



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	ACETONE
Other Names	2-Propanone, Dimethyl Ketone
Manufacturer's Product Code	16255
Recommended Use	Solvent

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au



Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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GHS Classification	Pictogram	Hazard statement
Flammable Liquids, Category 2	 FLAME	H225 Highly flammable liquid and vapour
Serious Eye Damage/Irritation, Category 2A	 EXCLAMATION MARK	H319 Causes serious eye irritation
Specific Target Organ Toxicity (Single exposure), Category 3		H336 May cause drowsiness or dizziness
Non-GHS (Safe Work Australia)		AUH066 Repeated exposure may cause skin dryness or cracking

Product: ACETONE**Precautionary statements:**

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
PREVENTATIVE	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilation/lighting equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P261	Avoid breathing mist/vapours/spray
P264	Wash thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/eye protection/face protection
RESPONSE	
P303 + P361 + P353	IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse. Rinse skin with water/shower
P304 + P340	IF INHALED: Remove victim 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
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P337 + P313	If eye irritation persists: Get medical advice/attention
P370 + P378	In case of fire: Use foam/water spray/fog for extinction
STORAGE	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed
P403 + P235	Store in a well-ventilated place. Keep cool
P405	Store locked up
DISPOSAL	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Acetone	67-64-1	> 99

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Keep victim calm and remove to fresh air if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available. Transport to nearest medical facility for additional treatment if necessary.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. Seek immediate medical assistance.
Ingestion:	If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Product: ACETONE

Symptoms caused by exposure

Inhalation:	Breathing of high vapour concentrations may cause central nervous system depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continuous inhalation may result in unconsciousness and death.
Skin:	May include burning sensation and/or a dried/cracked appearance.
Eye:	May include burning sensation, redness, swelling and/or blurred vision.
Ingestion:	May include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath and/or fever

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Specific hazards arising from the chemical

A highly flammable liquid. Carbon monoxide and/or carbon dioxide may be evolved. May form flammable vapour mixture with air. Avoid all ignition sources. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Heating can cause expansion or decomposition leading to violent rupture of containers. Containers exposed to intense heat from fires should be cooled with large quantities of water.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code •2YE.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Highly flammable product. Avoid breathing vapours. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Electrostatic charges may be generated during transfer. Electrostatic discharge may cause fire. Ensure electrical continuity by earthing all equipment. Flameproof equipment necessary in area where chemical is being used. Vapours may accumulate in low or confined areas.

Conditions for safe storage, including any incompatibilities

Bulk storage tanks should be banded. Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia - Acetone: 1185mg/m³ (500ppm) TWA (8hr), STEL 2375mg/m³ (1000ppm)

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear colourless liquid
Odour:	Characteristic
Odour threshold (ppm):	Data not available
pH:	Not applicable
Melting point/freezing point (°C):	-95
Initial boiling point and boiling range (°C):	56
Flash point (°C):	-18 (closed cup)
Evaporation rate (Butyl acetate = 1):	5.6
Flammability:	Highly flammable
Upper/lower flammability or explosive limits (%):	2.15 - 13.0

Product: ACETONE

Vapour pressure (mbar @ 20°C):	186
Vapour density (air = 1):	2
Density (g/ml @ 20°C):	0.79
Solubility:	Miscible with water
Partition coefficient: n-octanol/water:	0.2
Auto-ignition temperature (°C):	465
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials

Strong oxidising agents, reducing agents, acids, alkalis.

Hazardous decomposition products

Burning can produce carbon monoxide and/or carbon dioxide.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Low toxicity - LD50 Oral (rat) > 2000 mg/kg LC50 Inhalation (rat, 4h) > 20 mg/l
Skin corrosion/irritation:	Skin - rabbit, Result – Irritating to skin (48h). May cause skin irritation. Will have a degreasing effect on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis
Serious eye damage/irritation:	Moderate to severe eye irritant. High concentrations of 500-1000ppm are irritating to eyes
Respiratory or skin sensitisation:	Not expected to be a sensitiser
Germ cell mutagenicity:	Not mutagenic
Carcinogenicity:	Not expected to be carcinogenic
Reproductive toxicity:	Not expected to impair fertility
Specific Target Organ Toxicity (STOT) – single exposure:	Data not available
Specific Target Organ Toxicity (STOT) – repeated exposure:	Central nervous system: repeated exposure affects the nervous system. Effects seen at high doses only
Aspiration hazard:	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal

Product: ACETONE

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity:

Fish –	Low toxicity: LC/EC/IC50 > 1000mg/l
Aquatic invertebrate –	Low toxicity: LC/EC/IC50 > 1000mg/l
Algae –	Low toxicity: LC/EC/IC50 > 1000mg/l
Microorganisms –	Low toxicity: LC/EC/IC50 > 1000mg/l

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Readily biodegradable.

Bioaccumulative potential

Not expected to bioaccumulate significantly.

