

# CHH Ecoply Barrier

Carter Holt Harvey Plywood Ltd

Chemwatch Hazard Alert Code: 1

Chemwatch: 5243-02

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Safety Data Sheet according to HSNO Regulations

S.GHS.NZLEN.RISK

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

### Product Identifier

Product name	CHH Ecoply Barrier
Synonyms	Not Available
Other means of identification	Not Available

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

Relevant identified uses	Plywood rigid air barrier.
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### Details of the supplier of the safety data sheet

Registered company name	Carter Holt Harvey Plywood Ltd
Address	173 Captain Springs Road Onehunga Auckland 1061 New Zealand
Telephone	+64 800 326 759
Fax	Not Available
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

**Not considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Not regulated for transport of Dangerous Goods.**

#### 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

#### CANADIAN WHMIS SYMBOLS

Classification	Not Applicable
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Determined by  
Chemwatch using  
GHS/HSNO criteria

Not Available  
\*LIMITED EVIDENCE

### Label elements

Hazard pictogram(s) Not Applicable

SIGNAL WORD **NOT APPLICABLE**

### Hazard statement(s)

Not Applicable

\*LIMITED EVIDENCE

### Supplementary 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
		powder coated plywood
40798-65-0	<10	<u>phenol/ formaldehyde polymer sodium salt</u>
		impregnation residuals, as
7440-50-8	^	<u>copper</u>
7440-47-3	^	<u>chromium</u>
7440-38-2	^	<u>arsenic</u>
		Coating comprises
7727-43-7	<1	<u>barium sulfate</u>
13463-67-7	<1	<u>titanium dioxide</u>
2451-62-9	<1	<u>triglycidyl isocyanurate</u>
68186-94-7	<1	<u>C.I. Pigment Black 26</u>
		In use, may generate wood dust softwood

## SECTION 4 FIRST AID MEASURES

### Description of first aid measures

<b>Eye Contact</b>	<ul style="list-style-type: none"> <li>▶ Hazard relates to dust released by sawing, cutting, sanding, trimming or other finishing operations.</li> </ul> If this product comes in contact with eyes: <ul style="list-style-type: none"> <li>▶ Wash out immediately with water.</li> <li>▶ If irritation continues, seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
<b>Skin Contact</b>	Brush off dust. In the event of abrasion or irritation of the skin seek medical attention.

<b>Inhalation</b>	<ul style="list-style-type: none"> <li>▶ If dust is inhaled, remove from contaminated area.</li> <li>▶ Encourage patient to blow nose to ensure clear passage of breathing.</li> <li>▶ If irritation or discomfort persists seek medical attention.</li> </ul>
<b>Ingestion</b>	<p>Not considered a normal route of entry.</p> <ul style="list-style-type: none"> <li>▶ Immediately give a glass of water.</li> <li>▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>

### 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.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.

### Special hazards arising from the substrate or mixture

<b>Fire Incompatibility</b>	Avoid exposure to excessive heat and fire.
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### Advice for firefighters

<b>Fire Fighting</b>	<p>Alert Fire Brigade and tell them location and nature of hazard.</p> <p>Use water delivered as a fine spray to control the fire and cool adjacent area.</p> <p> Wear breathing apparatus plus protective gloves. Equipment should be thoroughly decontaminated after use.</p>
<b>Fire/Explosion Hazard</b>	<p>Combustible. Will burn if ignited.</p> <p> - 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.</p>

## 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

<b>Minor Spills</b>	Pick up. Refer to major spills.
<b>Major Spills</b>	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

<b>Safe handling</b>	Use gloves when handling product to avoid splinters.
<b>Other information</b>	▶ Keep dry

### Conditions for safe storage, including any incompatibilities

<b>Suitable container</b>	Packets.
<b>Storage incompatibility</b>	▶ Keep dry



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- X** — Must not be stored together  
**0** — May be stored together with specific preventions  
**+** — May be stored together

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### OCCUPATIONAL EXPOSURE LIMITS (OEL)

#### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	copper	Copper fume Dusts and mists, as Cu	0.2; 1 mg/m <sup>3</sup>	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	chromium	Chromium metal	0.5 mg/m <sup>3</sup>	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	barium sulfate	Barium sulphate	10 mg/m <sup>3</sup>	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	titanium dioxide	Titanium dioxide	10 mg/m <sup>3</sup>	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	triglycidyl isocyanurate	Triglycidyl isocyanurate (TGIC)	0.08 mg/m <sup>3</sup>	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	C.I. Pigment Black 26	Manganese dust and compounds, as Mn	1 mg/m <sup>3</sup>	Not Available	Not Available	Not Available


#### EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
copper	Copper	3 mg/m <sup>3</sup>	33 mg/m <sup>3</sup>	200 mg/m <sup>3</sup>
chromium	Chromium	1.5 mg/m <sup>3</sup>	17 mg/m <sup>3</sup>	99 mg/m <sup>3</sup>
barium sulfate	Barium sulfate	15 mg/m <sup>3</sup>	170 mg/m <sup>3</sup>	990 mg/m <sup>3</sup>
titanium dioxide	Titanium oxide; (Titanium dioxide)	30 mg/m <sup>3</sup>	330 mg/m <sup>3</sup>	2,000 mg/m <sup>3</sup>

Ingredient	Original IDLH	Revised IDLH
phenol/ formaldehyde polymer sodium salt	Not Available	Not Available
copper	100 mg/m <sup>3</sup>	Not Available
chromium	250 mg/m <sup>3</sup>	Not Available
arsenic	Not Available	Not Available
barium sulfate	Not Available	Not Available
titanium dioxide	5,000 mg/m <sup>3</sup>	Not Available
triglycidyl isocyanurate	Not Available	Not Available
C.I. Pigment Black 26	500 mg/m <sup>3</sup>	Not Available

### Exposure controls

<b>Appropriate engineering controls</b>	<p>► 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.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>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.</p> <p>Employers may need to use multiple types of controls to prevent employee overexposure.</p> <p>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. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.</p>		
	<table border="1" style="width: 100%;"> <tr> <td>Type of Contaminant:</td> <td style="text-align: right;">Air Speed:</td> </tr> </table>	Type of Contaminant:	Air Speed:
Type of Contaminant:	Air Speed:		

	solvent, vapours, degreasing etc., evaporating from tank (in still air)	0.25-0.5 m/s (50-100 f/min)
	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min)
	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)
	Within each range the appropriate value depends on:	
	Lower end of the range	Upper end of the range
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents
	2: Contaminants of low toxicity or of nuisance value only	2: Contaminants of high toxicity
	3: Intermittent, low production.	3: High production, heavy use
	4: Large hood or large air mass in motion	4: Small hood - local control only
	<p>Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.</p>	
<b>Personal protection</b>		
<b>Eye and face protection</b>	When sawing, machining or sanding use]- Safety glasses with side shields.	
<b>Skin protection</b>	See Hand protection below	
<b>Hands/feet protection</b>	<ul style="list-style-type: none"> <li>▶ Protective gloves eg. Leather gloves or gloves with Leather facing</li> <li>▶ Safety footwear</li> </ul>	
<b>Body protection</b>	See Other protection below	
<b>Other protection</b>	<p>No special equipment needed when handling small quantities.</p> <p><b>OTHERWISE:</b></p> <ul style="list-style-type: none"> <li>▶ Overalls.</li> <li>▶ Barrier cream.</li> <li>▶ Eyewash unit.</li> </ul>	

### Respiratory protection

- ▶ Avoid generating and breathing dust.
- ▶ Effective dust extraction and good ventilation is required when using cutting, shaping or sanding tools. Wear a disposable dust mask AS/NZS 1715:2009 class P1 or P2 when machining.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Beige plywood sheet ranging in thickness from 3mm to 45mm.		
<b>Physical state</b>	Manufactured	<b>Relative density (Water = 1)</b>	0.5-1.0
<b>Odour</b>	Not Available	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature (°C)</b>	>200
<b>pH (as supplied)</b>	Not Applicable	<b>Decomposition temperature</b>	Not Available
<b>Melting point / freezing point (°C)</b>	Not Applicable	<b>Viscosity (cSt)</b>	Not Applicable

