



1. Identification of Substance & Company

Product

Product name	Tanalith® MCA treated timber
Other names	NA
Product code	Not allocated
HSNO approval	Not applicable – the timber treatment chemical used for this product has been approved under HSNO (Approval number HSR100930).
Proper shipping name	Not allocated
UN number	Not allocated
DG class for transport	Not allocated
Packaging group	Not allocated
Hazchem code	Not allocated
Poison schedule	Not allocated
Uses	Building timber

Company Details

Company	OneFortyOne New Zealand Limited
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2. Hazard Identification

Hazard Classifications

The timber treatment chemical used to manufacture Tanalith® MCA treated timber (Tanalith® MCA) has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR100930): The wood is considered a manufactured article and is not covered under the HSNO act.

SYMBOLS

None allocated

Other Classifications

Although under HSNO, this product is considered to be a manufactured article, wood dust (including treated wood dust) should be considered irritating to eyes, skin and respiratory tract, sensitizing to some individuals. Prolonged exposure to wood dusts of certain species may be considered carcinogenic. Note: the properties of treated wood will be dependent on the type of wood and its state, i.e. dust is considered hazardous.

Wood is also flammable and high concentrations of wood dust may be explosive.

Hazard and Precautionary Statements

Hazard	NA
Precautionary	NA

3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
Copper Carbonate	12069-69-1	<1%
Tebuconazole	107534-96-3	<0.1%
Sodium Nitrite	7632-00-0	<0.1%
Ingredients not contributing to HSNO classes, including the dispersant	Proprietary	<1%
timber typically pinus radiata	N/A	>99%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

You should call the National Poisons Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service). IF exposed or concerned: Get medical advice.

Recommended first aid facilities Ready access to running water is required. Accessible eyewash is recommended.

Exposure

Swallowed	Unlikely to occur, however if Tanalith®MCA treated wood dust is swallowed abdominal discomfort and vomiting may occur. In case of persistent symptoms, contact the National Poisons Centre or a Doctor. If conscious, give plenty of water to drink. Do NOT induce vomiting. Seek medical assistance. If vomiting occur, place victim face downwards, with head turned to the side and lower than hips to prevent vomit entering the lungs.
Eye contact	Treated or untreated wood dust irritate the eye. If product gets in eyes, wash material from them with running water for 15 minutes. If symptoms persist, seek medical advice.
Skin contact	Avoid skin contact with freshly treated timber as residual solvent and/or dust may cause mild dermatitis or skin sensitivity. If symptoms persist, seek medical advice. Wash contaminated skin with plenty of soap and water.
Inhaled	Wood dust may cause irritation to nose, throat and lungs resulting in breathing difficulty. Inhalation of vapour can result in headaches, dizziness and possible nausea. Take care to avoid breathing any fumes from freshly treated timber. Wood dust is a possible sensitiser and so if coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:	Treated wood is flammable. In addition wood dusts may be explosive at high concentrations. LEL of wood dust: 40g/m ³ or air.
Suitable extinguishing substances	Flammability of timber after treatment is the same as other wood products. Fire may be extinguished using water or other firefighting mediums.
Unsuitable extinguishing substances	None known
Products of combustion	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Protective equipment	Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.
Hazchem code	None allocated

6. Accidental Release Measures

Containment	There is no current legal requirement for containment of this product.
Emergency procedures	Not applicable
Clean-up method	Not applicable
Disposal	Not applicable
Precautions	Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours or dust from freshly impregnated timbers and sawdust. Work up wind or increase ventilation.

7. Storage & Handling

Storage	Avoid storage of harmful substances with food. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. After working with Tanalith®MCA treated wood wash hands before eating, drinking, smoking or otherwise placing your hands near your mouth or rubbing your eyes. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and

inhalation of the vapour of freshly treated timber and with sawdust.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m³ for respirable particulates and 10mg/m³ for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Stds	Ingredient	WES-TWA	WES-STEL
	Wood dusts:		
	Certain hard woods*	0.5 mg/m ³	-
	Soft wood*	2 mg/m ³ for 8 and 12 hour shifts*	-
	Copper Carbonate as Cu	0.01mg/m ³	-

NOTES: The NZ exposure standard is higher than in other countries. Exposure should be kept as low as practicable to reduce the risk of lung cancer.
Hardwood dust is a confirmed/suspected carcinogen depending on hard wood type, sensitiser.

