

# **Material Safety Data Sheet**

3<sup>rd</sup> May 2024

#### WOOD VENEER PRODUCT

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

#### Identification of material and supplier

Products:	Formply – AS/NZS6669 Structural Plywood - AS/NZS2269.0 Hoop Decorative – AS/NZS2269.0 Plywood Flooring - AS/NZS2269.0 Bridgeply - AS/NZS2269.0
Supplier:	Big River Group Grafton
UN Number:	None allocated.
Registered Trade Name:	None allocated.
Dangerous Goods Class:	None allocated.
Hazchem Code:	None allocated.
Poisons Schedule:	None allocated.

**Use:** Formwork, residential, commercial, industrial, and marine construction, furniture and fitments, bridges pedestrian walkways and/or general-purpose building materials.

#### PHYSICAL DESCRIPTION/PROPERTIES

#### **Appearance:**

The products are manufactured as pressed boards ranging in standard thickness from 4mm to 50mm. They are made from wood veneers of a range of species which are bonded together with thermo set adhesives.

### **Odour:**

No distinctive odour. Newly manufactured plywood and freshly machined surfaces tend to have the odour of the wood species from which the plywood is manufactured.

Boiling Point	Not applicable.
Vapour Pressure	Not applicable.
Vapour Density	Not applicable.
Melting Point	Not applicable.
Solubility in Water	Highly insoluble.
Flashpoint	Not applicable.
Specific Gravity	0.50-1.00
Flammability in air	Fine airborne dust, generated when the product is machined, can ignite spontaneously.
Auto Ignition Temperature	>220°C

#### **INGREDIENTS:**

Substance Chemical Entity	CAS No.	Properties by weight
Wood veneer	none	>92%
Phenol formaldehyde resin or	40798-65-0	<8%
Melamine urea formaldehyde resin, or	25036-13-9	<8%
Urea formaldehyde resin	9011-05-6	<8%

#### NOTE:

The above ingredients are bonded together under heat and pressure. The process cures the resin. However, small amounts of formaldehyde may be released from the finished product. In newly manufactured plywood, which is the worst-case scenario, formaldehyde emissions have been measured in the range 0.03-0.05ppm using the large-scale chamber test material, the current emission levels tested and approved by the Engineered Wood Products Association Australasia (EWPAA) are Super Eo for Big River Group's manufacturing plant in Grafton which is below 0.03ppm.

## HEALTH HAZARD INFORMATION

#### **Health Effects:**

# This product, in its natural form, is not classified as hazardous according to criteria of WorkSafe Australia.

In well-ventilated storage areas and workplaces utilising these products the concentration of formaldehyde in the air will not exceed the World Health Organisation standard of 0.1ppm for the general environment and it will be well below the WorkSafe Australia occupational Exposure Standard of 1.0ppm on a time weighted average (twa).

Sealing plywood with paint, varnish or other surface finishes further reduces any emissions.

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

#### **Cured resin:**

The cured resin is inert and not likely to contribute to health effects.

#### Formaldehyde:

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.

WorkSafe Australia has classified formaldehyde as a Category 3 carcinogen - possibly carcinogenic to humans - on the basis of evidence that inhalation of gas caused nasal cancer in experiments with rats. In the experiments, groups of rats were exposed to formaldehyde for six hours a day, five days a week for up to two years at concentrations of 0, 2.0, 5.6 and 14.3ppm. Fifty percent of those exposed at 14.3ppm, one percent exposed to 5.6ppm, but none exposed to 2.0 or 0ppm developed nasal cancers.

There have been more than thirty epidemiological studies involving over 150,000 people occupationally exposed to formaldehyde. These, and studies of behaviour to toxicity, indicate that exposure to formaldehyde below the WorkSafe Australia occupational Exposure Standard of 1ppm TWA (time weighted average) will not result in an increased risk of cavity cancers in humans.

As plywood products have emission levels of 0.03 to 0.05 ppm well below the WHO recommended level of 0.1 ppm, under reasonably foreseeable circumstances it is unlikely that the presence of traces of formaldehyde in the product poses any health risk.

