

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Orange Peel**
 Item Code: 3070
 Product Use: Industrial strength paint stripper.
 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
 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:
Cleaning Products (combustible) – HSR002525

Pictograms



Irritant

Chronic

Ecotoxic

Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
3.1D	H227	Combustible liquid.	Flam. Liq. 4
6.1E (oral)	H303	May be harmful if swallowed.	Acute Tox. 5
6.3A	H315	Causes skin irritation.	Skin Irrit. 2
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
6.5B	H317	May cause an allergic skin reaction.	Skin Sens. 1
6.8A	H360	May damage fertility or the unborn child.	Repr. 1B
9.1A	H400	Very toxic to aquatic life.	Aquatic Acute 1
9.2B	H422	Toxic to the soil environment.	

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.
P261	Avoid breathing fumes or vapours.
P264	Wash hands thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
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.
P362	Take off contaminated clothing and wash before re-use.
P391	Collect spillage.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
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.
N-methyl-2-pyrrolidone	>60	872-50-4
d-limonene	10-30	5989-27-5
Non-hazardous ingredients	To bal	

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. Do NOT induce vomiting. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. 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. The liquid may produce considerable gastrointestinal discomfort and may be harmful or toxic if swallowed. Ingestion may result in nausea, pain and vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.
Inhalation:	Not applicable.
Skin:	Causes skin irritation. May cause an allergic skin reaction.
Eye:	Causes serious eye irritation.
Chronic:	May damage fertility or the unborn child.
Other:	Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours. Treat symptomatically.

Section 5.	Fire Fighting Measures
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Hazard Type	Combustible
Hazards from combustion products	Carbon Dioxide and nitrogen Oxides. Other pyrolysis products typical of burning organic material. WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides. May emit poisonous fumes. Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.
Suitable Extinguishing media	Dry chemical powder, BCF (where regulations permit), Carbon dioxide and water spray or fog - Large fires only.
Precautions for firefighters and special protective clothing	Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Personal precautions:

Wear protective equipment as detailed in Section 8. Clear area of any unprotected personnel. No smoking, naked lights or ignition sources. Increase ventilation.

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:

Clean up spills immediately. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste 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.
- Keep away from heat, sparks, open flames or hot surfaces. No smoking.
- Avoid breathing fumes or vapours.
- Wash hands thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective clothing.
- Use personal protective equipment as required.
- Do not allow wet clothing with material to stay in contact with skin.
- Use in well ventilated area.
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
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Precautions for Storage:

- Store away from incompatible materials listed in Section 10 eg oxidisers.
- Material is hygroscopic, i.e. absorbs moisture from the air.
- Keep containers well sealed in storage.
- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storage and handling recommendations contained within this SDS.
- Suitable container: Glass, metal can or drum, packaging recommended by mfg. Check all containers are clearly labelled and free from leaks.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
1-Methyl-2-pyrrolidone (skin) [872-50-4]	25	103	75	309

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

General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant:	Air Speed:
solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min)
aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)
grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)

Within each range the appropriate value depends on:

Lower end of the range	Upper end of the range
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents
2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity
2: Intermittent, low production.	3: High production, heavy use
4: Large hood or large air mass in motion	4: Small hood-local control only

Personal Protection Equipment:



Eyes	Wear safety goggles with side shields. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly.																				
Hands and Skin	Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber Overalls, PVC apron, barrier cream, skin cleaning cream and eye wash unit.																				
Respiratory	Type AK Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent) Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter. <table border="1" data-bbox="443 1682 1155 1895"> <thead> <tr> <th>Required Minimum</th> <th>Half-Face Respirator</th> <th>Full-Face Respirator</th> <th>Powered Air</th> </tr> </thead> <tbody> <tr> <td>up to 5 x ES</td> <td>AK-AUS / Class 1</td> <td>-</td> <td>AK-PAPR-AUS / Class</td> </tr> <tr> <td>up to 25 x ES</td> <td>Air-line*</td> <td>AK-2</td> <td>AK-PAPR-2</td> </tr> <tr> <td>up to 50 x ES</td> <td>-</td> <td>AK-3</td> <td>-</td> </tr> <tr> <td>50+ x ES</td> <td>-</td> <td>Air-line**</td> <td>-</td> </tr> </tbody> </table> <p>^ - Full-face A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E =</p>	Required Minimum	Half-Face Respirator	Full-Face Respirator	Powered Air	up to 5 x ES	AK-AUS / Class 1	-	AK-PAPR-AUS / Class	up to 25 x ES	Air-line*	AK-2	AK-PAPR-2	up to 50 x ES	-	AK-3	-	50+ x ES	-	Air-line**	-
Required Minimum	Half-Face Respirator	Full-Face Respirator	Powered Air																		
up to 5 x ES	AK-AUS / Class 1	-	AK-PAPR-AUS / Class																		
up to 25 x ES	Air-line*	AK-2	AK-PAPR-2																		
up to 50 x ES	-	AK-3	-																		
50+ x ES	-	Air-line**	-																		