<b>Initial boiling point and boiling range (°C)</b>	Not Applicable	<b>Molecular weight (g/mol)</b>	Not Applicable
<b>Flash point (°C)</b>	Not Applicable	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	Not Applicable	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	Not Applicable	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	Not Available	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Applicable
<b>Lower Explosive Limit (%)</b>	Not Available	<b>Volatile Component (%vol)</b>	Not Applicable
<b>Vapour pressure (kPa)</b>	Not Applicable	<b>Gas group</b>	Not Available
<b>Solubility in water (g/L)</b>	Immiscible	<b>pH as a solution (1%)</b>	Not Applicable
<b>Vapour density (Air = 1)</b>	Not Applicable	<b>VOC g/L</b>	Not Applicable

## SECTION 10 STABILITY AND REACTIVITY

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

## SECTION 11 TOXICOLOGICAL INFORMATION

### Information on toxicological effects

<b>Inhaled</b>	Not normally a hazard due to physical form of product. Generated dust may be discomforting  Wood dust is a hazardous substance.
<b>Ingestion</b>	Not normally a hazard due to physical form of product.  Ingestion of sawdust may cause nausea, abdominal pain, vomiting or diarrhoea.
<b>Skin Contact</b>	The dust is discomforting and mildly abrasive to the skin and may cause drying of the skin, which may lead to contact dermatitis.
<b>Eye</b>	The dust may produce eye discomfort causing smarting, pain and redness.
<b>Chronic</b>	<p>▸ Hazard relates to dust released by sawing, cutting, sanding, trimming or other finishing operations.</p> <p>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.</p> <p> Wood dust may cause skin and respiratory sensitisation.</p>

<b>CCH EcoCopy Barrier</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available
<b>phenol/ formaldehyde polymer sodium salt</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available
<b>copper</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>	Not Available
	Inhalation (rat) LC50: 0.733 mg/l4 h <sup>[1]</sup>	
	Oral (rat) LD50: 300-500 mg/kg <sup>[1]</sup>	
<b>chromium</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available
<b>arsenic</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Oral (rat) LD50: 763 mg/kg <sup>[2]</sup>	Not Available

barium sulfate	<b>TOXICITY</b>	<b>IRRITATION</b>
	dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>	Not Available
titanium dioxide	<b>TOXICITY</b>	<b>IRRITATION</b>
	Inhalation (rat) LC50: >2.28 mg/l/4 h <sup>[1]</sup>	Skin (human): 0.3 mg /3D (int)-mild *
	Oral (rat) LD50: >2000 mg/kg <sup>[1]</sup>	
triglycidyl isocyanurate	<b>TOXICITY</b>	<b>IRRITATION</b>
	dermal (rat) LD50: >2000 mg/kg <sup>[2]</sup>	Eye (rabbit): SEVERE *
	Inhalation (rat) LC50: 0.65 mg/l/4h** <sup>[2]</sup>	Skin (rabbit): slight *
	Oral (rat) LD50: <100 mg/kg <sup>[2]</sup>	
C.I. Pigment Black 26	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available
<b>Legend:</b>	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	

