SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**Norclean Plus**
Product Use:	Industrial solvent: cleaning and degreasing
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:	22 May 2020

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: Cleaning Products (Flammable) – HSR002528

Pictograms

Flammable Irritant Chronic Ecotoxic

Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
3.1B	H225	Highly flammable liquid and vapour.	Flam. Liq. 2
6.1E (asp)	H304	May be fatal if swallowed and enters airways.	Asp. Tox. 1
6.3A	H315	Causes skin irritation.	Skin Irrit. 2
6.8B	H361	Suspected of damaging fertility or the unborn	Repr. 2

		child.	
6.9N	H336	May cause drowsiness or dizziness.	STOT SE 3
9.1B	H411	Toxic to aquatic life with long lasting effects.	Aquatic Chronic 2

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions 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 and lighting.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing fumes, mist, vapours and spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing and wash before re-use.
P391	Collect spillage.
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.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P370 + P378	In case of fire: Use extinguishing media carbon dioxide, foam or dry chemicals for extinction.

Storage Code	Storage Statement
P405	Store locked up.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
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.
Naphtha (petroleum), hydrotreated	100	64742-49-0
Heptane	60-70	142-82-5
Cyclohexane	20-30	110-82-7
Methyl Cyclopentane	<10	96-37-7

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.
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	Immediately call a POISON CENTER or doctor/physician. Aspiration hazard. 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.
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.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion:	May be fatal if swallowed and enters airways.
Inhalation:	May cause drowsiness or dizziness.
Skin:	Causes skin irritation.
Eye:	Not applicable.
Chronic:	Suspected of damaging fertility or the unborn child.

Section 5. Fire Fighting Measures

Hazard Type	Highly Flammable Liquid.
Hazards from combustion products	Carbon dioxide and carbon monoxide.
Suitable Extinguishing media	Dry chemical or foam.
Precautions for firefighters and special protective clothing	Fire fighters should wear full protective gear.
HAZCHEM CODE	**3YE**

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. Ensure that drain valves are closed at all times. Clean up and report spills immediately. Warn occupants of downwind areas of possible fire and explosion hazard.

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:

Shut off the source of the spill if possible and safe to do so.
Confine the spill if possible.
If a water spill remove the product from the surface by skimming or
with suitable absorbent material.
If a land spill, contain the spill liquid with sand or earth.
Recover by pumping - use explosion proof pump or hand pump – or with a suitable absorbent material. Disposed as per Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Obtain special instructions before use.
- 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.
- Open slowly to control possible pressure release.
- Use explosion-proof electrical, ventilating and lighting.
- Use only non-sparking tools.
- Use grounding leads to avoid discharge (electrical spark).
- Avoid breathing fumes, mist, vapours and spray.
- Wash hands thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective clothing.
- Use personal protective equipment as required.

Precautions for Storage:

- Store away from incompatible materials such as Natural Rubber, Butyl Rubber, EPDM, Polystyrene
- Keep out of reach of children.
- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed.
- Store in a well-ventilated place.
- Store in a cool, dry place away from direct sunlight.
- Do not pressurise, cut, heat or weld containers - residual vapours are flammable.
- This product is flammable and will fuel a fire in progress.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

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

The time weighted average concentration (TWA) for this product is: 600mg/m3 (159 ppm), which means the highest allowable exposure concentration in an eight-hour day for a five-day working week. The short-term exposure limit (STEL) is: None specified, which is the maximum allowable exposure concentration at any time.

Heptane	(142-82-5)	400	1640	500	2050
Cyclohexane	(110-82-7)	100	350	300	1050

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 2019 11TH EDITION.

Engineering Controls

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Personal Protection Equipment

Eyes	Always use safety glasses or a face shield when handling this product.
Hands and Skin	Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves (e.g. PVC) be worn when handling this product.
Respiratory	Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type "A" filter material is considered suitable for this product.

