SAFETY DATA SHEET

Section 1 Identification of the material and the supplier

Product:	**FLAMEfixx dFx®** - Durable Flame Retardant Treated Wood
Product Use:	Timber components for use in structures in protected situations where fire and insect/fungal decay resistance is required
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	Wood Modification Technologies Limited
Address:	19 Melanesia Road, Kohimarama Auckland 1071, New Zealand
Telephone:	+64 212706043
Emergency Telephone:	**0800 200 162**
Date of SDS Preparation:	27 August 2018

Section 2 Hazards Identification

This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

Section 3 Composition / Information on Ingredients

Name	**CAS NUMBER.**	**Weight %**
Pinus Radiata – Timber	N/A	> 86.0
Wood preservative residuals as:		
Sodium Aluminate	1302-42-7	4.0-13.0
Tebuconazole	107534-96-3	< 0.2%
Propiconazole	60207-90-1	< 0.2%
Permethrin	52645-53-1	< 0.05%
1-methyl-2-pyrrolidone	872-50-4	< 0.2%

Section 4 First Aid Measures

Routes of Exposure:

If in Eyes	Hold eyes open and carefully rinse eyes with running water for several minutes. Seek medical advice if irritation persists.
If on Skin	Brush off dust. Rinse skin with soap, water/shower. If skin irritation occurs, get medical attention. Get medical advice if pierced by splinters.
If Swallowed	Rinse mouth. Do not induce vomiting unless told to do so by a medical professional. Seek medical attention if you feel unwell.
If Inhaled	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If person is not breathing, begin artificial respiration. Use mouth-to-nose rather than mouth-to-mouth. If experiencing respiratory symptoms: Seek medical attention.

Most important symptoms and effects, both acute and delayed
Symptoms:

Ingestion:	Unlikely route of exposure. Possible Irritation, dry/sore throat.
Inhalation:	Nasal dryness, irritation, shortness of breath, coughing, sneezing, runny nose.
Skin:	Contact dermatitis/Irritation - redness, itchiness, rash, dry skin, blistering.
Eye:	Serious eye damage – itchiness, redness, swelling.

Section 5 Fire Fighting Measures

Hazard Type	Combustible material
Hazards from decomposition products	Avoid breathing smoke or fumes that may contain hazardous decomposition products. Carbon dioxide, carbon monoxide, oxides of nitrogen. May produce toxic decomposition products in fumes and smoke in fire.
Suitable Extinguishing media	In case of fire water spray.
Precautions for firefighters and special protective clothing	Wear personal protection equipment and self-contained breathing apparatus. Wood dust may form explosive mixtures with air.
HAZCHEM CODE	**None Allocated**

Section 6 Accidental Release Measures

SPILLS:
Wear appropriate personal protective equipment. Avoid any contact with skin or eyes.

Dispose of treated off cuts to authorized landfill. Consult Regional Council for disposal options
Clean spillage area with detergent and water. Wash and dry any contaminated protective equipment before re-use.

Section 7 Handling and Storage

HANDLING:

- Wear protective clothing.
- Wash hands before smoking, eating, drinking or using the toilet
- Keep away from sparks, open flames, hot surfaces. No smoking.
- Some preservative may migrate from the treated timber into soil/water or may dislodge from the treated timber surface upon contact with skin. Wash exposed skin areas thoroughly

STORAGE:

- Store in a dry, well-ventilated place, away from sources of heat or ignition
- Store away from incompatibilities listed in Section 10.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

	TWA		STEL	
Substance	**ppm**	**mg/m³**	**ppm**	**mg/m³**
Wood dust (soft wood)		5		10
Wood dust (hard wood)		1		
1-Methyl-2-pyrrolidone (skin)	25	103	75	309

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

Engineering Controls:
Use in well-ventilated area or outside.
Avoid sawing or sanding of timber that is wet (not dry) with the preservative treatment

PERSONAL PROTECTIVE EQUIPMENT:

Eyes	Wear goggles, full face shield, or safety glasses with side shields when using this product.
Hands and Skin	Wear protective clothing such as overalls and shirt with sleeves, also closed in footwear and rubber gloves.
Respiratory	Use in well-ventilated area or outside. Wear dust mask if wood dust is generated.
General	Wash hands before eating, drinking, smoking, using the toilet and at the end of the shift.

Section 9 Physical and Chemical Properties

Appearance	Machined or rough-sawn pine timber and timber-based products;
Odour	Not available
Odour Threshold	Not applicable
pH	Not applicable
Boiling Point	Not applicable
Melting Point	Not applicable
Freezing Point	Not available
Flash Point	Not applicable
Flammability	Combustible
Upper and Lower Exposure Limits	Not applicable
Vapour Pressure	Not applicable
Density at 20^0C	0.4 – 0.6 g/cm^3
Solubility in water	Insoluble
Partition Coefficient:	Not applicable
Auto-ignition Temperature	Not applicable
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available
% Volatiles	Not applicable
Evaporation Rate	Not applicable

Section 10 Stability and Reactivity

Chemical Stability:	Stable under normal storage and use conditions.
Conditions to Avoid:	Avoid contact with heat and extreme cold.
Incompatibility:	Other combustible materials, Strong oxidising agents, acids, alkalis.
Hazardous Decomposition: Products	Carbon dioxide, carbon monoxide, oxides of nitrogen. May produce toxic decomposition products in fumes and smoke in fire.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation/Respiratory	May cause asthma-like symptoms.
Eye	May cause eye irritation.
Skin	May cause skin irritation. May cause skin sensitization.

Chronic Effects:

Carcinogenicity	May cause nasal/paranasal cancer through repeated exposure.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
STOT/SE	Not applicable.
STOT/RE	May cause damage to skin and lungs through repeated exposure.
Aspiration	Not applicable.

Section 12 Ecotoxicological Information

This product is not known to be a hazard to the environment. Treated wood may contain ecotoxic compounds, which may leech out into waterways over time. Remove from waterways as soon as possible.

Persistence/Degradability: No data available
Mobility in Soil: No data available
Bioaccumulative potential: No data available
Other Adverse effects: No data available

Section 13 Disposal Considerations

Dispose of treated off cuts to authorised landfill. Consult Regional Council for disposal options.
DO NOT use off cuts for heating or cooking fires or for barbecues or spit roasts. Avoid contact with ash; contains toxic compounds. Dispose of ash safely to an approved landfill.

Section 14 Transport Information

This substance is not classified as a dangerous good for Land Transport in New Zealand according to NZS5433: 2012

Section 15 Regulatory Information

This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

Section 16 Other Information

Glossary

EC_{50}	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC_{50}	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD_{50}	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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