

# BRIGGS VENEERS

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## Briggs FLAMEBLOCK™ FRMDF

### Fire Retardant Medium Density Fibreboard MATERIAL SAFETY DATA SHEET – OCTOBER 2009

This Material Safety Data Sheet (MSDS) has been prepared for Briggs Veneers Pty. Ltd. in accordance with the National Code for the Preparation of Material Safety Data Sheets, 2<sup>nd</sup> Edition [NOHSC:2011(2003)], published by the Commonwealth of Australia's National Occupational Health & Safety Commission. The Information contained herein must not be altered, deleted or added to. Briggs Veneers Pty. Ltd. will not accept responsibility for changes made to its MSDS by any other person or organisation.

#### SECTION 1: IDENTIFICATION OF THE MATERIAL

**Material Name:** Briggs FLAMEBLOCK™ FRMDF

**Recommended Use:** Interior linings, joinery and furniture production. Suitable substrate for paper overlay, melamine laminate or wood veneers.

**Supplier:** Briggs Veneers Pty. Ltd.

**Phone Number for General Information (Within Australia):** 02-9732-7888, Monday to Friday, 9:00am to 5:00pm Australian Eastern Standard Time.

#### SECTION 2: HAZARDS IDENTIFICATION

**Medium Density Fibreboard** is not classed as a Hazardous Substance under the Australian Government's Safe Work Australia's *Hazardous Substances Information System*.

**Manual Handling:** Handling the product without gloves may give rise to splinters.

**Wood Dust:** If the product is sanded or sawn, wood dust is produced which may cause irritation of the nose, throat, eyes and skin. Wood dust may also be a sensitiser, and some

individuals may develop allergic dermatitis or asthma. Prolonged inhalation of wood dust increases the risk of nasal and para-nasal sinus cancers.

**Exposure to wood dust produced by machining may result in the following health effects:**

**Swallowed:** Unlikely to occur in significant quantities.

**Eye Contact:** Wood dust may cause temporary discomfort.

**Skin Contact:** Wood dust may cause itching and occasionally a rash, depending on the individual and the species of wood.

**Inhalation:** Wood dust may irritate the throat and lungs, particularly in people with upper respiratory tract or chest complaints. A temporary asthmatic reaction may occur.

**Chronic:** Repeated exposure to uncontrolled wood dust over many years increases the risk of allergies, dermatitis, asthma and/or chronic nose or throat irritation in some people. Prolonged inhalation of fine wood dust also increases the risk of nasal or para nasal sinus cancers. If the work practices described in this MSDS are followed, no chronic health effects are anticipated.

<b>SECTION 3: INFORMATION ON INGREDIENTS</b>
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**Core Information:** Briggs FLAMEBLOCK™ FRMDF is made primarily from softwood (*gymnosperm*) wood fibres with up to 5% hardwood (*angiosperm*) wood fibres. The wood fibres are bonded together with melamine-urea-formaldehyde (MUF) adhesive. Fire retardancy is imparted by phosphates and other inorganic salts in the proportion 9% to 10% by weight. The product may contain traces of heavy metals at non-hazardous levels, ie. well below the concentration cut-off levels specified in the National Occupational Health & Safety Commission's *Approved Criteria for Classifying Hazardous Substances* [NOHSC:1008].

**Chemical Identity:** Natural wood is comprised of cellulose, hemicellulose and lignin, with traces of other chemical substances, all of which are non-hazardous in themselves.

The adhesive used to manufacture Briggs FLAMEBLOCK™ FRMDF is a low formaldehyde MUF formulation. When tested to European Standard EN 120, perforator value was a maximum of 8 mg/100 g dry board, equivalent to a concentration of 0.1 ppm formaldehyde in air. This complies with the E1 level of formaldehyde potential in Australian Standard 1859.2:2004, *Reconstituted wood-based panels – Specifications, Part 2: Dry-processed fibreboard*.

#### SECTION 4: FIRST AID MEASURES

**Swallowed:** Drink water.

**Eye Contact:** If wearing contact lenses, remove them and flush eyes with flowing water.

**Skin Contact:** Wash with soap and water.

**Inhalation:** Remove to fresh air. If recovery is not rapid, seek medical help.

**Advice to Doctor:** Treat symptomatically. There are no likely delayed effects other than those arising from long-term exposure. Refer Section 11 for toxicological information.

#### SECTION 5: FIRE FIGHTING MEASURES

Burning or smouldering wood generates carbon dioxide and other pyrolysis products typical of burning organic material. Dry wood dust in high concentrations can be explosive. Use water or dry chemical fire extinguishers.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

Not relevant to this product.

