CHH Antisapstain Treated Pine Solid Wood

Carter Holt Harvey (Carter Holt Harvey (CHH) Woodproducts New Zealand)

Chemwatch Hazard Alert Code: **1**

Chemwatch: **26-5667**
Version No: **5.1.1.1**
Safety Data Sheet according to WHS and ADG requirements

Issue Date: **12/07/2017**
Print Date: **20/07/2017**
L.GHS.AUS.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	CHH Antisapstain Treated Pine Solid Wood
Synonyms	Not Available
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Timber for industrial or packaging applications. Timber sold in packets ranging from 1.8 to 4.5 m3 volume.

Details of the supplier of the safety data sheet

Registered company name	Carter Holt Harvey (Carter Holt Harvey (CHH) Woodproducts New Zealand)
Address	Private Bag 92-106 Auckland 1142 New Zealand
Telephone	0800 746 399
Fax	0800 746 400
Website	Not Available
Email	Not Available

Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	Not Available
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

NON-HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability	0	
Toxicity	0	
Body Contact	1	
Reactivity	0	
Chronic	0	

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme

Poisons Schedule	Not Applicable
Classification	Not Applicable

Label elements

Continued...

Hazard pictogram(s)	Not Applicable
SIGNAL WORD	NOT APPLICABLE

Hazard statement(s)

Not Applicable

Precautionary statement(s) Prevention

Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
Not Available	>90	solid pine wood
Not Available	<2	treatment residuals may include:
7440-50-8	^	copper
10294-56-1	^	phosphorous acid
1897-45-6	^	chlorothalonil
		In use, may generate wood dust softwood
Not Available	13ppm/CMIT/MIT	Cleanwood may also be present at low levels
		THIS REPORT IS FOR TREATED PRODUCT ONLY

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	▸ 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. ▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	Brush off dust. In the event of abrasion or irritation of the skin seek medical attention.
Inhalation	▸ 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.
Ingestion	▸ 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.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Water spray or fog.
- Foam.
- Dry chemical powder.

Continued...

- BCF (where regulations permit).

Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid exposure to excessive heat and fire.

Advice for firefighters

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.
HAZCHEM	Not Applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

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 SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Use gloves when handling product to avoid splinters.
Other information	▸ Keep dry

Conditions for safe storage, including any incompatibilities

Suitable container	▸ Generally not applicable.
Storage incompatibility	▸ Keep dry

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	copper	Copper (fume)	0.2 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	copper	Copper, dusts & mists (as Cu)	1 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
copper	Copper	3 mg/m3	33 mg/m3	200 mg/m3
phosphorous acid	Phosphorous acid, o-; (Phosphonic acid)	3 mg/m3	30 mg/m3	150 mg/m3
phosphorous acid	Phosphonic acid	1.2 mg/m3	13 mg/m3	380 mg/m3
chlorothalonil	Chlorothalonil; (Tetrachloroisophthalonitrile)	0.13 mg/m3	1.4 mg/m3	8.6 mg/m3

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Ingredient	Original IDLH	Revised IDLH
solid pine wood	Not Available	Not Available
treatment residuals may include:	Not Available	Not Available
copper	N.E. mg/m3 / N.E. ppm	100 mg/m3
phosphorous acid	Not Available	Not Available
chlorothalonil	Not Available	Not Available
Cleanwood may also be present at low levels	Not Available	Not Available

MATERIAL DATA

Exposure controls

Appropriate 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.
Personal protection	
Eye and face protection	When sawing, machining or sanding use|- Safety glasses with side shields.
Skin protection	See Hand protection below
Hands/feet protection	‣ Protective gloves eg. Leather gloves or gloves with Leather facing |NB - care should be taken not to touch the eyes or other sensitive areas while still wearing gloves that have been used to handle treated timber. [CHH]
Body protection	See Other protection below
Other protection	No special equipment needed when handling small quantities. **OTHERWISE:** ‣ Overalls. ‣ Barrier cream. ‣ Eyewash unit.
Thermal hazards	Not Available

Respiratory protection

Type B-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.
Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	B-AUS P2	-	B-PAPR-AUS / Class 1 P2
up to 50 x ES	-	B-AUS / Class 1 P2	-
up to 100 x ES	-	B-2 P2	B-PAPR-2 P2 ^

^ - Full-face
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Green or air dried sawn timber in all sizes, envelope treatment with liquid preservative to give temporary protection (approx 5 months) against sap stain and other decay fungi. Odourless.|THIS CHEMWATCH REPORT IS FOR TREATED PRODUCT ONLY.

