Chemwatch Independent Material Safety Data Sheet Issue Date: 13-Jan-2012

A317LP

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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

CHH UNTREATED PINE LVL, PLYWOOD AND I JOIST

PRODUCT USE

Glued product used in residential, commercial, and industrial construction, and/or general purpose building material.

SUPPLIER

Company: Carter Holt Harvey CHH Woodproducts

Address:

Private Bag 92165 Auckland, 1142 New Zealand

Telephone: 0800 866 678

Fax: 0800 866 679

Company: Carter Holt Harvey (CHH) Wood Products

Address: PO Box 425 Box Hill VIC, 3128 Australia

Telephone: +61 3 9258 7600 Fax: +61 3 9258 7629

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

RISK

•None under normal operating conditions.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME CAS RN % wood veneer >90

phenol/ formaldehyde polymer sodium salt 40798-65-0 <10

In use, may generate

wood dust softwood Not avail.

THIS REPORT IS FOR UNTREATED PRODUCT ONLY

Section 4 - FIRST AID MEASURES

SWALLOWED

- Hazard relates to dust released by sawing, cutting, sanding, trimming or other finishing operations.
- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

EYE

- Hazard relates to dust released by sawing, cutting, sanding, trimming or other finishing operations. If this product comes in contact with eyes:
- Wash out immediately with water.
- If irritation continues, seek medical attention.

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• Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

■ Brush off dust.

In the event of abrasion or irritation of the skin seek medical attention.

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- If dust is inhaled, remove from contaminated area.
- Encourage patient to blow nose to ensure clear passage of breathing.
- If irritation or discomfort persists seek medical attention.

NOTES TO PHYSICIAN

■ Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Water spray or fog.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

FIRE FIGHTING

■ Alert Fire Brigade and tell them location and nature of hazard.

Use water delivered as a fine spray to control the fire and cool adjacent area.

Wear breathing apparatus plus protective gloves.

Equipment should be thoroughly decontaminated after use.

FIRE/EXPLOSION HAZARD

- Combustible. Will burn if ignited.
- Wood products do not normally constitute an explosion hazard.
- Mechanical or abrasive activities which produce wood dust, as a by-product, may present a severe explosion hazard if a dust cloud contacts an ignition source.
- Hot humid conditions may result in spontaneous combustion of accumulated wood dust.
- Partially burned or scorched wood dust can explode if dispersed in air.
- Wet dusts may ignite spontaneously.
- Solid fuels, such as wood, when subjected to a sufficient heat flux, will degrade, gasify and release
 vapours. There is little or no oxidation involved in this gasification process and thus it is endothermic.
 This process is referred to as forced pyrolysis but is sometimes referred to, wrongly, as smoldering
 combustion. This type of combustion, once initiated, can continue in a low-oxygen environment, even when
 the fire is in a closed compartment with low oxygen content.
- An airborne concentration of 40 grams of dust per cubic meter of air is frequently used as the lower explosive limit (L.E.L) of wood dusts.
- Thermal oxidative decomposition may produce vapours and gases including carbon monoxide, aldehydes (including formaldehyde), organic acids, cyanides, polycyclic aromatics, and other volatile organic fragments.

FIRE INCOMPATIBILITY

Avoid exposure to excessive heat and fire.

HAZCHEM

None

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Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

Pick up.

Refer to major spills.

MAJOR SPILLS

Pick up.

Secure load if safe to do so.

Bundle/collect recoverable product.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

■ Use gloves when handling product to avoid splinters.

SUITABLE CONTAINER

Generally not applicable.

STORAGE INCOMPATIBILITY

Keep dry.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry area protected from environmental extremes.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storage and handling recommendations contained within this MSDS.

