

1. Identification of Substance & Company

Product

Product name	FRAMEbor WB
Other names	n/a
Product code	BOR-FWB
HSNO approval	HSR06029
Proper shipping name	Not applicable
UN number	Not applicable
DG class for transport	Not applicable
Packaging group	Not applicable
Hazchem code	2X
Poison schedule	S3
Uses	For application to internal framing timber by spray or dip to provide protection against decay and insects.
NOTE	To be labelled as "Marine Pollutant"

Company Details

Company name	Arch Wood Protection (NZ) Ltd		
Address	265 James Fletcher Dr PO Box 22-148 Otahuhu, AUCKLAND	8 Penn Place PO Box 6124 CHRISTCHURCH	Scion Campus PO Box 6123 ROTORUA
Telephone no	(09) 276 3646	(03) 348 5379	(07) 350 1680

Emergency telephone number: 0800-623-000

2. Hazard Identification

Hazard Classifications

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR06029), and is classified as follows:

Classes:

- 6.1D Acutely toxic by ingestion
- 6.3A Skin irritant
- 6.4A Eye irritant
- 6.5A Respiratory sensitiser
- 6.5B Contact sensitiser
- 6.8B Suspected human reproductive or developmental toxicant
- 6.9A Known human target organ toxicant
- 9.1B Highly toxic to the aquatic environment
- 9.3C Harmful to terrestrial vertebrates

SYMBOLS

DANGER



Other Classifications

There are no other Classifications that are known to apply.

Hazard and Safety Phrases

Hazard	Harmful if swallowed. Causes skin irritation. Causes eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child . Causes damage to organs through prolonged or repeated exposure . Toxic to aquatic life with long lasting effects. Harmful to terrestrial vertebrates.
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FRAMEbor WB

Material Safety Data Sheet

Safety Keep out of the reach of children.
Avoid contact with the skin.
Avoid contact with eyes.
Do not breathe fumes/vapour.
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Wear suitable protective clothing, gloves and eye/face protection.
Use appropriate container to avoid environmental contamination.
Avoid exposure -- obtain special instructions before use.
Avoid release to the environment. Refer to special instructions/safety data sheets.

3. Composition / Information on Ingredients

Component	CAS/ Identification	Class for ingredient(s)	Conc (m/v %)
Disodium octaborate tetrahydrate	12008-41-2	6.1E, 6.4A, 6.8B, 9.1D	10-30%
Benzalkonium chloride	8001-54-5	6.1C, 6.5A, 6.5B, 6.9B, 8.2C, 8.3A, 9.1A, 9.3B	<10%
Monoethylene Glycol	107-21-1	6.1D, 6.4A, 6.9A, 9.3C	<75%
Water	7732-18-5	non-hazardous	balance

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

4. First Aid

General Information

Arch Wood Protection have an Emergency Contact Phone Number: 0800 623 000.

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). Ready access to running water is required.

Accessible eye wash is recommended

Recommended first aid facilities:

Ready access to running water is required. Accessible eyewash is recommended. Emergency shower, hand wash, soap. CPR training, oxygen mask.

Exposure

Swallowed

Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor.

Eye contact

If product gets in eyes, wash material from them with running water for 15 minutes. If symptoms persist, seek medical advice.

Skin contact

Flush immediately with large amounts of water. Remove all contaminated clothing. Contact a doctor if irritation persists.

Inhaled

Generally, inhalation of fumes is unlikely to result in adverse health effects. However, it 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

There are no specific risks for fire/explosion for this chemical. It is non-flammable.

Suitable extinguishing substances

Carbon dioxide, extinguishing powder, foam, fog sprays.

Unsuitable extinguishing substances

Water streams

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

2X



6. Accidental Release Measures

Containment	If greater than 1000L is stored, secondary containment and emergency plans to manage any potential spills must be in place.
Emergency procedures	In the event of spillage alert the fire brigade to location and give brief description of hazard. Shut off all possible sources of ignition. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Contain using sand, earth or vermiculite. Do not use sawdust on concentrate. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses. (If this occurs contact your regional council immediately).
Clean-up method	Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.
Disposal	Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions	Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation.

7. Storage & Handling

Storage	Supplied in bulk by tanker, in 1000L IBC or in 200 litre drums. Containers to be stored unopened in secure, labelled, well-ventilated and bunded area away from foodstuffs and incompatible materials. Containers must bear the prescribed labelling, including the Hazchem code and name of contents. Keep tanks closed when not in use - check regularly for leaks. Keep out of reach of children.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by the NZ Department of Labour for this product. There is a general limit of 10mg/m³ for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Stds (OSH 2002)	Ingredient	WES-TWA	WES-STEL
	Disodium octaborate tetrahydrate	Data unavailable	Data unavailable
	Benzalkonium chloride	Data unavailable	Data unavailable
	Monoethylene Glycol	50ppm	120 mg/m ³
	Water	Data unavailable	Data unavailable

Engineering Controls

In industrial situations, concentration values below the WES value must be maintained. 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.

Keep product away from waterways.

Personal Protective Equipment

Eyes



Avoid contact with eyes. Use safety glasses and or chemical splash goggles if splashes are possible.

Skin



Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking.



Respiratory



A respirator when airborne concentrations approach the WES (section 8). If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

WES Additional Information

Not applicable

9. Physical & Chemical Properties

Appearance	White viscous liquid
Odour	Sweet smell
pH	6.3
Vapour pressure	Unknown
Boiling point	N/A
Volatile materials	N/A
Freezing / melting point	N/A
Solubility	Soluble in water
Specific gravity / density	1.22 g/ml
Flash point	Non-flammable
Danger of explosion	Not explosive
Auto-ignition temperature	Non-flammable
Upper and lower flammable limits	Non-flammable
Corrosiveness	Non-corrosive

10. Stability & Reactivity

Stability	Stable under normal use and storage conditions.
Conditions to be avoided	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
Incompatible groups	None known
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.
Hazardous reactions	No specific hazards.