Sulfur dioxide(SO₂), G = Agricultural chemicals, K = Ammonia(NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Section 9 Physical and Chemical Properties

Appearance	Thick orange liquid.
Odour	Not available
Odour Threshold	Not available
pH	Not available
Boiling Point	154.44 ^o C
Melting Point	Not available
Freezing Point	Not available
Flash Point	>61 ^o C
Flammability	Combustible
Upper and Lower Exposure Limits	Not available
Volatile Component	Not available
Vapour Pressure 20^oC	<0.13 kPa
Relative Density (water =1)	0.96-1.02
Solubilities	Partly Miscible
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available
VOC g/L	871.03 g/L

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Sources of ignition, smoking or naked lights.
Incompatible Materials	Oxidisers
Hazardous Decomposition Products	Carbon Dioxide and nitrogen Oxides. Other pyrolysis products typical of burning organic material. WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides. May emit poisonous fumes.

Section 11 Toxicological Information

Acute Effects:

Swallowed	May be harmful if swallowed. Accidental ingestion of the material may be damaging to the health of the individual. Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce considerable gastrointestinal discomfort and may be harmful or toxic if swallowed. Ingestion may result in nausea, pain and vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes severe eye irritation. Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by a temporary redness (similar

	to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.
Skin	<p>Causes mild skin irritation. May cause an allergic skin reaction. Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis.</p> <p>The material may accentuate any pre-existing dermatitis condition. Open cuts, abraded or irritated skin should not be exposed to this material.</p> <p>Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.</p>

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	May damage fertility or the unborn child.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.
Other	Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]

Individual component information:

Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
N-Methyl-2-pyrrolidone (872-50-4)	3500mg/kg (rabbit)	-	-
d-Limonene (5989-27-5)	4400mg/kg (rat)	-	-

Section 12. Ecotoxicological Information

New Zealand:

HSNO Classes: 9.1A = Very toxic to aquatic life
9.2B = Toxic to the soil environment.

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

Individual component information (Please refer to www.epa.govt.co.nz for full details):

d-Limonene (5989-27-5):

Route	Species	Duration	Value LC50/EC50
Aquatic, fish	Pimephales promelas Fathead minnow	96 hr	0.702 mg/L
Aquatic, Crustacean	Daphnia magna	48 hr	0.421mg/L
Algae	Algae or other aquatic plants	72	Ca 8mg/L

Product Name: Orange Peel
Date of SDS: 10 December 2018

Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: 64 9 475 5240 www.techcomp.co.nz

Algae	Algae or other aquatic plants	72	NOEC 2.62mg/L
Bioaccumulative	Yes		
Rapidly Degradable	Yes		

N-Methyl-2-pyrrolidone (872-50-4):

Route	Species	Duration	Value LC50/EC50
Aquatic, fish	Fish	96 hr	464 mg/L
Aquatic, Crustacean	Crustacea	48 hr	Ca 4897 mg/L
	Crustacea	504	12.5mg/L
Algae	Algae or other aquatic plants	72	>500mg/L
Algae	Algae or other aquatic plants	72	>500mg/L
Bioaccumulative	Yes		
Rapidly Degradable	Yes		

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 "Combustible".

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: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS LIQUID, N.O.S

Air Transport

UN No: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS LIQUID, N.O.S

Marine Transport

UN No: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS LIQUID, N.O.S
 Marine Pollutant Yes

Limited Quantities Statement:

If the product's individual container is below 5L, 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.

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 6** 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 (Combustible) – HSR002525

HSNO Classification: 3.1D, 6.1E(oral), 6.3A, 6.4A, 6.5B, 6.8A, 9.1A, 9.2B

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	100L (9.1A)
Emergency Response Plan	100L (9.1A)
Secondary Containment	100L (9.1A)
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.

Issue Date: 10 December 2018 Review Date: 10 December 2023