Section 9 Physical and Chemical Properties

Appearance	Clear colourless Liquid
Odour	Not available
Odour Threshold	Not applicable
pH	Not applicable
Boiling Point	88-104^{0}C
Melting Point	Not applicable
Freezing Point	Not applicable
Flash Point	-13^{0}C
Flammability	Highly Flammable
Upper and Lower Exposure Limits	1.0 – 7.0
Percent Volatiles	100%
Vapour Pressure @ 20^{0}C	8 kPa
Vapour Density	Not applicable
Density @ 15^{0}C	0.73 g/ml
Solubility with Water	<0.10 % w/w
Partition Coefficient:	Not applicable
Auto-ignition Temperature	258^{0}C
Decomposition Temperature	Not applicable
Viscosity	0.7 cSt @ 20^{0}C 0.5 cSt @ 40^{0}C
Particle Characteristics	Not applicable

Section 10. Stability and Reactivity

Stability of Substance	This product is stable at room temperature and pressure.
Hazardous Reactions	Oxidizing agents, mineral acids, phosphorous and chlorine
Conditions to Avoid	Sources of heat and ignition, open flames.
Incompatible Materials	Natural Rubber, Butyl Rubber, EPDM, Polystyrene
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide, and other organic complexes on incomplete burning or oxidation.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Produces hallucinations and narcotic effect. Ingestion of large amounts will result in drowsiness, fatigue, loss of appetite, paresthesia in distal extremities (tingling in hands and feet). Possibility of muscle weakness, cold pulsation in extremities (hands and feet), blurred vision, headache, and nausea. Vomiting may cause this product to be

	aspirated to the lungs resulting in chemical pneumonitis or pulmonary oedema.
Dermal	Not applicable.
Inhalation	May cause drowsiness or dizziness. This product is irritating to the respiratory tract. Exposure to large concentrations over an extended period of time will result in muscle weakness, tingling in hands and feet, blurred vision, headaches, nausea, loss of appetite, hallucinations, and possible loss of consciousness.
Eye	Not applicable.
Skin	Causes skin irritation. It may result in dryness and cracking.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	May damage 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	Not applicable.
Chronic	There is evidence of damage to the peripheral nervous system, particularly arms and legs. This product contains n-hexane, where the effects of this constituent show incidents of experimental teratogenic and reproductive effects and mutation data has been reported. The effects of this product in combination with MEK are potentiated (greatly increased). This means that the effects suffered by ingestion or inhalation will be increased, or experienced more quickly.
Toxicity information	Oral LD50: n-hexane: 28710 mg/kg (oral, rat) Inhalation LC50: n-hexane: 190 ppm (inhalation, human)

Section 12. Ecotoxicological Information

New Zealand:
HSNO Classes: 9.1B = Toxic to aquatic life with long lasting effects.

Persistence and degradability	This product will evaporate and commence degradation on exposure to light and air.
Bioaccumulation	No data available
Mobility in Soil	This product is highly volatile and will rapidly evaporate to the air if released into the water.
Other adverse effects	No data available
Precautions	Do not allow to enter waterways.

Ecotoxicity Aquatic Toxicity

Fish Toxicity (rainbow trout, goldfish, bluegill):	LC50(96hr): n-hexane: LC50: (Carp) 210 000 µg/L
Daphnia Magna EC50 (24 hr):	n-hexane: EC50: 45 mmol/m^3
Blue-green algae (Toxicity threshold 7-8 days):	n-hexane: EC50: 8%
Green algae (Toxicity threshold 7-8 days):	n-hexane: EC50: 94 mmol/m^3

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:
Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are flammable and harmful. Ensure that empty packaging is allowed to dry.

Disposal methods to avoid:
This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product is ashless and can be burned directly in appropriate equipment.

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:	3295
Class-primary	3
Packing Group	II
Proper Shipping Name:	Liquid Hydrocarbons, N.O.S

Air Transport

UN No:	3295
Class-primary	3
Packing Group	II
Proper Shipping Name:	Liquid Hydrocarbons, N.O.S

Marine Transport

UN No:	3295
Class-primary	3
Packing Group	II
Proper Shipping Name:	Liquid Hydrocarbons, N.O.S
Marine Pollutant:	Yes

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.

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 2017

EPA Approval Code: Cleaning Products (Flammable) – HSR002528

HSNO Classification: 3.1B, 6.1E(asp), 6.3A, 6.8B, 6.9N, 9.1B

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	100L (>5L), 250L(<5L), 50L open (3.1B)
Tracking Trigger Quantities	Not required

Signage Trigger Quantities	250L(3.1B)
Emergency Response Plan	1000L(3.1B, 9.1B)
Secondary Containment	1000L(3.1B, 9.1B)
Fire Extinguishers	250L = 2 x required
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

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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