#### Wood Dust:

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. Some woods may also be sensitizers, and some people may develop allergic dermatitis or asthma. Inhalation of wood dust, both hardwood and softwood, may increase the risk of nasal and Para nasal sinus cancers.

# Exposures to the wood dust produced from machining the boards may result in the following health effects:

#### Acute:

**Ingestion**: Unlikely to occur, but swallowing the wood dust may result in abdominal discomfort. **Eye:** The wood dust may be irritating to the eyes causing discomfort and redness.

**Skin contact:** 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 exposure over many years to uncontrolled wood dust from these boards may increase the risk of allergies, dermatitis, asthma or chronic nose or throat irritation in some people. The risk of nasal or Para nasal sinus cancers may also be increased. If the work practices noted in this MSDS are followed, no chronic health effects are anticipated.

#### FIRST AID TREATMENTS

Ingestion: Drink a glass of water.

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

Skin contact: Wash with mild soap and running water.

**Inhaled:** Leave the dusty area.

Advice to Doctor: Treat symptomatically.

#### **PRECAUTIONS FOR USE**

#### **Exposure Standards**:

The WorkSafe Australia Exposure Standards for softwood (e.g. pine) dust, published in October 1991, are:

5 mg/m3 time-weighted average (TWA) 10mg/m3 short term exposure limit (STEL)

And hardwood is:

1 mg/m3 time weighted average (TWA) 2 mg/m3 short term exposure limit (STEL) Wood dust is also listed as a sensitizer and the Exposure Standard is under review. In the interests of maintaining a safe working environment, it is recommended that workplace exposures to wood dust should not exceed 1.0 mg/m3 TWA.

#### **ENGINEERING CONTROLS**

All work with these 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 the wet sweeping method.

#### **Skin Protection:**

Wear loose, comfortable clothing. Long-sleeved shirts, trousers, and comfortable work gloves (AS2161) should be worn if skin irritation occurs.

After handling boards, wash 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 P1 or P2 replaceable filter or disposable face piece respirator should be worn. Respirators should comply with AS/NZS1716, and be selected, used, and maintained in accordance with AS/NZS1715.

#### **Eye Protection**:

Safety glasses or non-fogging goggles to meet (AS/NZS1337) should be worn when machining.

#### Flammability:

These boards are flammable but difficult to ignite.

Avoid a build-up of wood dust and keep all storage and 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:**

The boards should be stored in well-ventilated areas away from source of heat, flames or sparks.

No special transport requirements are considered necessary.

#### **Spills and Disposals:**

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

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

#### **Fire/Explosion Hazard:**

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

Ignitability Index	14
Spread of Flame Index	8
Heat Evolved Index	8-10
Smoke Developed Index	2-3

Burning or smoldering boards or wood dust can generate 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 powder fire extinguishers:

COMPANY:	Big River Group
ADDRESS:	Grafton Plant Trenayr Road Junction Hill N.S.W 2460
PHONE NUMBER:	Grafton (02) 66440900
FAX NUMBER:	Grafton (02)66433328

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#### WOOD DUST - PLYWOOD PRODUCTS

#### (1) **PRODUCT WARNING LABEL**

The following warning label is to be legibly affixed at least once to each Pack of plywood panels.

#### WARNING

#### AVOID BREATHING WOOD DUST: AVOID CONTACT WITH THE EYES

#### (2) PACK WARNING LABEL

#### WARNING

Wood dust produced by machining or sanding wood products including plywood, may cause irritation to the eyes, nose, and throat. It may also cause sensitization, e.g. dermatitis and asthma. Repeated and prolonged exposure to wood dust may cause nasal cancer.

#### AVOID BREATHING WOOD DUST: AVOID CONTACT WITH EYES

Work in a clean, well-ventilated area with machines that are equipped with efficient dust extraction systems or, if these are not available wear an Australian/New Zealand Standards approved dust mask and eye protection.

Respirators/dust masks should comply with AS/NZS1716 and be selected and maintained in accordance with AS/NZS1715. Safety glasses or non-fogging goggles to AS/NZS1337 should be worn when machining these products.