

CHH Boron Treated Pine Solid Wood

Carter Holt Harvey Building Products Ltd

Chemwatch Hazard Alert Code: 1

Chemwatch: 4729-84

Issue Date: 02/09/2019

Version No: 15.1.1.1

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Safety Data Sheet according to HSNO Regulations

S.GHS.NZL.EN

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

Product Identifier

| | |
|-------------------------------|-----------------------------------|
| Product name | CHH Boron 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 | Treated solid wood product used in residential, commercial and industrial construction, furniture and fitments and/or general purpose building. |
|--------------------------|---|

Details of the supplier of the safety data sheet

| | |
|-------------------------|---|
| Registered company name | Carter Holt Harvey Building Products Ltd |
| Address | 173 Captain Springs Rd Onehunga Auckland 1061 New Zealand |
| Telephone | +64 800 746 399 |
| Fax | 0800 746 400 |
| Website | www.chhwoodproducts.co.nz |
| Email | woodproducts@chhwoodproducts.co.nz |

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

| | |
|---|----------------|
| Classification | Not Applicable |
| Determined by Chemwatch using GHS/HSNO criteria | Not Available |

Label elements

| | |
|---------------------|-----------------------|
| 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

CHH Boron Treated Pine Solid Wood

| CAS No | %[weight] | Name |
|---------------|-----------|---|
| Not Available | >90 | solid pine wood |
| Not Available | <2 | treatment residuals may include: |
| 12008-41-2 | ^ | <u>disodium octaborate</u> |
| 8001-54-5 | ^ | <u>benzalkonium chloride</u> |
| 62163-53-5 | ^ | <u>Basazol Red GRL</u> |
| 10377-60-3 | ^ | <u>magnesium nitrate</u> |
| 55965-84-9 | ^ | <u>isothiazolinones, mixed</u> |
| Not Available | | In use, may generate wood dust softwood |
| Not Available | | THIS REPORT IS FOR TREATED PRODUCT ONLY |

SECTION 4 FIRST AID MEASURES

Description of first aid measures

| | |
|---------------------|--|
| Eye Contact | <ul style="list-style-type: none"> ▶ Hazard relates to dust released by sawing, cutting, sanding, trimming or other finishing operations. If this product comes in contact with eyes: <ul style="list-style-type: none"> ▶ 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 | <ul style="list-style-type: none"> ▶ 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 | <ul style="list-style-type: none"> ▶ 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.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.

Special hazards arising from the substrate or mixture

| | |
|-----------------------------|--|
| Fire Incompatibility | Avoid exposure to excessive heat and fire. |
|-----------------------------|--|

Advice for firefighters

| | |
|------------------------------|--|
| Fire Fighting | Wear breathing apparatus plus protective gloves. Equipment should be thoroughly decontaminated after use. 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. |
| Fire/Explosion Hazard | 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. Combustible. Will burn if ignited. |

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 |



+ + + + + + +

- 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

Not Available

EMERGENCY LIMITS


| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|-----------------------|---|------------|-----------|-------------|
| benzalkonium chloride | Alkyl dimethylbenzyl ammonium chloride; (Benzalkonium chloride) | 0.91 mg/m3 | 10 mg/m3 | 60 mg/m3 |
| magnesium nitrate | Magnesium(II) nitrate (1:2), hexahydrate | 16 mg/m3 | 180 mg/m3 | 1,100 mg/m3 |
| magnesium nitrate | Magnesium nitrate; (Magnesium(II) nitrate (1:2)) | 30 mg/m3 | 330 mg/m3 | 2,000 mg/m3 |

| Ingredient | Original IDLH | Revised IDLH |
|-------------------------|---------------|---------------|
| disodium octaborate | Not Available | Not Available |
| benzalkonium chloride | Not Available | Not Available |
| Basazol Red GRL | Not Available | Not Available |
| magnesium nitrate | Not Available | Not Available |
| isothiazolinones, mixed | Not Available | Not Available |

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. 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. 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. | | | | | | | | | | |
| | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Type of Contaminant:</th> <th style="width: 30%;">Air Speed:</th> </tr> </thead> <tbody> <tr> <td>solvent, vapours, degreasing etc., evaporating from tank (in still air)</td> <td>0.25-0.5 m/s (50-100 f/min)</td> </tr> <tr> <td>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)</td> <td>0.5-1 m/s (100-200 f/min.)</td> </tr> <tr> <td>direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)</td> <td>1-2.5 m/s (200-500 f/min)</td> </tr> <tr> <td>grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).</td> <td>2.5-10 m/s (500-2000 f/min.)</td> </tr> </tbody> </table> | 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.) |
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| | Within each range the appropriate value depends on: | | | | | | | | | | |
| | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Lower end of the range</th> <th style="width: 50%;">Upper end of the range</th> </tr> </thead> <tbody> <tr> <td>1: Room air currents minimal or favourable to capture</td> <td>1: Disturbing room air currents</td> </tr> <tr> <td>2: Contaminants of low toxicity or of nuisance value only</td> <td>2: Contaminants of high toxicity</td> </tr> <tr> <td>3: Intermittent, low production.</td> <td>3: High production, heavy use</td> </tr> <tr> <td>4: Large hood or large air mass in motion</td> <td>4: Small hood - local control only</td> </tr> </tbody> </table> | 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 |
| Lower end of the range | Upper end of the range | | | | | | | | | | |
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| 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 | | | | | | | | | | |
| 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 | | | | | | | | | | | |