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes	Avoid contact with eyes. Use safety glasses when machining treated timber and sawdust is likely.
Skin	Avoid repeated or prolonged exposure to treated wood. Wear overalls, safety boots and gloves when handling treated wood. If sawdust accumulates on clothes, launder before re-use. Wash work clothes separately from other household clothing.
Respiratory	Avoid breathing wood dust. Use a dustmask, e.g. class P1 or P2 disposable respirators, when machining treated timber and sawdust is likely.

WES Additional Information

Hard wood dusts are considered a confirmed of suspected carcinogen depending on the wood type. Pine is regarded as soft wood. Wood dust is listed as a sensitizer.

9. Physical & Chemical Properties

Appearance	Products appear as standard timber ranging from solid wood to plywood.
Odour	similar to other wood products.
Odour Threshold	no data
pH	no data
Freezing/melting point	no data
Boiling Point	no data
Flashpoint	>200°C
Flammability	wood may burn
Upper & lower flammable limits	LEL _(wood dust) = 40g/m ³ air.
Vapour pressure	no data
Vapour density	no data
Specific gravity/density	no data
Solubility	not soluble in water
Partition coefficient	no data
Auto-ignition temperature	Not established
Decomposition temperature	no data
Viscosity	no data
Particle Characteristics	no data
Danger of explosion	Certain wood dust may be explosive at high concentrations. LEL _(wood dust) = 40g/m ³ air.

10. Stability & Reactivity

Stability	Stable under normal use and storage conditions.
Conditions to be avoided	Keep away from sources of ignition and flammable materials (see below). Treated timber off-cuts should not be used as fuel for barbeques or heating fires, garden mulch or animal bedding.
Incompatible groups	Non specified
Substance Specific Incompatibility	There are no specific incompatibilities for this chemical.
Hazardous decomposition products	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen, and under some circumstances, oxides of nitrogen. Water.
Hazardous reactions	No specific hazards.

11. Toxicological Information

Summary

No specific data is available for this product.
 If ingested, wood dusts may cause nausea, abdominal pain, vomiting or diarrhoea.
 Contact of wood dusts with skin may result in discomforting and may cause skin to dry out.
 Wood dust may be irritating to eyes causing tearing, pain and redness.
 Wood dusts may be irritating if inhaled
 Various wood dusts may cause dermatitis, allergic respiratory effects and cancer (hardwoods)

Supporting Data

Acute	Oral	No data for the timber is available. Using LD ₅₀ 's for actives, the calculated LD ₅₀ (oral, rat) for the mixture is >5,000 mg/kg. Data considered includes: Copper Carbonate 159 mg/kg (rabbit), 1350 mg/kg (rat), Sodium Nitrite 85 mg/kg (rat), Tebuconazole 1615 mg/kg (mouse), 1700mg/kg (rat).
	Dermal	No data for the timber is available. Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (dermal, rat) for the mixture is >2,000 mg/kg. Data considered: Copper Carbonate 0.54 mg/L but < 2.0 mg/L (female rats), Tebuconazole 800mg/m ³ (rat).
Chronic	Inhaled	No data for the timber is available.
	Eye	No data for the timber is available. The mixture is not considered to be an eye irritant
	Skin	No data for the timber is available. The mixture is not considered to be a skin irritant
	Sensitisation	The treatment chemicals used are considered to be a respiratory sensitizer, because at least one of the ingredients present in greater than 0.1% is known to be a respiratory sensitizer. The treated timber is considered non-hazardous.
	Mutagenicity	No data for the timber is available. No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	No data for the timber is available. Wood dusts are considered carcinogenic. The National Toxicology Program (NTP) and The International Agency for Research on Cancer (IARC) classify wood dust as a human carcinogen (IARC Group 1). This classification is based primarily on increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. The evaluation did not find sufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum with exposure to wood dusts. Tanalith® MCA is not considered to be a known carcinogen.
	Reproductive / Developmental	The treatment chemical used is considered to be a suspected reproductive or developmental toxicant, because at least one of the ingredients present in greater than 0.1% is suspected to be a reproductive or developmental toxicant. The treated timber is considered non-hazardous.
	Systemic	The treatment chemical used is considered to be a known or presumed target organ toxicant, because at least one of the ingredients present in greater than 1% is known or presumed to be a target organ toxicant. The treated timber is considered non-hazardous.
	Aggravation of existing conditions	Repeated exposures over many years to uncontrolled dust, gas and vapours from these timbers may increase the risk of allergic dermatitis, asthma, or chronic nose or throat irritation in some people. The risk of nasal or paranasal sinus cancers may also be increased. If workplace practices noted in this SDS are followed, no chronic health effects are anticipated.

