SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**Liquid Glass Hardener**
Item Code:	1262
UN No.	
Product Use:	Epoxy laminating Resin - Hardener
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:	techinfo@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 (Corrosive) – HSR002658

Pictograms

Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Acute inhalation toxicity Cat. 4	H332	Harmful if inhaled.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.

Skin corrosion Cat. 1B	H314	Causes severe skin burns and eye damage.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
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.
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.

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.
P363	Wash contaminated clothing before reuse.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
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.

Storage Code	Storage Statement
P405	Store locked up.

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

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Benzyl alcohol	25 - 50	100-51-6
3-aminomethyl-3,5,5-trimethylcyclohexylamine	25 - 50	2855-13-2
Trimethylhexan-1,6-diamin	$\leq$2.5	25620-58-0

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. Get 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. Immediately call a POISON CENTER or doctor/physician.

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. Immediately call a POISON CENTER or doctor/physician.

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 owing to presence of Phenol. Moderately toxic.

Inhalation: Harmful if inhaled. Vapour will irritate eye and respiratory system. Cause headaches and dizziness.

Skin: Causes skin burns and eye damage. Prolonged and repeated exposure may cause asthma and skin sensitisation or other allergic response.

Eye: Liquid may cause burns and severe eye irritation.

Chronic: Not applicable.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	Formation of toxic gases is possible during heating or in case of fire.
Suitable Extinguishing media	CO_2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam. For safety reasons unsuitable extinguishing agents Water with a full water jet.
Precautions for firefighters and special protective clothing	Wear full body protection and self-contained breathing apparatus.
HAZCHEM CODE	**2X**

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:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.
- Do not breathe fumes, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective clothing.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.

- Store locked up, in a well-ventilated place. Keep cool.
- Store in original container.
- 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

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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.

Personal Protection Equipment

Eyes	Tightly sealed safety glasses with side shields.
Hands and Skin	Preventive skin protection by use of skin-protecting agents is recommended. Material of gloves: Nitrile rubber, NBR and Fluorocarbon rubber (Viton) Recommended thickness of the material: ≥ 0.5 mm Do not wear leather gloves. Protective clothing is recommended.
Respiratory	Use breathing protection in case of insufficient ventilation. Combination Filter A-P2

Section 9 Physical and Chemical Properties

Appearance	Yellowish liquid
Odour	Amine-like
Odour Threshold	Not applicable
pH	Not applicable
Boiling Point	>200^{0}C
Melting Point	Not applicable
Freezing Point	Not applicable
Flash Point	>100^{0}C
Flammability	Not applicable
Upper and Lower Exposure Limits	1.2% - 13.0%
Volatile Component	Not available
Vapour Pressure @ 20^{0}C	0.1 hPa
Density at 23^{0}C	1.02 g/cm^3
Solubilities	Not miscible or difficult to mix
Partition Coefficient:	Not applicable
Auto-ignition Temperature	380°C
Decomposition Temperature	Not applicable

Viscosity dynamic @ 23^{0}C	530 mPas (ISO 3219)
Particle Characteristics	Not applicable

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	None knowns.
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	No decomposition if used according to specifications. in the event of fire: Poisonous gases/vapours Corrosive gases/vapours

Section 11 Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed. Irritate mouth, throat and digestive tract. May cause burning sensation and severe damage to mucous membrane owing to presence of Phenol.
Dermal	Not applicable.
Inhalation	Harmful if inhaled. Vapour will irritate eye and respiratory system. Cause headaches and dizziness.
Eye	Causes serious eye damage.
Skin	Causes severe skin burns. Prolonged and repeated exposure may cause asthma and skin sensitisation or other allergic response.

Chronic Effects:

Carcinogenicity	Not applicable
Reproductive Toxicity	Not applicable
Germ Cell Mutagenicity	Not applicable
Aspiration	Not applicable
STOT/SE	Not applicable
STOT/RE	Not applicable

Section 12. Ecotoxicological Information

This product is not hazardous to the environment.

Aquatic toxicity:	
100-51-6 Benzyl alcohol	
Algentoxizität	*79 mg/l (Scenedesmus quadricauda) (EC50(3h))* *640 mg/l (Alge Scenedesmus sp.) (EC50(96h))*
Bakterien-Toxizität	*>658 mg/l (Pseudomonas putida) (EC50(16h))* *71.42 mg/l (Photobacterium phosphoreum) (EC50(0,5h)) 400 mg/l (Pseudomonas putida) (EC50(0,5h))*
Daphnientoxizität	*400 mg/l (Daphnia magna (Wasserfloh)) (EC50(24h))*
Fischtoxizität	*460 mg/l (Pimephales promelas) (LC50(96h))* *645 mg/l (Goldorfe (orfe)) (LC50(96h))* *10 mg/l (Lepomis macrochirus) (LC50 (96h))*
2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine	

Algentoxizität	*50 mg/l (Scenedesmus subspicatus) (EC50(72h))*
Bakterien-Toxizität	*1120 mg/l (Pseudomonas putida) (EC10(18h))*
Daphnientoxizität	*23 mg/l (Daphnia magna (Wasserfloh)) (EC50(48h))*
Fischtoxizität	*110 mg/l (Brachydanio rerio) (LC50(96h))*
25620-58-0 Trimethylhexan-1,6-diamin	
Algentoxizität	*29.5 mg/l (Scenedesmus subspicatus) (EC50(72h)) 72*
Bakterien-Toxizität	*mg/l (Pseudomonas putida) (EC10(16h))*
Daphnientoxizität	*31.5 mg/l (Daphnia magna (Wasserfloh)) (EC50(24h))*
Fischtoxizität	*174 mg/l (Leuciscus idus) (LC50(48h))*

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	Danger to drinking water if even small quantities leak into soil.
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 –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

<u>Road, Rail, Sea and Air Transport</u>

UN No	2735
Class - Primary	8
Packing Group	II
Proper Shipping Name	AMINES, LIQUID, CORROSIVE, N . O . S . (ISOPHORONEDIAMINE)
Marine Pollutant	No
Special Provisions	If the product's individual container is below 1L/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 (Corrosive) – HSR002658

HSW (HS) Regulations 2017 and EPA Notices	**Trigger Quantity**
Certified Handler	Not required
Location Certificate	250L
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	250L
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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