SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**Norsystem Boat Epoxy Resin – Hardeners (Slow & Fast)**
Item Code:	Slow: 1402, 1412, 1422 Fast: 1404, 1414, 1424
Product Use:	Hardener for laminating when used with Norsystem resin base
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

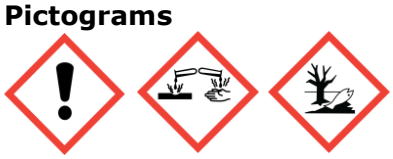
Section 2. Hazards Identification

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 dermal toxicity Cat. 4	H312	Harmful in contact with skin.
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.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment chronic Cat. 2	H411	Toxic to aquatic life with long lasting effects.
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.
P260	Do not breathe fumes, gas, mist or vapours.
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.
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.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
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.
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.**
3-aminomethyl-3,5,5-trimethylcyclohexylamine	25-50	2855-13-2
m-phenylenebis(methylamine)	10-25	1477-55-0
Phenol, styrolisiert	10-25	61788-44-1
rimethylhexane-1,6-diamine	2.5-10	25513-64-8
Salicylic acid	2.5-10	69-72-7
Polyoxypropylenediamine	2.5-10	9046-10-0

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. Get immediate medical attention.
If Swallowed	Rinse mouth. DO NOT induce vomiting. 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. Call a POISON CENTER or doctor/physician if you feel unwell.
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.
Inhalation:	Harmful if inhaled.
Skin:	Harmful in contact with skin. Causes skin burns. May cause an allergic skin reaction.
Eye:	Causes serious eye damage.
Chronic:	Not applicable.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable Liquid
Hazards from combustion products	Decomposition products are: Carbon monoxide Carbon dioxide Oxides of nitrogen
Suitable Extinguishing media	Use foam, carbon dioxide or Dry Chemicals or water fog to extinguish flames.
Precautions for firefighters and special protective clothing	Wear full body protection and self-contained breathing apparatus. Water may be used to cool down fire exposed containers. Keep heat and naked fire away from spill.
HAZCHEM CODE	**2X**

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 container tightly closed.

- Do not breathe fumes, gas, mist or vapours.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective clothing.
- Use personal protective equipment as required.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep cool and well ventilated place.
- Store away from heat and sparks.
- Store locked up.
- 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
m-phenylenebis(methylamine)	[1477-55-0]		0.1 (Ceiling)		

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 were necessary.

Personal Protection Equipment

Eyes	Wear safety goggles with side shields.
Hands and Skin	Wear chemical resistant gloves. Wear overalls and use barrier cream.
Respiratory	Avoid breathing vapours or dust by wearing AS1716 approved respirators.

Section 9 Physical and Chemical Properties

Appearance	Amber liquid
Odour	Not available
Odour Threshold	Not applicable
pH	Not applicable
Boiling Point	>200^{0}C
Melting Point	Not measured
Freezing Point	Not applicable
Flash Point	>100^{0}C
Flammability	Not applicable
Upper and Lower Exposure Limits	Not applicable
Volatile Component	Not applicable
Vapour Density	Not applicable
Specific Gravity	Slow: 0.979 Fast: 1.012kg
Solubilities	Immiscible

Partition Coefficient:	Not applicable
Auto-ignition Temperature	365^0C
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	None known.
Incompatible Materials	Avoid contact with mineral acids, Oxidising agents and epoxy resins under uncontrolled conditions.
Hazardous Decomposition Products	Hazardous decomposition products:- Carbon dioxide Carbon Monoxide Oxides of Nitrogen

Section 11 Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed.
Dermal	Harmful in contact with skin.
Inhalation	Harmful if inhaled.
Eye	Causes serious eye damage.
Skin	Causes severe skin burns. May cause an allergic reaction.

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

Toxic to aquatic life with long lasting effects.
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.

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, Ecotoxic". 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	2735
Class - Primary	8
Packing Group	II
Proper Shipping Name	AMINES, LIQUID, CORROSIVE, N.O.S
Marine Pollutant	YES
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

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

Issue Date: 15 November 2023 Review Date: 15 November 2028