12. Ecological Data

Summary

Tanalith®MCA treated timber is safe to use in normal circumstances. Contact with the environment highly unlikely to pose a significant environmental hazard.

Supporting Data

Aquatic	No data for timber is available. Using EC ₅₀ 's for ingredients, the calculated EC ₅₀ for the mixture is > 100 mg/L. Data considered includes: copper carbonate 0.212 mg/L (96 hr , fish), 0.44 mg/L (48hr, brine shrimp), 0.0127 mg/L (72hr, green algae) based on copper fume, Tebuconazole 0.1444 mg ai/l (Fron number, Lemna gibba (algae)) , 4.4 mg/l (96hr, Rainbow trout), 4 mg/l (48hr, Daphnia magna). Sodium nitrite: 0.11mg/L (96hr, Oncorhynchus mykiss), 1.1mg/L (48hr, Australian redclaw crayfish).
Bioaccumulation	No data for timber is available. No evidence of bioaccumulation.
Degradability	No data for timber is available.
Soil	No data available for the timber. EPA has not classified the mixture as ecotoxic in the soil environment. The soil toxicity value for the mixture is ≥ 100 mg/kg.
Terrestrial vertebrate	No data for the mixture. EPA has not classified the timber as ecotoxic to terrestrial vertebrates. See acute toxicity.
Terrestrial invertebrate	No data for the timber. EPA has not classified the timber as ecotoxic to terrestrial invertebrates.
Biocidal	Not applicable.

13. Disposal Considerations

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the Hazardous Substances (Disposal) Notice 2017 and the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. When disposing of treated timber, shavings and sawdust, this should occur at a landfill that has regional council resource consent to receive such materials and meets the local authority landfill acceptance criteria. Do not incinerate treated off-cuts, chips, sawdust and shavings. Off-cuts, chips, sawdust and shavings from antiseptantreated treated timber must not be used as mulch or animal bedding.
Contaminated packaging	Disposal of contaminated packaging must comply with the Hazardous Substances (Disposal) Notice 2017 clause 12. Ensure that the package is rendered incapable of containing any substance and is disposed in a manner that is consistent with the requirements of the substance it contained and the material of the package. If possible reuse or recycle packaging.

14. Transport Information

Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007

There are no specific restrictions for this product (not a dangerous good).

UN number	not allocated	Proper shipping name	Not allocated
Class(es)	Not allocated	Packing group	Not allocated
Precautions	None	Hazchem code	Not allocated

15. Regulatory information

This product is not considered to be a hazardous substance under the HSNO act. It is a manufactured article.

Specific Controls

Not applicable

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	For the wood preservative: Approval HSR100930 Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Authority (New Zealand)
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD₅₀	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC₅₀	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS (SDS)	Material Safety Data Sheet (or Safety Data Sheet)
NZIoC	New Zealand Inventory of Chemicals
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
Controls	EPA notices, www.epa.govt.nz , Health and Safety at Work (Hazardous Substances) Regulations 2017, www.legislation.govt.nz
WES	The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz .
Other References	Timber treatment chemical SDS

Review

Date	Reason for review
June 2023	New SDS

Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely GHS 7 classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: +64 21 104 0951.