CHH Boron Treated Pine Solid Wood

| | |
|--------------------------------|---|
| | or used. |
| Personal protection |  |
| Eye and face protection | When sawing, machining or sanding use: <ul style="list-style-type: none"> ▶ 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 lenses 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] |
| Skin protection | See Hand protection below |
| Hands/feet protection | <ul style="list-style-type: none"> ▶ Protective gloves eg. Leather gloves or gloves with Leather facing ▶ Safety footwear |
| Body protection | See Other protection below |
| Other protection | No special equipment needed when handling small quantities. OTHERWISE: <ul style="list-style-type: none"> ▶ Overalls. ▶ Barrier cream. ▶ Eyewash unit. |

Respiratory protection

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

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

| Required minimum protection factor | Maximum gas/vapour concentration present in air p.p.m. (by volume) | Half-face Respirator | Full-Face Respirator |
|------------------------------------|--|----------------------|----------------------|
| up to 10 | 1000 | AK-AUS / Class1 P2 | - |
| up to 50 | 1000 | - | AK-AUS / Class 1 P2 |
| up to 50 | 5000 | Airline * | - |
| up to 100 | 5000 | - | AK-2 P2 |
| up to 100 | 10000 | - | AK-3 P2 |
| 100+ | | | Airline** |

* - Continuous Flow ** - Continuous-flow or positive pressure demand

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)

- ▶ 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

| | | | |
|---|---|--|----------------|
| Appearance | Timber in all sizes, dry and planed, impregnated with liquid preservative. THIS CHEMWATCH REPORT IS FOR TREATED PRODUCT ONLY. | | |
| 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 | Immiscible | pH as a solution (1%) | Not Applicable |
| Vapour density (Air = 1) | Not Applicable | VOC g/L | Not Applicable |

SECTION 10 STABILITY AND REACTIVITY

CHH Boron Treated Pine Solid Wood

| | |
|---|---|
| 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 | Ingestion of sawdust may cause nausea, abdominal pain, vomiting or diarrhoea. Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments |
| 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 smarting, pain and redness. |
| Chronic | Wood dust may cause skin and respiratory sensitisation. ▶ 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. |

| CHH Boron Treated Pine Solid Wood | TOXICITY | IRRITATION |
|-----------------------------------|---|---|
| | Not Available | Not Available |
| disodium octaborate | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: >2000 mg/kg ^[2] | Eye: no adverse effect observed (not irritating) ^[1] |
| | Inhalation (rat) LC50: >2.01 mg/l4 h ^[1] | Skin: no adverse effect observed (not irritating) ^[1] |
| | Oral (rat) LD50: >250 mg/kg ^[1] | |
| benzalkonium chloride | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: 1560 mg/kg ^[2] | Eye (human): 0.05 mg SEVERE |
| | Oral (rat) LD50: 240 mg/kg ^[2] | Eye (rabbit): 1mg/24h SEVERE |
| | | Skin (human): 0.15 mg/72h mild |
| Basazol Red GRL | TOXICITY | IRRITATION |
| | Oral (rat) LD50: 1630 mg/kg ^[2] | Not Available |
| magnesium nitrate | TOXICITY | IRRITATION |
| | dermal (rat) LD50: >5000 mg/kg ^[1] | Eye (rabbit): 500 mg/24h - mild |
| | Oral (rat) LD50: >2000 mg/kg ^[1] | Skin (rabbit): 500 mg/24h - mild |
| isothiazolinones, mixed | TOXICITY | IRRITATION |
| | dermal (rat) LD50: >1008 mg/kg ^[1] | Eye: adverse effect observed (irreversible damage) ^[1] |
| | Oral (rat) LD50: 53 mg/kg ^[2] | Skin: adverse effect observed (corrosive) ^[1] |
| | | Skin: adverse effect observed (irritating) ^[1] |

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

| | |
|--------------------------------|---|
| BENZALKONIUM CHLORIDE | Alkyldimethylbenzylammonium chlorides are in the list of dangerous substances of council directive, classified as "harmful in contact with skin and on ingestion", and "corrosive and very toxic to aquatic organisms". It can cause dose dependent skin and eye irritation with possible deterioration of vision, possible sensitisation in those with pre-existing eczema. It does not cause cancer, genetic defect, foetal or developmental abnormality. |
| BASAZOL RED GRL | BASF SDS for acetic acid solution |
| MAGNESIUM NITRATE | Magnesium nitrate hexahydrate is a methaemoglobin-forming agent which if inhaled or ingested in high enough concentrations may cause fatigue, headache, dizziness. (Source: I.L.O. Encyclopaedia) |
| ISOTHIAZOLINONES, MIXED | 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. 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. No significant acute toxicological data identified in literature search. |