<b>COPPER</b>	for copper and its compounds (typically copper chloride): <b>Acute toxicity:</b> 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. Symptom of the hardness of skin, an exudation of hardness site, the formation of scar and reddish changes were observed on application sites in all treated animals. Skin inflammation and injury were also noted. In addition, a reddish or black urine was observed in females at 2,000, 1,500 and 1,000 mg/kg bw. Female rats appeared to be more sensitive than male based on mortality and clinical signs. No reliable skin/eye irritation studies were available. The acute dermal study with copper monochloride suggests that it has a potential to cause skin irritation. <b>Repeat dose toxicity:</b> In repeated dose toxicity study performed according to OECD TG 422, copper monochloride was given orally (gavage) to Sprague-Dawley rats for 30 days to males and for 39 - 51 days to females at concentrations of 0, 1.3, 5.0, 20, and 80 mg/kg bw/day. The NOAEL value was 5 and 1.3 mg/kg bw/day for male and female rats, respectively. No deaths were observed in male rats. One treatment-related death was observed in female rats in the high dose group. Erythropoietic toxicity (anaemia) was seen in both sexes at the 80 mg/kg bw/day. The frequency of squamous cell hyperplasia of the forestomach was increased in a dose-dependent manner in male and female rats at all treatment groups, and was statistically significant in males at doses of =20 mg/kg bw/day and in females at doses of =5 mg/kg bw/day doses. The observed effects are considered to be local, non-systemic effect on the forestomach which result from oral (gavage) administration of copper monochloride. <b>Genotoxicity:</b> An in vitro genotoxicity study with copper monochloride showed negative results in a bacterial reverse mutation test with Salmonella typhimurium strains (TA 98, TA 100, TA 1535, and TA 1537) with and without S9 mix at concentrations of up to 1,000 ug/plate. An in vitro test for chromosome aberration in Chinese hamster lung (CHL) cells showed that copper monochloride induced structural and numerical aberrations at the concentration of 50, 70 and 100 ug/mL without S9 mix. In the presence of the metabolic activation system, significant increases of structural aberrations were observed at 50 and 70 ug/mL and significant increases of numerical aberrations were observed at 70 ug/mL. In an in vivo mammalian erythrocyte micronucleus assay, all animals dosed (15 - 60 mg/kg bw) with copper monochloride exhibited similar PCE/(PCE+NCE) ratios and MNPCE frequencies compared to those of the negative control animals. Therefore copper monochloride is not an in vivo mutagen. <b>Carcinogenicity:</b> there was insufficient information to evaluate the carcinogenic activity of copper monochloride. <b>Reproductive and developmental toxicity:</b> In the combined repeated dose toxicity study with the reproduction/developmental toxicity screening test (OECD TG 422), copper monochloride was given orally (gavage) to Sprague-Dawley rats for 30 days to males and for 39-51 days to females at concentrations of 0, 1.3, 5.0, 20, and 80 mg/kg bw/day. The NOAEL of copper monochloride for fertility toxicity was 80 mg/kg bw/day for the parental animals. No treatment-related effects were observed on the reproductive organs and the fertility parameters assessed. For developmental toxicity the NOAEL was 20 mg/kg bw/day. Three of 120 pups appeared to have icterus at birth; 4 of 120 pups appeared runted at the highest dose tested (80 mg/kg bw/day). <b>WARNING:</b> 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.
	<b>CHROMIUM</b>