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Physical state	Manufactured	**Relative density (Water = 1)**	0.4-0.6
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	Not Applicable	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	Not Applicable	**Viscosity (cSt)**	Not Applicable
Initial boiling point and boiling range (°C)	Not Applicable	**Molecular weight (g/mol)**	Not Applicable
Flash point (°C)	Not Applicable	**Taste**	Not Available
Evaporation rate	Not Applicable	**Explosive properties**	Not Available
Flammability	Not Applicable	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Applicable
Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	Not Applicable
Vapour pressure (kPa)	Not Applicable	**Gas group**	Not Available
Solubility in water (g/L)	Immiscible	**pH as a solution (1%)**	Not Applicable
Vapour density (Air = 1)	Not Applicable	**VOC g/L**	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Not normally a hazard due to physical form of product. Generated dust may be discomforting
Ingestion	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.
Skin Contact	The dust is discomforting and mildly abrasive to the skin and may cause drying of the skin, which may lead to contact dermatitis.
Eye	The dust may produce eye discomfort causing transient smarting, blinking
Chronic	▸ Hazard relates to dust released by sawing, cutting, sanding, trimming or other finishing operations. Common chronic responses to wood dust exposures are dermatitis, simple bronchitis and non asthmatic chronic airflow obstruction. Wood is an organic substrate for growth of micro-organisms and fungal spores, these readily become airborne with wood dust and have caused a variety of respiratory infections Various woods, mainly tropical varieties, are able to induce allergies in joiners, carpenters, cabinet makers and model-makers. Allergies of the immediate type (rhino conjunctivitis, bronchial asthma, urticaria), caused by contact with dusts produced during wood-working and those of a delayed type (contact eczema) caused by both the dust and by direct contact with the solid wood, are seen in an occupational setting. Because of the large number of substances found in wood, only a few low molecular weight allergens have been isolated and identified; these are mostly quinone or flavone derivatives. |Wood dust may cause skin and respiratory sensitisation.

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CHH Antisapstain Treated Pine Solid Wood	**TOXICITY**	**IRRITATION**
	Not Available	Not Available
copper	**TOXICITY**	**IRRITATION**
	dermal (rat) LD50: >2000 mg/kg[1]	Not Available
	Inhalation (rat) LC50: 0.733 mg/l/4hr[1]	
	Inhalation (rat) LC50: 1.03 mg/l/4hr[1]	
	Inhalation (rat) LC50: 1.67 mg/l/4hr[1]	
	Oral (rat) LD50: 300-500 mg/kg[1]	
phosphorous acid	**TOXICITY**	**IRRITATION**
	dermal (rat) LD50: >5000 mg/kg[2]	Not Available
	Oral (rat) LD50: 1895 mg/kg[2]	
chlorothalonil	**TOXICITY**	**IRRITATION**
	dermal (rat) LD50: >2500 mg/kg[2]	Not Available
	Inhalation (rat) LC50: 0.1 mg/l/4h.[2]	
	Oral (rat) LD50: 10000 mg/kgd[2]	
Legend:	*1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances*	