For major quantities:

- Consider storage in bunded areas ensure storage areas are isolated from sources of community water (including stormwater, ground water, lakes and streams).
- Ensure that accidental discharge to air or water is the subject of a contingency disaster management plan; this may require consultation with local authorities.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Source Material TWA mg/m³ STEL mg/m³ Notes Australia Exposure Standards Plywood And I Joist (Wood dust (soft wood))

The following materials had no OELs on our records

phenol/ formaldehyde polymer sodium salt:
 CAS:40798- 65- 0

MATERIAL DATA

CHH UNTREATED PINE LVL, PLYWOOD AND I JOIST: Not available

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

PHENOL/ FORMALDEHYDE POLYMER SODIUM SALT:

- These "dusts" have little adverse effect on the lungs and do not produce toxic effects or organic disease. Although there is no dust which does not evoke some cellular response at sufficiently high concentrations, the cellular response caused by P.N.O.C.s has the following characteristics:
 - the architecture of the air spaces remain intact,
 - scar tissue (collagen) is not synthesised to any degree,
 - tissue reaction is potentially reversible.

Extensive concentrations of P.N.O.C.s may:

- · seriously reduce visibility.
- cause unpleasant deposits in the eyes, ears and nasal passages,
- contribute to skin or mucous membrane injury by chemical or mechanical action, per se, or by the rigorous skin cleansing procedures necessary for their removal. [ACGIH]

This limit does not apply:

- to brief exposures to higher concentrations
- nor does it apply to those substances that may cause physiological impairment at lower concentrations but for which a TLV has as yet to be determined.

This exposure standard applies to particles which

- are insoluble or poorly soluble* in water or, preferably, in aqueous lung fluid (if data is available) and
- have a low toxicity (i.e., are not cytotoxic, genotoxic, or otherwise chemically reactive with lung tissue, and do not emit ionizing radiation, cause immune sensitization, or cause toxic effects other than by inflammation or by a mechanism of lung overload).

WOOD DUST SOFTWOOD:

■ Wood dusts produce dermatitis and an increased risk of upper respiratory disease. Epidemiological studies in furniture workers show an increased risk of lung, tongue, pharynx and nasal cancer. An excess risk of leukaemia amongst millwrights probably is associated with exposure to various components used in wood preservation.

Impairment of nasal mucociliary function may occur below 5 mg/m3 and may be important in the development of nasal adenocarcinoma amongst furniture workers exposed to hardwoods.

Certain exotic hardwoods contain alkaloids which may produce headache, anorexia, nausea, bradycardia and dyspnoea.

The softwood TLV-TWA reflects the apparent low risk for upper respiratory tract involvement amongst workers in the building industry. A separate TLV-TWA, for hard woods, is based on impaired nasal mucociliary function reported to contribute to nasal adenocarcinoma and related hyperplasia found in furniture workers.

PERSONAL PROTECTION

EYE

- When sawing, machining or sanding use
- Safety glasses with side shields.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

HANDS/FEET

- Protective gloves eg. Leather gloves or gloves with Leather facing.
- Safety footwear.

OTHER

■ No special equipment needed when handling small quantities. OTHERWISE:

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

- Overalls.
- Barrier cream.
- Eyewash unit.

RESPIRATOR

• Particulate dust filter. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

ENGINEERING CONTROLS

• Hazard relates to dust released by sawing, cutting, sanding, trimming or other finishing operations. Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Employers may need to use multiple types of controls to prevent employee overexposure.

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Pressed boards ranging from 3mm to 90mm. These boards are ripped into strips between 47 and 1200mm wide to form lineal wood components.

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PHYSICAL PROPERTIES

Does not mix with water.

Floats on water.

State	Manufactured	Molecular Weight	Not Applicable
Melting Range (℃)	Not Applicable	Viscosity	Not Applicable
Boiling Range (℃)	Not Applicable	Solubility in water (g/L)	Immiscible
Flash Point (℃)	Not applicable	pH (1% solution)	Not Applica ble
Decomposition Temp (℃)	Not Available	pH (as supplied)	Not A pplicable
Autoignition Temp (℃)	>200	Vapour Pressure (kPa)	Not Appli cable
Upper Explosive Limit (%)	Not applicable	Specific Gravity (water=1)	0.5- 1.0
Lower Explosive Limit (%)	Not applicable	Relative Vapour Density	Not applicable
		(air=1)	
Volatile Component (%vol)	Not Applicable	Evaporation Rate	Not Applicable

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Section 10 - STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY

■ Product is considered stable and hazardous polymerisation will not occur. For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

■ Not normally a hazard due to physical form of product.