	Gastrointestinal tumours, lymphoma, musculoskeletal tumours and tumours at site of application recorded.
<b>ARSENIC</b>	<p>Arsenic compounds are classified by the European Union as toxic by inhalation and ingestion and toxic to aquatic life and long lasting in the environment. IARC classify arsenic in drinking water as a confirmed human carcinogen (IARC 1).</p> <p>The main inorganic forms of arsenic relevant for human exposures are pentavalent arsenic (also called arsenate, As(V), or As+5) and trivalent arsenic (also called arsenite, As(III), or As+3). These inorganic species undergoes a series of reduction and oxidative/methylation steps in human liver and other tissues to form tri- and pentavalent methylated metabolites of methylarsonite [MA(III)], methylarsonate [MA(V)], dimethylarsinite [DMA(III)], and dimethylarsinate [DMA(V)]. Some mammalian species also produce trimethylated metabolites, trimethylarsine oxide</p> <p>The distinction between inorganic and organic forms is important because it is generally accepted that the organic species are excreted more quickly from the body and generally considered less toxic, with a relative rank order of As(III) &gt; As(V) &gt;&gt; MA(V), DMA(V) &gt;&gt; arsenobetaine. However, the methylated trivalent metabolites, MA(III) and DMA(III), are significantly more toxic than their pentavalent counterpart and either As(III) or As(V). In many cases, biomonitoring or environmental occurrence data are reported as total arsenic and do not distinguish between the different species. In those situations, understanding the relevant sources of arsenic is essential to evaluate potential arsenic related health effects, especially those related to inorganic arsenic exposure.</p> <p><b>WARNING:</b> This substance has been classified by the IARC as Group 1: <b>CARCINOGENIC TO HUMANS</b>. Tumorigenic - Carcinogenic by RTECS criteria.</p>
<b>TITANIUM DIOXIDE</b>	<p>The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.</p> <p>The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.</p> <p>Exposure to titanium dioxide is via inhalation, swallowing or skin contact. When inhaled, it may deposit in lung tissue and lymph nodes causing dysfunction of the lungs and immune system. Absorption by the stomach and intestines depends on the size of the particle. It penetrated only the outermost layer of the skin, suggesting that healthy skin may be an effective barrier. There is no substantive data on genetic damage, though cases have been reported in experimental animals. Studies have differing conclusions on its cancer-causing potential.</p> <p><b>WARNING:</b> This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans. * IUCLID</p>
<b>TRIGLYCIDYL ISOCYANURATE</b>	<p>The following information refers to contact allergens as a group and may not be specific to this product.</p> <p>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. 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.</p> <p>Animal testing showed that a-TGIC is very poorly absorbed into the bloodstream from the stomach, but it is still distributed in the liver, stomach and testes. TGIC appears to be broken down by epoxide hydrolase in the microsomes of cells; the rate of this varies between tissues and individuals. The toxic effect of TGIC toward cells is probably related to its alkylating ability. In animals, it may bind DNA in various tissues. Studies that evaluated the effects of TGIC on fertility were equivocal, with reduced fertility only occasionally noted. TGIC has caused chromosomal abnormalities in animal testing; in animals, it also caused skin tumours and ulceration.</p> <p>* TGIC Full Public Report: NICNAS (Australia) April 1994; ** [Manufacturer]</p>
<b>PHENOL/ FORMALDEHYDE POLYMER SODIUM SALT &amp; CHROMIUM &amp; BARIUM SULFATE &amp; C.I. PIGMENT BLACK 26</b>	No significant acute toxicological data identified in literature search.

<b>Acute Toxicity</b>	☉	<b>Carcinogenicity</b>	☉
<b>Skin Irritation/Corrosion</b>	☉	<b>Reproductivity</b>	☉
<b>Serious Eye Damage/Irritation</b>	☉	<b>STOT - Single Exposure</b>	☉
<b>Respiratory or Skin sensitisation</b>	☉	<b>STOT - Repeated Exposure</b>	☉
<b>Mutagenicity</b>	☉	<b>Aspiration Hazard</b>	☉

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



## Toxicity

CHH Ecoply Barrier	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
phenol/ formaldehyde polymer sodium salt	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
chromium	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	13.9mg/L	4
	EC50	48	Crustacea	0.0225mg/L	5
	EC50	72	Algae or other aquatic plants	0.104mg/L	4
	NOEC	672	Fish	0.00019mg/L	4
arsenic	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	9.9mg/L	4
NOEC	336	Algae or other aquatic plants	<0.75mg/L	4	
barium sulfate	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	>3.5mg/L	2
	EC50	48	Crustacea	32mg/L	4
	NOEC	72	Algae or other aquatic plants	>=1.15mg/L	2
titanium dioxide	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	155mg/L	2
	EC50	48	Crustacea	>10mg/L	2
	EC50	72	Algae or other aquatic plants	5.83mg/L	4
	NOEC	336	Fish	0.089mg/L	4
triglycidyl isocyanurate	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	>77mg/L	2
EC50	72	Algae or other aquatic plants	>29- <30mg/L	2	
C.I. Pigment Black 26	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	0.05mg/L	2
	NOEC	504	Fish	0.52mg/L	2
<b>Legend:</b>	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.

Continued...

