SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**Top Flight Antifouling**
Item Code:	7000
UN no.	1263
Product Use:	As anti-fouling on underwater sections of hulls of craft to prevent growth of weeds and marine organism
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:	10 December 2018 v2

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 2017

EPA Approval No:
Surface Coatings and Colourants (Flammable, Toxic [6.7]) – HSR002669

Pictograms

Flammable Toxic/ Irritant Chronic

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
3.1C	H226	Flammable liquid and vapour.	Flam. Liq. 3
6.1D (oral)	H302	Harmful if swallowed.	Acute Tox. 4
6.3B	H316	Causes mild skin irritation.	Skin Irrit. 3
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
6.5B	H317	May cause an allergic skin reaction.	Skin Sens. 1
6.7B	H351	Suspected of causing cancer.	Carc. 2
6.9B	H373	May cause damage to organs through prolonged or repeated exposure.	STOT RE 2

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
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 or vapours.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective clothing.
P281	Use personal protective equipment as required.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
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.
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.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P370 + P378	In case of fire: Use dry chemical, carbon dioxide or foam 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.
Cuprous Oxide	49-55	1317-39-1
Aromatic Solvent	10-22	64792-94-5
Pigments	10-18	Proprietary

Rosins	9-15	Proprietary
Synthetic Resins	5-10	Proprietary
Additives	1-2	Proprietary

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. If eye irritation persists: Get medical advice.

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. If the victim is conscious give water 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.
Inhalation: Not applicable.
Skin: Causes mild skin irritation. May cause an allergic skin reaction.
Eye: Causes serious eye irritation.
Chronic: Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

Section 5. Fire Fighting Measures

Hazard Type	Flammable. May form explosive mixtures with air
Hazards from combustion products	Combustion product may be toxic.
Suitable Extinguishing media	Use dry chemical, carbon dioxide or foam to extinguish fire.
Precautions for firefighters and special protective clothing	Wear self-contained breathing apparatus. Eliminated oxygen, spontaneous may occur oxidising product to CuO if exposed to moist air at >100°C.
HAZCHEM CODE	**3Y**

Section 6. Accidental Release Measures

Personal precautions:
Wear protective equipment as detailed in Section 8. Clear area of any unprotected personnel. Eliminate 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 spill onto dry sand or earth and collect up and label containers for disposal. Dispose by incineration by approved agent or local regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe fumes or vapours.
- 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.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective clothing.
- Use personal protective equipment as required.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store locked up, in a well-ventilated place. Keep cool.
- Product should be stored in properly sealed containers, if at all, not used in one application.
- Keep out of reach of children.
- Partly used containers should be properly sealed to avoid spillage.
- Under certain conditions cuprous oxide present in the product may react violently with strong reactants such as acids and bases.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	**TWA**		**STEL**	
	ppm	**mg/m^3**	**ppm**	**mg/m^3**

No ingredients have known exposure limits.

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 NOV 2017 9TH EDITION.

Engineering Controls
Use only in well ventilated areas. Apply local dust extraction to areas where product is sanded to avoid exposure to dust inhalation.

Personal Protection Equipment:

Eyes	Wear safety goggles with side shields.
Hands and Skin	Wear overall, use Barrier cream on skin. Wear chemical resistant gloves, goggles and safety mask.
Respiratory	Avoid breathing dust when sanding.

Section 9 Physical and Chemical Properties

Appearance	Coloured (Red, Black or Blue) viscous liquid
Odour	Solvent odour
Odour Threshold	Not applicable
pH	Not applicable
Boiling Point	174^0C for solvent
Melting Point	Not applicable
Freezing Point	Not applicable
Flash Point	32^0C
Flammability	Flammable
Upper and Lower Exposure Limits	Not available
Volatile Component	Not available
Vapour Pressure 25^0C	Not applicable
Specific Gravity	1.750 – 2.039
Solubilities	Insoluble
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	Oxidisers, strong acids and bases, other flammables.
Hazardous Decomposition Products	Combustion product may be toxic.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed. Product contains cuprous oxide and will irritate mouth, throat and digestive tract, may result in nausea, chill and diarrhoea if swallowed in large quantities.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes severe eye irritation.
Skin	Causes mild skin irritation. May cause an allergic skin reaction.

Chronic Effects:

Carcinogenicity	Suspected of causing cancer.
Reproductive Toxicity	Not applicable
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	May cause damage to the organs with prolonged or repeated exposure.

Individual component information:

Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Cuprous Oxide (1317-39-1)	470 mg/kg (rat)	>1000mg/kg (Rat)	5mg/L(Rat)- 4hrs dust/mist

Section 12. Ecotoxicological Information

This product is not hazardous to the environment.

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

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 and marked "Flammable".

Precautions: If triple rinsing container, add rinsate to waste container for disposal.

Disposal methods to avoid: Do not release product into the environment prior to curing.

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 5433:2012

Road and Rail Transport

UN No:	1263
Class-primary	3
Packing Group	III
Proper Shipping Name:	PAINT FLAMMABLE LIQUID

Air Transport

UN No:	1263
Class-primary	3
Packing Group	III
Proper Shipping Name:	PAINT FLAMMABLE LIQUID

Marine Transport

UN No:	1263
Class-primary	3
Packing Group	III
Proper Shipping Name:	PAINT FLAMMABLE LIQUID

Limited Quantities Statement:

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.

NOT Classified as a Scheduled 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 2017

EPA Approval Code: Surface Coatings and Colourants (Flammable, Toxic [6.7]) – HSR002669

HSNO Classification: 3.1C, 6.1D(oral), 6.3B, 6.4A, 6.5B, 6.7B, 6.9B

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 (3.1C)
Emergency Response Plan	1000L (6.1D)
Secondary Containment	1000L (6.1D)
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. National Industrial Chemicals Notification and Assessment Scheme (NICNAS).
3. Standard for the Uniform Scheduling of Medicines and Poisons.
4. Australian Code for the Transport of Dangerous Goods by Road & Rail.
5. Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
6. Workplace exposure standards for airborne contaminants, Safe work Australia.
7. American Conference of Industrial Hygienists (ACGIH).
8. 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 Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012

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.

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