SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**Norseal Epoxy Wood Treatment - Hardener**
Item Code:	1202
Product Use:	Epoxy Wood Treatment 2 pack
Restriction of Use:	Refer to Section 15
Australian Supplier:	**Norglass Paints**
Address:	59 Moxon Road Punchbowl NSW 2196 Australia
Telephone:	+61 2 9708 2200
Email:	info@norglass.com.au
New Zealand Supplier:	xxx
Address:	xxx xxx
Telephone:	0508 724687
Emergency Numbers:	
Australia:	**13 1126 (Poisons Information Centre)**
New Zealand:	**0800 764 766 (National Poison Centre)**
Date of SDS Preparation:	15 November 2023

Section 2. Hazards Identification

Australia:
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

New Zealand:
This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: Surface Coatings and Colourants (Flammable)– HSR002662

Pictograms

Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Flammable Liquids Cat. 3	H226	Flammable liquid and vapour.
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Aspiration hazard Cat. 1	H304	May be fatal if swallowed and enters airways.

Skin irritation Cat. 2	H315	Causes skin irritation.
Reproductive toxicity Cat. 2	H361	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment chronic Cat. 4	H402	Harmful to aquatic life.
Hazardous to terrestrial vertebrates	H433	Hazardous to terrestrial vertebrates

Prevention Code	**Prevention Statement**
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, sparks, open flames or hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe fumes, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective clothing.

Response Code	**Response Statement**
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P362 + P364	Take off contaminated clothing and wash before re-use.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P370 + P378	In case of fire: Use foam, carbon dioxide or dry chemicals for extinction.

Storage Code	**Storage Statement**
P405	Store locked up.
P403 + P235	Store in a well-ventilated place. Keep cool.

Disposal Code	**Disposal Statement**
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Ingredients

Ingredients	**Wt%**	**CAS NUMBER.**
Modified Aliphatic Polyamide	30-40	100-51-6 2855-13-2
Xylene	30-40	1330-20-7
Butanol	30-40	78-83-1

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.
If on Skin	Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. If skin irritation occurs: get medical advice/attention.
If Swallowed	Rinse mouth. DO NOT induce vomiting. If the victim is conscious give water or milk to drink to dilute the effect. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek immediate medical attention.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult or if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion:	Harmful if swallowed. Irritate mouth, throat and digestive tract. May cause burning sensation and severe damage to mucous membrane.
Inhalation:	May be harmful if inhaled. Vapours irritate the eye and respiratory system. May cause headaches and dizziness.
Skin:	May be harmful in contact with skin. Causes skin irritation. Prolonged or repeated exposure may lead to dermatitis or skin sensitisation.
Eye:	Causes serious eye damage.
Chronic:	May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways. Suspected of damaging fertility or the unborn child. Prolonged or repeated exposure may cause asthma and skin sensitisation or tother allergic responses.

Section 5. Fire Fighting Measures

Hazard Type	Flammable Liquid
Hazards from combustion products	Hazardous Products: Carbon monoxide Carbon dioxide Oxides of nitrogen.
Suitable Extinguishing media	Extinguishing media carbon dioxide, foam or dry chemicals.
Precautions for firefighters and special protective clothing	Wear full body protection and self-contained breathing apparatus. Water may be used to cool down the fire exposed containers. Keep heat and naked flame away from spill
HAZCHEM CODE	**3Y**

Section 6. Accidental Release Measures

Personal precautions:

Wear protective equipment as detailed in Section 8. Clear area of any unprotected personnel.

Environmental precautions:

Adequate steps should be taken to prevent spillage reaching waterways and drains.

Spill and Disposal procedures:

Extinguish all sources of ignition. Spilt material should be absorbed into dry inert material such as sand, earth or sawdust and disposed by incineration by approved agent or local regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat, sparks, open flames or hot surfaces. No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Do not breathe dust, fume, gas, mist or vapours.
- Wash hands thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective clothing and equipment.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store locked up, in a well-ventilated place. Keep cool.
- Keep out of reach of children.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³
Xylene [1330-20-7]	50	217	-	-
Isobutyl alcohol [78-83-1]	50	152	-	-

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 APRIL 2022 13TH EDITION.

Engineering Controls

Use only in well ventilated areas. Introduce local exhaust ventilation if necessary.

Personal Protection Equipment

Eyes	Wear safety goggles with side shields.
Hands and Skin	Wear chemical resistant rubber gloves. Wear overalls and use barrier cream.
Respiratory	Avoid breathing dust arising from sanding the product or solvent vapours be wearing organic vapour respirators.