11. Toxicological Information

Summary

No specific data is available for this product. Where available, toxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following toxicity.

Supporting Data

Acute	Oral	No data for mixture is available. Using LC ₅₀ 's for ingredients, the calculated LC ₅₀ (oral, rat) for the mixture is between 300 mg/kg and 2000 mg/kg. Data for ingredients is as follows: disodium octaborate tetrahydrate 6216 mg/kg, benzalkonium chloride 240 mg/kg, Monoethylene Glycol 4700 mg/kg.
	Dermal	No data for mixture is available. Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (dermal, rat) for the mixture is >2,000 mg/kg. Data considered includes: benzalkonium chloride 1560 mg/kg, Monoethylene Glycol >2000 mg/kg.
	Inhaled	No data for mixture is available. Using LC ₅₀ 's for ingredients, the calculated LC ₅₀ (inhalation, rat) for the mixture is >5,000 ppm. Data considered includes: monoethylene glycol 820 mg/m ³ .
	Eye	The mixture is considered to be an eye irritant, because some of the ingredients present are considered eye irritants in more concentrated form.
	Skin	The mixture is considered to be a skin irritant, because some of the ingredients present are considered skin irritants in more concentrated form.
Chronic	Sensitisation	The mixture is considered to be a contact & respiratory sensitizer, because at least one of the ingredients present in greater than 0.1% is known to be a contact & respiratory sensitizer.
	Mutagenicity	No data for mixture is available. No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	No data for mixture is available. No ingredient present at concentrations > 0.1% is considered a carcinogen.
	Reproductive / Developmental	The mixture 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.
	Systemic	The mixture 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.
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

No specific data is available for this product. Where available, ecotoxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following ecotoxicity groups:

Supporting Data

Aquatic	No data for mixture is available. Using EC ₅₀ 's for ingredients, the calculated EC ₅₀ for the mixture is between 1 mg/L and 10 mg/L and at least one of the components is either bioaccumulative or persistent in the aquatic environment. Data considered includes: disodium octaborate tetrahydrate 24 mg/L, benzalkonium chloride 0.62 mg/L, monoethylene glycol >4000 mg/L.
Bioaccumulation	No data for mixture is available. No evidence of bioaccumulation.
Degradability	No data for mixture is available. No evidence of persistence in the environment.
Soil	No data available for the mixture. ERMA has not classified the mixture as ecotoxic in the soil environment. The soil toxicity value for the mixture is ≥ 100 mg/kg.
Terrestrial vertebrate	The mixture has been classified by ERMA as 9.3C Using LC ₅₀ 's for ingredients, the calculated LC ₅₀ (oral, rat) for the mixture is between 500 mg/kg and 2000 mg/kg. Data for ingredients is as follows: disodium octaborate tetrahydrate 6216 mg/kg, benzalkonium chloride 240 mg/kg, Monoethylene Glycol 4700 mg/kg.
Terrestrial invertebrate	The mixture has not been classified by ERMA as harmful to terrestrial invertebrates. The calculated invertebrate ecotoxicity value for the mixture is > 25 µg/bee.
Biocidal	Not applicable

Environmental effect levels:

Ingredients

Disodium octaborate tetrahydrate
 Benzalkonium chloride
 Monoethylene Glycol

EEL

Not available
 Not available
 Not available



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	Consult Arch Wood Protection for recycling options. Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Rinse containers with water before disposal. Recycle the washings through the treatment system. Preferably re-cycle container, otherwise send to landfill or similar.

14. Transport Information

Transport according to NZS 5433 (Transport of Hazardous Substances on Land).

UN number:	Not allocated	Proper shipping name:	Not allocated
Class(es)	Not allocated	Packing group:	Not allocated
Precautions:	Marine Pollutant	Hazchem code:	2X

15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR06029

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

MSDS	To be available within 10 minutes in workplaces storing > 1L.
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Approved Evacuation Scheme required if > 1000L is stored.
Bunding and secondary containment	Required if > 1000L is stored.
Signage	Required if > 1000L is stored in any one location.

Other Legislation

No data



16. Other Information

Abbreviations

Approval Code	Approval HSR06029 Controls, ERMA. www.ermanz.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species).
ERMA	Environmental Risk Management Authority
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
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	Material Safety Data Sheet (or Safety Data Sheet)
NICNAS	Australian National Industrial Chemicals Notification and Assessment Scheme
NTP	National Toxicology Program (USA)
OSH	The Occupational Safety and Health Service of the Department of Labour (NZ)
SUSDP	Australian Standard for the Uniform Scheduling of Drugs & Poisons
UN Number	United Nations Number
WES	Workplace Exposure Standard

References

Data	Unless otherwise stated comes from IUCLID datasheet for the specific chemical
ERMA Transfer Gazettes	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
Controls Matrix	Part of the ERMA New Zealand User Guide to the HSNO Control Regulations
WES 2002	The NZ Workplace Exposure Standards Effective from 2002, published by OSH and available on their web site – www.osh.dol.govt.nz .
Other References:	Not applicable

Disclaimer

This MSDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The MSDS 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 MSDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The graph on the first page of the MSDS gives you an immediate idea of the type and severity of hazard that the chemical may pose. These ratings, and the likely HSNO classifications, are based on our experience, ERMA Guidelines and international classifications. To contact MSDS author, email [Ruth Hamilton ruth@writersinc.co.nz](mailto:Ruth.Hamilton@writersinc.co.nz) or phone: (09) 579 2641