**Persistence and degradability**

Ingredient	Persistence: Water/Soil	Persistence: Air
titanium dioxide	HIGH	HIGH
triglycidyl isocyanurate	HIGH	HIGH

**Bioaccumulative potential**

Ingredient	Bioaccumulation
titanium dioxide	LOW (BCF = 10)
triglycidyl isocyanurate	LOW (LogKOW = 1.2052)

**Mobility in soil**

Ingredient	Mobility
titanium dioxide	LOW (KOC = 23.74)
triglycidyl isocyanurate	LOW (KOC = 10)

**SECTION 13 DISPOSAL CONSIDERATIONS****Waste treatment methods**

Product / Packaging disposal	
	<ul style="list-style-type: none"> <li>▶ Recycle wherever possible or consult manufacturer for recycling options.</li> <li>▶ Consult State Land Waste Management Authority for disposal.</li> <li>▶ Bury residue in an authorised landfill.</li> </ul>

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

**Disposal Requirements**

Not applicable as substance/ material is non hazardous.

**SECTION 14 TRANSPORT INFORMATION****Labels Required**

Marine Pollutant	NO
HAZCHEM	Not Applicable

**Land transport (UN): 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**

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
Not Applicable	Not Applicable

**PHENOL/ FORMALDEHYDE POLYMER SODIUM SALT(40798-65-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

New Zealand Inventory of Chemicals (NZIoC)

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

New Zealand Hazardous Substances and New Organisms (HSNO) Act -  
Classification of Chemicals  
New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

#### CHROMIUM(7440-47-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified  
by the IARC Monographs  
New Zealand Hazardous Substances and New Organisms (HSNO) Act -  
Classification of Chemicals

New Zealand Inventory of Chemicals (NZIoC)  
New Zealand Workplace Exposure Standards (WES)

#### ARSENIC(7440-38-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified  
by the IARC Monographs  
New Zealand Hazardous Substances and New Organisms (HSNO) Act -  
Classification of Chemicals

New Zealand Inventory of Chemicals (NZIoC)

#### BARIUM SULFATE(7727-43-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

#### TITANIUM DIOXIDE(13463-67-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified  
by the IARC Monographs  
New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

#### TRIGLYCIDYL ISOCYANURATE(2451-62-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act -  
Classification of Chemicals  
New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

#### C.I. PIGMENT BLACK 26(68186-94-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

### Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
Not Applicable	Not Applicable	Not Applicable

### Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

### Tracking Requirements

Not Applicable

### National Inventory Status

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (triglycidyl isocyanurate; copper; C.I. Pigment Black 26; arsenic; barium sulfate; phenol/ formaldehyde polymer sodium salt; chromium)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	N (phenol/ formaldehyde polymer sodium salt)
Japan - ENCS	N (copper; C.I. Pigment Black 26; arsenic; phenol/ formaldehyde polymer sodium salt; chromium)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	N (phenol/ formaldehyde polymer sodium salt)

USA - TSCA	Y
<b>Legend:</b>	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

<b>Revision Date</b>	22/05/2018
<b>Initial Date</b>	27/01/2017

### Other information

#### Ingredients with multiple cas numbers

Name	CAS No
copper	7440-50-8, 133353-46-5, 133353-47-6, 195161-80-9, 65555-90-0, 72514-83-1
barium sulfate	7727-43-7, 13462-86-7
titanium dioxide	13463-67-7, 1317-70-0, 1317-80-2, 12188-41-9, 1309-63-3, 100292-32-8, 101239-53-6, 116788-85-3, 12000-59-8, 12701-76-7, 12767-65-6, 12789-63-8, 1344-29-2, 185323-71-1, 185828-91-5, 188357-76-8, 188357-79-1, 195740-11-5, 221548-98-7, 224963-00-2, 246178-32-5, 252962-41-7, 37230-92-5, 37230-94-7, 37230-95-8, 37230-96-9, 39320-58-6, 39360-64-0, 39379-02-7, 416845-43-7, 494848-07-6, 494848-23-6, 494851-77-3, 494851-98-8, 55068-84-3, 55068-85-4, 552316-51-5, 62338-64-1, 767341-00-4, 97929-50-5, 98084-96-9
C.I. Pigment Black 26	68186-94-7, 69234-82-8, 86090-41-7, 206452-06-4

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

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