Section 9 Physical and Chemical Properties

Appearance	Clear liquid
Odour	Strong solvent odour
Odour Threshold	Not applicable
pH	Not applicable
Boiling Point	137-143^{0}C for solvent
Melting Point	Not applicable
Freezing Point	Not applicable

Flash Point	27^0C(cup closed)
Flammability	Not applicable
Upper and Lower Exposure Limits	1.1 – 7.7(solvents)
Volatile Component	80% by volume
Vapour Density	Not applicable
Specific Gravity	0.860
Solubilities	Immiscible
Partition Coefficient:	Not applicable
Auto-ignition Temperature	Not applicable
Decomposition Temperature	Not applicable
Kinematic Viscosity	Not applicable
Particle Characteristics	Not applicable

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Sources of ignition. Heat.
Incompatible Materials	Avoid contact with strong acids, oxidising agents and epoxy resins under uncontrolled conditions.
Hazardous Decomposition Products	Hazardous Products: Carbon monoxide Carbon dioxide Oxides of nitrogen.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes serious eye damage.
Skin	Causes skin irritation.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Suspected of damaging fertility or the unborn child.
Germ Cell Mutagenicity	Not applicable.
Aspiration	May be fatal if swallowed and enters airways.
STOT/SE	Not applicable.
STOT/RE	Causes damage to organs through prolonged or repeated exposure.

Individual component information:

Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Xylene (1330-20-7)	1590 mg/kg (mouse)	-	>27.6mg/L(Rat) Vapour
Benzenemethanol (100-51-6)	1040mg/kg (Rabbit)	2000mg/kg (rabbit)	-
Isophoronediamine (2855-13-2)	1030mg/kg (rat)	-	-

Section 12. Ecotoxicological Information

Harmful to aquatic life.
Hazardous to terrestrial vertebrates.

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available
Precautions	Do not allow to enter waterways

Individual component information (Please refer to www.epa.govt.co.nz for full details):

Xylene (1330-20-7):

Route	Species	Duration	Value LC50/EC50
Fish	Oncorhynchus mykiss Rainbow trout, donaldson trout	96 hr (static	3.3 mg/L
Crustacean	Palaemonetes pugio (Crustacea)	48 hr	8.5mg/L
Algal	Skeletonema costatum (Algae)	72hr (static)	10mg/L
Bioaccumulative	No		
Rapidly Degradable	Yes		

Isophoronediamine (2855-13-2):

Route	Species	Duration	Value LC50/EC50
Fish	Lepomis macrochirus (Fish, fresh water)	96 hr (static	110 mg/L
Crustacean	Daphnia magna (Water flea)	48 hr	21.5mg/L
Algal	Scendesmus subspicatus (Algae)	72 hr	>50.0 mg/l
Bioaccumulative	No		
Rapidly Degradable	No		

Benzenemethanol (100-51-6):

Route	Species	Duration	Value LC50/EC50
Fish	Lepomis macrochirus (Fish, fresh water)	96 hr (static	10 mg/L
Crustacean	Daphnia magna (Water flea)	24 hr	55mg/L
Ecotoxic in the soil environment	Photobacterium phosphoreum (Bacteria)	5 minutes	50mg/L
Bioaccumulative	No		
Rapidly Degradable	Yes		

Section 13. Disposal Considerations

Disposal Method: Place recovered product into an appropriate waste container for disposal through appropriate waste company or specialized landfill in accordance with local regulations. Ensure container is sealed and isolated away from ignition sources.

Precautions: Ensure waste container containing recovered product is labelled "Hazardous Waste – Flammable, Corrosive". If triple rinsing container, add rinsate to waste container for disposal.

Disposal methods to avoid: Do not allow to enter waterways.

Section 14 Transport Information

This product is classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020

Road, Rail, Sea and Air Transport

UN No	1866
Class - Primary	3
Packing Group	III
Proper Shipping Name	RESIN SOLUTION, FLAMMABLE LIQUID
Marine Pollutant	NO
Special Provisions	If the product's individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

Australia:
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as a **Schedule 5** Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

New Zealand:
This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: Surface Coatings and Colourants (Flammable) – HSR002662

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	500L (>5L), 1500L(<5L), 250L open
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L
Emergency Response Plan	1000L
Secondary Containment	1000L
Restriction of Use	Only use for the intended purpose.

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:
Australia:

1. Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
2. Standard for the Uniform Scheduling of Medicines and Poisons.
3. Australian Code for the Transport of Dangerous Goods by Road & Rail.
4. Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

5. Workplace exposure standards for airborne contaminants, Safe work Australia.
6. American Conference of Industrial Hygienists (ACGIH).
7. Globally Harmonised System of classification and labelling of chemicals.

New Zealand:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

The information herein is given in good faith, but no warranty, express or implied is made.

Please contact the Australian Manufacturer or New Zealand distributor, if further information is required.

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