	Not applicable
<b>Auto ignition Temperature</b>	Not applicable

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### INGREDIENTS

Substance/Chemical Entity	CAS NO.	Proportion by weight
Wood	None	60–65%
Solids	x	>35%
Melamine Formaldehyde Resin	x	>5%

Note: The solids and the resin are bonded together in the wood under heat and pressure. The process cures the solids and the resin into an insoluble solid. A small amount of formaldehyde may however be released from the finished product. In newly manufactured Solidwood, formaldehyde emission has been measured in the range 0.1-0.2ppm using the large-scale chamber test.

### HEALTH HAZARD INFORMATION

#### Health Effects

This product, in its natural form, is not classified as hazardous. However, handling board edges and surfaces may cause splinters.

The known health effects of the constituents of the boards are as follows:

When the boards are machined (sawn, sanded, drilled, routed, planed, etc) wood dust is produced, Wood dust and splinters may cause irritation of the nose and throat, eyes and skin. Wood dust may also be a sensitiser, and some people may develop allergic dermatitis or asthma. Inhalation of wood dust may increase the risk of nasal and para-nasal sinus cancers. Exposure to the wood dust produced from machining treated boards may result in the following health effects:

**Ingestion:** Swallowing is unlikely to occur in a single ingestion large enough to cause any ill effect. Treated timber must NOT be used for cooking fires, barbecues or spit roasts.

**Eye:** Wood dust may be irritating to the eyes, causing discomfort and redness.

**Skin:** The wood dust may irritate the skin, resulting in itching and occasionally a red rash. Allergic contact dermatitis may occur.

**Inhaled:** The wood dust may irritate the throat and lungs especially in people with upper respiratory tract or chest complaints. Asthma may occur.

**Chronic:** Repeated exposures to uncontrolled wood dust from these boards over many years may increase the risk of allergies, dermatitis, asthma or chronic nose or throat irritation in some people.

#### First Aid:

**Swallowed:** Drink a glass of water. Seek medical attention if there is abdominal discomfort.

**Eye:** Remove contact lenses, flush with flowing water for at least 15 minutes, and if symptoms persist seek immediate medical attention.

**Skin:** Wash with mild soap and running water.

**Inhaled:** Remove to fresh air. If recovery is not rapid seek medical assistance,

**Advice to Doctor:** Treat symptomatically

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### Melamine Formaldehyde Resin:

In the finished product, the cured resin is inert and not likely to contribute to health effects. A small amount of formaldehyde may however be released from the finished product. Formaldehyde gas is irritating to the nose and throat, eyes and skin. It is recommended that storage areas be well ventilated to avoid any irritating effects of a build-up of formaldehyde. In well-ventilated storage areas and work places utilizing these products the concentration of formaldehyde in the air will not exceed the World Health Organization standard of 0.1 ppm for the general environment and it will be well below the occupational Exposure Standard of 1.0 ppm on a time weighted average (TWA). Sealing Solidwood with paint, varnish or other surface finishes further reduces emissions from the boards.

The International Agency for Research on Cancer (IARC) assessed formaldehyde in 1982 as Group 2A: possibly carcinogenic to humans. Exposure to formaldehyde below the occupational Exposure Standard of 1.0 ppm TWA (time weighted average) will not result in an increased risk of cavity cancers in humans

## PRECAUTIONS FOR USE

### Exposure Standards.

There are no specific standards for treated softwood in the Exposure Standards, but for the individual ingredients in the wood dust the limits are:

	OSH New Zealand	WORKSAFE Australia
Wood dust	5 mg/m <sup>3</sup> time-weighted average (TWA)	5 mg/m <sup>3</sup> time-weighted average (TWA) 10 mg/m <sup>3</sup> short term exposure limit (STEL) Wood dust is also listed as a sensitiser and the Exposure Standard is under review
Formaldehyde	1.0 ppm (1.2 mg/m <sup>3</sup> ) time-weighted average (TWA) 2.0 ppm (2.5 mg/m <sup>3</sup> ) short term exposure limit (STEL)	1.0 ppm (1.2 mg/m <sup>3</sup> ) time-weighted average (TWA) 2.0 ppm (2.5 mg/m <sup>3</sup> ) short term exposure limit (STEL)

In the interests of maintaining a safe working environment, it is recommended that workplace exposures to wood dust should not exceed 1.0 mg/m<sup>3</sup> TWA.

### Engineering Controls:

All work with these treated boards should be carried out in such a way as to minimise the generation of wood dust. Under factory conditions, machining should be done with equipment fitted with exhaust devices capable of removing wood dust at the source. Hand power tools should be fitted with dust bags.

Work areas should be well ventilated. They should be cleaned at least daily, and wood dust should be removed by vacuum cleaning or by wet sweeping.

### Skin Protection:

Wear loose, comfortable clothing. Long sleeved shirts, trousers and comfortable work gloves (AS2I6I) should be worn if skin irritation occurs, and to minimize the risk of splinters. After handling boards, wash hands with mild soap and water. Do not scratch or rub the skin if it becomes irritated. Wash work clothes regularly and if possible separate from other clothes.

### Respiratory Protection:

If wood dust exposures are not controlled when machining (sawing, routing, planing, drilling, sanding, etc.) a class RI or 22 replaceable filter or disposable face piece respirator should be worn. Respirators should comply with AS/NZ17IG, and be selected, used and maintained in accordance with AS/NZS1323.

### Eye Protection:

Safety glasses or non-fogging goggles (ASINZSI3SZ) should be worn when machining.

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#### Combustibility:

These boards are not combustible. Avoid a build-up of wood dust and keep all storage work areas well ventilated. Avoid sources of radiant heat and flame, and avoid sparks and sources of ignition in all electrical equipment, including dust extraction equipment.

People must not smoke in storage or work areas.

## SAFE HANDLING INFORMATION

#### Storage and Transport:

Boards should be stored in well-ventilated areas. No special transport requirements are considered necessary.

#### Waste Disposals:

Off-cuts and general waste material should be placed in containers and disposed of at approved landfill sites, in accordance with disposal authority guidelines.

Wood dust should be cleaned up by vacuuming or wet sweeping.

#### Fire/Explosion Hazard:

Early fire hazard properties as determined in accordance with AS1530 Part 3.

**Ignitability Index** 0

**Spread of Flame Index** 0

**Heat Evolved Index** 0

**Smoke Developed Index** 0-1

Burning or smouldering boards or wood dust can generate irritating and toxic fumes and gases including carbon monoxide, carbon dioxide, aldehydes, and organic acids. Dry wood dust in high concentrations can be explosive. Use water or dry chemical fire extinguishers. Fire fighters should wear self-containing breathing apparatus.

#### Smoking:

Storage and work areas should be smoke free

## CONTACT DETAILS: -

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The information contained in this document is based on data available at the time of writing, which we believe is accurate and reliable. From time to time the information will be changed and added to as new data becomes available.

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