MATERIAL SAFETY DATA SHEET

WOOD VENEER PRODUCT

Carter Holt Harvey Wood Products: untreated radiata pine plywood

(Technical note 95/5/21: 30 June 2002)

IMPORTANT NOTICE: This Material Safety Data Sheet (MSDS) is written by Carter Holt Harvey Wood Products (a division of Carter Holt Harvey Ltd, ARBN 050 319 152) in accordance with Worksafe Australia and OSH New Zealand Guidelines. As such, the information contained herein must not be altered, deleted or added to. Carter Holt Harvey Wood Products will issue a new MSDS when there is a change in product specifications and/or the guidelines or regulations. Carter Holt Harvey Wood Products will not accept responsibility for changes made to its MSDS in content by any other person.

IDENTIFICATION

Product Name: **structural plywood to *AS/NZS 2269*.**
pallet grade(Non-structural) & reject plywood.
Ecoply, plyfloor, plyroof, plybrace, plygroove.

UN Number: **None allocated**

Registered Trade Name: **Carter Holt Harvey Wood Products**, **a division of Carter Holt Harvey Ltd**

Dangerous Goods Class: **None allocated**

Hazchem Code: **None allocated**

Poisons Schedule: **None allocated**

Use: Residential, commercial, industrial and marine construction, furniture and fitments and/or general purpose building material.

Physical Description/Properties

Appearance:

The products are manufactured as pressed boards ranging in thickness from 3mm to 45mm. They are made from *Pinus radiata* wood veneers bonded together with resin.

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 wood dust, generated when the product is machined, can ignite spontaneously.

Auto Ignition Temperature: **>**200ºC

Ingredients:

Substance/Chemical Entity	CAS NO.	Proportion by weight
Wood veneer	None	>92%
Phenol formaldehyde resin	40798-65-0	<8%

Note: The 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, formaldehyde emission has been measured in the range 0.03-0.05ppm using the large-scale chamber test. Emissions reduce to lower levels in service.

HEALTH HAZARD INFORMATION

Health Effects

This product, in its natural form, is not classified as hazardous. However, handling panel edges and surfaces may cause splinters. The known health effects of the constituents of the boards are as follows:

Wood Dust:

The main health effects relating to this product result from prolonged exposure to fine wood dust generated by further processing. When the boards are machined (sawn, sanded, drilled, routed, planed, etc) wood dust is produced. Wood dust or splinters may cause irritation of the nose, 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 the boards may result in the following health effects:**

Acute:

Swallowed 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 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. 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:

Swallowed: Drink a glass of water

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.

Phenol formaldehyde resin:

In the finished product, the cured resin is inert and not likely to contribute to health effects.

Formaldehyde emission

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 utilising these products the concentration of formaldehyde in the air will not exceed the World Health Organisation 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 plywood 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 - on the basis of evidence that inhalation of formaldehyde 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 14.3 ppm. Fifty percent of those exposed at 14.3 ppm, one percent exposed to 5.6 ppm, but none exposed to 2.0 or 0 ppm 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 occupational Exposure Standard of 1 ppm TWA (time weighted average) will not result in a increased risk of cavity cancers in humans.

As veneer 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 a health risk.

PRECAUTIONS FOR USE

Exposure Standards:

Exposure standards for softwood (e.g. pine) dust and formaldehyde are:

	OSH New Zealand	Worksafe Australia
Wood dust:	5 mg/m^3 time-weighted average (TWA)	5 mg/m^3 time-weighted average (TWA) 10 mg/m^3 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^3) time-weighted average (TWA) 2.0 ppm (2.5 mg/m^3) short term exposure limit (STEL)	1.0 ppm (1.2 mg/m^3) time-weighted average (TWA) 2.0 ppm (2.5 mg/m^3) 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^3 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 wet sweeping.

Skin Protection:

Wear loose, comfortable clothing. Long sleeved shirts, trousers and comfortable work gloves (AS2161) should be worn if skin irritation occurs, and to minimise the risk of splinters.

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/NZ1716, and be selected, used and maintained in accordance with AS/NZS1715.

Eye Protection:

Safety glasses or non fogging goggles (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 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 away from sources 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 disposed of 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 as determined in accordance with AS1530 Part 3.

Ignitability Index	14
Spread of Flame Index	7
Heat Evolved Index	7
Smoke Developed Index	3

Burning or smouldering 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 fire extinguishers.

Smoking:

Storage and work areas should be smoke free

CONTACT POINT:

AUSTRALIA
woodlogic, a division of Carter Holt Harvey Ltd
PO Box 117
Box Hill
Victoria 3128
Phone: 1800 338 463
Facsimile: 1800 624 362

www.woodlogic.com.au

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.