COPPER	for copper and its compounds (typically copper chloride): **Acute toxicity:** There are no reliable acute oral toxicity results available. In an acute dermal toxicity study (OECD TG 402), one group of 5 male rats and 5 groups of 5 female rats received doses of 1000, 1500 and 2000 mg/kg bw via dermal application for 24 hours. The LD50 values of copper monochloride were 2,000 mg/kg bw or greater for male (no deaths observed) and 1,224 mg/kg bw for female. Four females died at both 1500 and 2000 mg/kg bw, and one at 1,000 mg/kg bw. WARNING: Inhalation of high concentrations of copper fume may cause "metal fume fever", an acute industrial disease of short duration. Symptoms are tiredness, influenza like respiratory tract irritation with fever.
PHOSPHOROUS ACID	The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may produce respiratory tract irritation. Symptoms of pulmonary irritation may include coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and a burning sensation. Unlike most organs, the lung can respond to a chemical insult or a chemical agent, by first removing or neutralising the irritant and then repairing the damage (inflammation of the lungs may be a consequence). The repair process (which initially developed to protect mammalian lungs from foreign matter and antigens) may, however, cause further damage to the lungs (fibrosis for example) when activated by hazardous chemicals. The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis. No data of toxicological significance identified in literature search.
CHLOROTHALONIL	The following information refers to contact allergens as a group and may not be specific to this product. 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 reactions. for chlorothalanil: Chlorothalonil has low acute oral and dermal toxicity in rats and rabbits, respectively (acute oral and dermal LD50 values are > 10 000 mg/kg body weight). Hammer-milled technical chlorothalonil (MMAD 5-8 um) exhibited high toxicity in rats in an inhalation study, with a 4-h LC50 of 0.1 mg/litre. Chlorothalonil is a skin and eye irritant in the rabbit. Skin sensitization studies in the guinea-pig were inconclusive. **WARNING:** This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans. ADI: 0.01 mg/kg/day NOEL: 1.5 mg/kg/day
PHOSPHOROUS ACID & CHLOROTHALONIL	Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS.

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Acute Toxicity	⊘	**Carcinogenicity**	⊘
Skin Irritation/Corrosion	⊘	**Reproductivity**	⊘
Serious Eye Damage/Irritation	⊘	**STOT - Single Exposure**	⊘
Respiratory or Skin sensitisation	⊘	**STOT - Repeated Exposure**	⊘
Mutagenicity	⊘	**Aspiration Hazard**	⊘

Legend: ✗ *– Data available but does not fill the criteria for classification*
✓ *– Data available to make classification*
⊘ *– Data Not Available to make classification*

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

CHH Antisapstain Treated Pine Solid Wood

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Not Available	Not Available	Not Available	Not Available	Not Available

copper

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	0.0028mg/L	2
EC50	48	Crustacea	0.001mg/L	5
EC50	72	Algae or other aquatic plants	0.013335mg/L	4
BCF	960	Fish	200mg/L	4
EC25	6	Algae or other aquatic plants	0.00150495mg/L	4
NOEC	96	Crustacea	0.0008mg/L	4

phosphorous acid

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	=6980mg/L	1

chlorothalonil

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	0.0076mg/L	4
EC50	48	Crustacea	0.0066475mg/L	4
EC50	72	Algae or other aquatic plants	0.0068mg/L	4
BCF	336	Algae or other aquatic plants	0.02mg/L	4
NOEC	240	Crustacea	0.0003mg/L	4

Legend: *Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data*

Although treated, the solid wood will decay on ground contact.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
chlorothalonil	HIGH	HIGH

Bioaccumulative potential

Ingredient	Bioaccumulation
chlorothalonil	LOW (BCF = 125)

Mobility in soil

Ingredient	Mobility
chlorothalonil	LOW (KOC = 2392)

Continued...

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	▸ 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 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

COPPER(7440-50-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

PHOSPHOROUS ACID(10294-56-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

CHLOROTHALONIL(1897-45-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (chlorothalonil; copper; phosphorous acid)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	N (copper)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y
Legend:	*Y = All ingredients are on the inventory* *N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)*

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

Name	CAS No

Continued...

copper	7440-50-8, 133353-46-5, 133353-47-6, 195161-80-9, 65555-90-0, 72514-83-1

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.

The 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.

Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average
PC—STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit。
IDLH: Immediately Dangerous to Life or Health Concentrations
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index