Considered an unlikely route of entry in commercial/industrial environments. Ingestion of sawdust may cause nausea, abdominal pain, vomiting or diarrhoea.

EYE

■ The dust may produce eye discomfort causing smarting, pain and redness.

SKIN

The dust is discomforting and mildly abrasive to the skin and may cause drying of the skin, which may lead to contact dermatitis.

INHALED

■ Not normally a hazard due to physical form of product. Generated dust may be discomforting.

CHRONIC HEALTH EFFECTS

• Hazard relates to dust released by sawing, cutting, sanding, trimming or other finishing operations. Various woods are able to induce allergies, both of the immediate onset type in woodwork which causes a respiratory syndrome, and of the delayed type which results in eczema from exposure to dusts and direct contact. Cross-reaction is common. Certain alkaloids are contained in some species, causing headache, anorexia, slow heart rate and breathing difficulties. Conjunctivitis is also possible. Allergic reactions are aggravated by fungi and bacteria associated with wood. Cancers of the respiratory tract seem to be more common in those professions associated with the use of wood. This seems to be true for both hardwood and soft wood.

Wood dust may cause skin and respiratory sensitisation.

TOXICITY AND IRRITATION

WOOD DUST SOFTWOOD:

PHENOL/ FORMALDEHYDE POLYMER SODIUM SALT:

■ No significant acute toxicological data identified in literature search.

CHH UNTREATED PINE LVL, PLYWOOD AND I JOIST:

■ Not available. Refer to individual constituents.

WOOD DUST SOFTWOOD:

- unless otherwise specified data extracted from RTECS Register of Toxic Effects of Chemical Substances.
- Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune

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Section 11 - TOXICOLOGICAL INFORMATION

reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested. Allergic reactions involving the respiratory tract are usually due to interactions between IgE antibodies and allergens and occur rapidly. Allergic potential of the allergen and period of exposure often determine the severity of symptoms. Some people may be genetically more prone than others, and exposure to other irritants may aggravate symptoms. Allergy causing activity is due to interactions with proteins. Attention should be paid to atopic diathesis, characterised by increased susceptibility to nasal inflammation, asthma and eczema.

Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Such allergy is of the delayed type with onset up to four hours following exposure.

WARNING: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS. WARNING: Inhalation of wood dust by workers in the furniture and cabinet making industry has been related to nasal cancer [I.L.O. Encyclopedia] Use control measures to limit all exposures.

Section 12 - ECOLOGICAL INFORMATION

PHENOL/ FORMALDEHYDE POLYMER SODIUM SALT:

■ For Phenols:

Ecotoxicity - Phenols with log Pow >7.4 are expected to exhibit low toxicity to aquatic organisms however; the toxicity of phenols with a lower log Pow is variable. Dinitrophenols are more toxic than predicted from QSAR estimates. Hazard information for these groups is not generally available.

WOOD DUST SOFTWOOD:

■ DO NOT discharge into sewer or waterways.

The solid wood will decay on ground contact.

Ecotoxicity

Ingredient Persistence: Persistence: Air Bioaccumulation Mobility

phenol/ formaldehyde polymer No Data No Data Sodium salt Available No Data Available Wood dust softwood No Data Available Available Available

Section 13 - DISPOSAL CONSIDERATIONS

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Management Authority for disposal.
- Bury residue in an authorised landfill.

Section 14 - TRANSPORTATION INFORMATION

HAZCHEM:

None (ADG7)

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Section 14 - TRANSPORTATION INFORMATION

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE None

REGULATIONS

Regulations for ingredients

phenol/ formaldehyde polymer sodium salt (CAS: 40798-65-0) is found on the following regulatory lists:

"Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory"

No data for CHH Untreated Pine LVL, Plywood And I Joist (CW: 4729-43)

No data for CHH Untreated Pine LVL, Plywood And I Joist (CAS: , Not avail)

Section 16 - OTHER INFORMATION

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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Issue Date: 13-Jan-2012 Print Date: 20-Jul-2012

This is the end of the MSDS.