#### SECTION 7: HANDLING & STORAGE

A build-up of dry wood dust in the air should be avoided by appropriate extraction equipment. Smoking must not be allowed where wood dust is present in the air. Medium density fibreboard should be stored in well ventilated areas away from sources of heat, flames or sparks. No special transport requirements are necessary.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Core Information:

**Wood Dust:** The current Australian Occupational Exposure Standard is:  
Time Weighted Average (TWA)<sup>1</sup>: 1 mg/m<sup>3</sup> (hardwoods). 5 mg/m<sup>3</sup> (softwoods)  
Short Term Exposure Limit (STEL)<sup>2</sup>: 10 mg/m<sup>3</sup> (softwoods)

**Formaldehyde:** The current Australian Occupational Exposure Standard is:  
Time Weighted Average (TWA): 1 ppm or 1.2 mg/m<sup>3</sup>  
Short Term Exposure Limit (STEL): 2 ppm or 2.5 mg/m<sup>3</sup>

**Engineering Controls:** Work with medium density fibreboard should be carried out in such a way as to minimise the generation of wood dust. Machining should be done with equipment fitted with exhaust devices capable of removing dust at the source. Hand power tools should be fitted with dust bags. Work areas should be well ventilated and cleaned at least daily. Wood dust should be removed by vacuum cleaning or wet sweeping. Compressed air must not be used to clear work benches or to blow dust off wood products. Electrical equipment in these areas should be dust ignition proof rated.

**Skin Protection:** Wear loose, comfortable clothing. Long sleeved shirts, trousers and work gloves should be worn if skin irritation occurs, and to minimise the risk of splinters.

**Respiratory Protection:** If wood dust exposures are not controlled when sanding MDF, a class P1 or P2 replaceable filter or disposable face piece respirator should be worn. Respirators must comply with AS/NZS 1716 and be selected, used and maintained in accordance with AS/NZS 1715.

**Eye Protection:** Safety glasses or non fogging goggles complying with AS/NZS 1337 should be worn when machining.

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<sup>1</sup> **Time Weighted Average (TWA)** means the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

<sup>2</sup> **Short Term Exposure Limit (STEL)** means a 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.

## SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Concentrations of small dust particles in the air can form a mixture that may explode if ignited. These concentrations usually occur in dust extraction equipment which can be destroyed unless special precautions are taken. Such an explosion can also dislodge dust deposits that may have accumulated on walls, floors and ledges which in turn can ignite causing a secondary explosion.

## SECTION 10: STABILITY & REACTIVITY

Briggs FLAMEBLOCK™ FRMDF has been tested and certified as a Fire Hazard Group 1 material in accordance with the requirements of the Building Code of Australia. Like all wood products, MDF swells and shrinks with significant changes in moisture content. The fire retardant agent in the board may in exceptional cases affect certain glues or paints. Always test before use.

## SECTION 11: TOXICOLOGICAL INFORMATION

**Nasal Cancer:** Studies from many different countries have identified the causative relationship between the long-term inhalation of fine wood dust and nasal cancer. This relationship was first identified in woodworkers in Buckinghamshire, England, and has been confirmed in other countries since then<sup>3</sup>. The emphasis is on small particles of airborne dust, such as the dust produced by fine sanding the surfaces of wood products. The most important single precautionary measure is the installation of an effective dust extraction system. Where airborne dust cannot be avoided, inhalation of dust through the nose or mouth should be avoided by the use of face masks<sup>4</sup>.

**Dermatitis:** Dermatitis may take one of two forms – irritant dermatitis or sensitisation dermatitis. Irritant dermatitis is often associated with the sap or latex of certain trees and is therefore unlikely when handling dry MDF. Sensitisation dermatitis is more troublesome and is usually initiated by exposure to the fine wood dust of certain timbers. If the level of contact is sufficient, pre-disposed individuals will experience an allergic reaction to the dust in question and will then be sensitised to that particular timber. On subsequent exposure to the timber's dust, the skin will react more quickly and more severely to relatively small amounts of the irritant. Mild cases will show as a slight

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<sup>3</sup> Danks, R.A., Kaye, A.H., Millar, H. & Kleid, S., *Cranifacial resection in the management of paransal sinus cancer*, in *Journal of Clinical Neuroscience* 1994, 1(2):111-117

<sup>4</sup> Orsler, R.J., *Health problems associated with wood processing*, Building Research Establishment Information Paper IP 13/79, Buckinghamshire, June 1979

reddening of the exposed skin with accompanying itching. More severe cases will experience a hot or burning sensation and the appearance of a rash. Preventative measures include protective clothing, designed to avoid trapping dust between clothing and skin. Thorough washing after exposure will ensure that the dust is removed as soon as is practically possible.

**Respiratory Irritation:** In parallel with dermatitis, respiratory irritation exists in both the primary irritant and allergenic forms. Symptoms include running nose and eyes and sneezing and, occasionally, nose bleeds. In the more extreme cases, the affected worker may experience breathing difficulties, sometimes leading to asthma-like symptoms.

Further information about exposure to wood dust and formaldehyde in the workplace is contained in the report *Benchmarking of exposures to wood dust and formaldehyde in selected industries in Australia* (July 2008) commissioned by the Office of the Australian Safety and Compensation Council (the Office of the ASCC).

## SECTION 12: ECOLOGICAL INFORMATION

Not applicable to this product.

## SECTION 13: DISPOSAL CONSIDERATIONS

Briggs FLAMEBLOCK™ FRMDF is not considered to present any ecotoxicity issues related to waste handling, or special precautions for landfill.

## SECTION 14: TRANSPORT INFORMATION

MDF for export must comply with the quarantine requirements of the destination country (if any). Otherwise there are no requirements applicable to this product.