CHH Boron Treated Pine Solid Wood

| | |
|--|---|
| BENZALKONIUM CHLORIDE & ISOTHIAZOLINONES, MIXED | Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production. |
| MAGNESIUM NITRATE & ISOTHIAZOLINONES, MIXED | 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 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. |

| | | | |
|-----------------------------------|---|--------------------------|---|
| 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 either not available or does not fill the criteria for classification
 ✓ – Data available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

| CHH Boron Treated Pine Solid Wood | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|-----------------------------------|---------------|-------------------------------|-------------------------------|---------------|---------------|
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| disodium octaborate | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| | LC50 | 96 | Fish | 74mg/L | 2 |
| | EC50 | 48 | Crustacea | ≈2528mg/L | 1 |
| | EC50 | 96 | Algae or other aquatic plants | 15.4mg/L | 2 |
| NOEC | 768 | Fish | 0.009mg/L | 2 | |
| benzalkonium chloride | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| | LC50 | 96 | Fish | 0.32mg/L | 4 |
| | EC50 | 48 | Crustacea | 0.018mg/L | 4 |
| | EC50 | 72 | Algae or other aquatic plants | 0.056mg/L | 4 |
| NOEC | 1 | Algae or other aquatic plants | 0.0025mg/L | 4 | |
| Basazol Red GRL | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| magnesium nitrate | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| | LC50 | 96 | Fish | 1-378mg/L | 2 |
| | EC50 | 48 | Crustacea | 490mg/L | 2 |
| NOEC | 720 | Fish | 58mg/L | 2 | |
| isothiazolinones, mixed | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| | LC50 | 96 | Fish | 0.129mg/L | 2 |
| | EC50 | 48 | Crustacea | 0.007mg/L | 2 |
| | EC50 | 72 | Algae or other aquatic plants | 0.0063mg/L | 2 |
| NOEC | 48 | Algae or other aquatic plants | 0.00049mg/L | 2 | |

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 |
|------------|---------------------------------------|---------------------------------------|
| | No Data available for all ingredients | No Data available for all ingredients |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|------------|-----------------|
| | |

Continued...

CHH Boron Treated Pine Solid Wood

No Data available for all ingredients

Mobility in soil

| Ingredient | Mobility |
|------------|---------------------------------------|
| | No Data available for all ingredients |

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

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

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 |

DISODIUM OCTABORATE 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 Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data

BENZALKONIUM CHLORIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Air Transport Association (IATA) Dangerous Goods Regulations

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

International Maritime Dangerous Goods Requirements (IMDG Code)

New Zealand Inventory of Chemicals (NZIoC)

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

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

BASAZOL RED GRL IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Air Transport Association (IATA) Dangerous Goods Regulations

New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits

International Maritime Dangerous Goods Requirements (IMDG Code)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

New Zealand Inventory of Chemicals (NZIoC)

MAGNESIUM NITRATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Air Transport Association (IATA) Dangerous Goods Regulations

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

International Maritime Dangerous Goods Requirements (IMDG Code)

New Zealand Inventory of Chemicals (NZIoC)

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

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

ISOTHIAZOLINONES, MIXED IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Air Transport Association (IATA) Dangerous Goods Regulations

New Zealand Inventory of Chemicals (NZIoC)

International Maritime Dangerous Goods Requirements (IMDG Code)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

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 |
|--------------|--|--|
| | | |

Continued...

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 | No (isothiazolinones, mixed) |
| Canada - DSL | Yes |
| Canada - NDSL | No (magnesium nitrate; isothiazolinones, mixed; disodium octaborate; benzalkonium chloride; Basazol Red GRL) |
| China - IECSC | Yes |
| Europe - EINEC / ELINCS / NLP | No (isothiazolinones, mixed) |
| Japan - ENCS | No (isothiazolinones, mixed; benzalkonium chloride; Basazol Red GRL) |
| Korea - KECI | No (Basazol Red GRL) |
| New Zealand - NZIoC | Yes |
| Philippines - PICCS | No (Basazol Red GRL) |
| USA - TSCA | No (isothiazolinones, mixed) |
| Taiwan - TCSI | Yes |
| Mexico - INSQ | No (isothiazolinones, mixed; disodium octaborate; Basazol Red GRL) |
| Vietnam - NCI | Yes |
| Russia - ARIPS | No (Basazol Red GRL) |
| Legend: | Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) |

SECTION 16 OTHER INFORMATION

| | |
|----------------------|------------|
| Revision Date | 02/09/2019 |
| Initial Date | 02/08/2006 |

SDS Version Summary

| Version | Issue Date | Sections Updated |
|----------|------------|------------------|
| 14.1.1.1 | 11/04/2019 | Ingredients |
| 15.1.1.1 | 02/09/2019 | Ingredients |

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.

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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