SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**Northane Hardener**
Item Code:	5005
Product Use:	Hardener for Northane Base 2 pack Polyurethane Paint (Polyester Polyurethane) for use in accordance with Product Data Sheet.
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 v3

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, Carcinogenic) – HSR002669

Pictograms

Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Flammable Liquids Cat. 3	H226	Flammable liquid and vapour.
Acute inhalation toxicity Cat. 4	H332	Harmful if inhaled.

Aspiration hazard Cat. 1	H304	May be fatal if swallowed and enters airways.
Skin irritation Cat. 2	H315	Causes skin irritation.
Eye irritation Cat. 2	H319	Causes serious eye irritation.
Respiratory sensitisation Cat. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Carcinogenicity Cat. 2	H351	Suspected of causing cancer.
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.

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 dust, fume, gas, mist or vapours.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective clothing.
P285	In case of inadequate ventilation wear respiratory protection.

Response Code	**Response Statement**
P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P304 + P341	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P370 + P378	In case of fire: Use carbon dioxide, foam 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	Cas Number	Weight %
Resin	28128-81-2	>60%
1-Methoxy- 2 -propyl acetate	108-65-6	10-30%
Xylene mixture	1330-20-7	10-30%
Ethyl benzene	100-41-4	<3%
Hexamethylene -1,6-diisocyanate	822-06-0	<.05%
OTHER INGREDIENTS DATA		
Chemical characterisation		
Aliphate Polyisocyanate appox: 75% in MPA/Xylene [1.1]		

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes — Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice. Remove contact lenses, if present and easy to do. Continue rinsing.

If on Skin — Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. If skin irritation or rash 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: May be harmful if swallowed.

Inhalation: Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin: May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.

Eye: Causes serious eye irritation.

Chronic: May be fatal if swallowed and enters airways.
Suspected of damaging fertility or the unborn child.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure.

Section 5. Fire Fighting Measures

Hazard Type	Flammable liquid vapours can explode in air if ignited.
Hazards from combustion products	In case of fire, decomposition can produce carbon monoxide isocyanate vapour and traces of Hydrogen cyanide.
Suitable Extinguishing media	Extinguishing Media, extinguishing powder, carbon dioxide, Halons and for large fires foam and water spray.
Precautions for firefighters and	Wear full body protection and self-contained breathing apparatus.

special protective clothing	
HAZCHEM CODE	**3Y**

Section 6. Accidental Release Measures

Personal precautions:
Wear protective equipment as detailed in Section 8. Clear area of any unprotected personnel. Extinguish all sources of ignition.

Environmental precautions:
Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Notify authorities if product enters sewers or public waters.

Spill and Disposal procedures:
Absorb the spilt material onto sand, sawdust, earth or other absorbent material. Place in a labelled container and dispose according to 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 only outdoors or in a well-ventilated area.
- 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.
- In case of inadequate ventilation wear respiratory protection.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store locked up, in a well-ventilated place. Keep cool.
- Avoid temperatures above 50°C.
- Product should be stored in properly sealed containers, if at all, not used in one application.
- In tightly sealed containers this can lead to possible bursting of containers.
- 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	-	-
Ethyl benzene [100-41-4]	20	88	40	176
Hexamethylene diisocyanate [822-06-0]	-	0.02	-	0.07

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 ventilation where necessary.

Personal Protection Equipment

Eyes	Wear safety goggles with side shields.
Hands and Skin	Wear PVC or rubber gloves. Wear overalls and use barrier cream.
Respiratory	When spraying wear respiratory mask.

Section 9 Physical and Chemical Properties

Appearance	Yellowish liquid
Odour	Solvent odour
Odour Threshold	Not applicable
pH	Not applicable
Boiling Point	145^{0}C for solvent
Melting Point	Not applicable
Freezing Point	Not applicable
Flash Point	38^{0}C(for solvent)
Flammability	Not applicable
Upper and Lower Exposure Limits	Not applicable
Volatile Component	40%
Vapour Pressure 25^{0}C	Not applicable
Specific Gravity	1.07
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	Exothermic reaction with amines and alcohol.
Hazardous Decomposition Products	carbon monoxide, isocyanate vapour and traces of Hydrogen cyanide.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Harmful if inhaled.
Eye	Causes severe eye irritation.
Skin	Causes skin irritation. May cause an allergic skin reaction.

Chronic Effects:

Carcinogenicity	Suspected of causing cancer.
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.

Section 12. Ecotoxicological Information

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.

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". 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
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, Carcinogenic) – HSR002669

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	1 000L
Emergency Response Plan	1 000L
Secondary Containment	1 000L
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

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

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