Mobility in soil

Miscible with water. If product enters soil, it will be mobile and may contaminate groundwater.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	1090
Proper shipping name:	Acetone
Australian Dangerous Goods class:	3
Australian Dangerous Goods packing group:	II
Hazchem code:	•2YE

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	5
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	14

SECTION 16 OTHER INFORMATION

Date of preparation:	10/12/2014
Revision number:	5
Changes in this revision:	Update to GHS SDS standard

This MSDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	CALCIUM, LIME AND RUST REMOVER
Other Names	None
Manufacturer's Product Code	16413
Recommended Use	Acidic liquid detergent

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au

Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	WARNING
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GHS Classification	Pictogram	Hazard statement
Chronic Aquatic Toxicity, Category 3	N/A	H412 Harmful to aquatic life with long lasting effects

Precautionary statements:

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
PREVENTATIVE	
P273	Avoid release to the environment
RESPONSE	
P391	Collect spillage

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients Names and Proportions

Chemical Entity	CAS Number	Proportion (%)
Sulphamic Acid	5329-14-6	< 10
Glycolic Acid	79-14-1	< 10
Surfactants	-	< 5
Other non-hazardous ingredients	-	balance

SECTION 4 FIRST AID MEASURES

Description of necessary first aid measures

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin Contact:	If skin contact occurs, wash skin thoroughly with water and follow by washing with soap if available. If any irritation persists, seek medical attention.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes and seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Give a glass of water and seek immediate medical attention.

Symptoms caused by exposure

Inhalation:	May cause irritation and possible chemical burns to the respiratory tract and nasal passages.
Skin:	May cause irritation. Prolonged contact may cause chemical burns.
Eye:	May cause severe irritation and reddening. Prolonged contact may cause permanent damage.
Ingestion:	May cause burns to the mouth and digestive tract.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Use water fog, or fine spray mist to extinguish.

Specific hazards arising from the chemical

Fire or excessive heat may produce hazardous decomposition products such as nitrous gases and sulphur oxides.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code 2X.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Spills may be slippery. Ensure that any alkalis, chlorine based products or other products of incompatible classes near the spill are removed. Dam and recover.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using appropriate barriers.

Product: CALCIUM, LIME AND RUST REMOVER

Methods and materials for containment and cleaning up

Collect with inert absorbent material such as sand or earth. Consult Local Authority on disposal.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Non-combustible material. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Always use clean and dry equipment to dispense the product. Dispenser should be cleaned before and after use. All dispensers should be washed out after use.

Conditions for safe storage, including any incompatibilities

Dangerous goods for storage. When not being used, the containers should be stored upright and secured with the original closure. If transfer to another container becomes necessary, ensure that the container is clearly labelled, is of a type suitable for the product, and is clean and free of other materials. Do not store near chlorine based chemicals.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia –
No exposure standard data is available.

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not provide adequate ventilation, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pale clear yellow liquid
Odour:	Data not available
Odour threshold (ppm):	Data not available
pH:	0 - 1 approx.
Melting point/freezing point (°C):	0 approx.
Initial boiling point and boiling range (°C):	100 approx.
Flash point (°C):	Data not available
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Non-combustible
Upper/lower flammability or explosive limits (%):	Data not available

Product: CALCIUM, LIME AND RUST REMOVER

Vapour pressure (kPa):	Data not available
Vapour density (air = 1):	Data not available
Density (g/ml @ 15°C):	1.20 – 1.30
Solubility:	Soluble in water
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	Data not available
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY

Reactivity

Will react violently with alkaline materials, generating heat. Will react releasing chlorine gas from chlorinated detergents.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

Do not store near high heat sources.

Incompatible materials

Alkaline materials, strong oxidising or reducing agents.

Hazardous decomposition products

Data not available.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Data not available.
Skin corrosion/irritation:	Potentially irritating to skin. Prolonged contact may cause chemical burns.
Serious eye damage/irritation:	Potentially severely irritating to eyes. Prolonged contact may cause permanent damage.
Respiratory or skin sensitisation:	Not expected to be a sensitiser.
Germ cell mutagenicity:	Not expected to be mutagenic.
Carcinogenicity:	Not expected to be carcinogenic.
Reproductive toxicity:	Not expected to affect reproduction.
Specific Target Organ Toxicity (STOT) – single exposure:	Data not available.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Data not available.
Aspiration hazard:	Data not available.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Concentrated product, harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Dilute well with water and dispose of as per Local Authority regulations. Do not allow concentrated product to enter drains, waterways or sewers.

Acute toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Data not available.

Bioaccumulative potential

Data not available.

Mobility in soil

Data not available.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	3264
Proper shipping name:	Corrosive Liquid N.O.S.
Australian Dangerous Goods class:	8
Australian Dangerous Goods packing group:	III
Hazchem code:	2X

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	5
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	37

SECTION 16 OTHER INFORMATION

Date of preparation:	24/11/2015
Revision number:	4
Changes in this revision:	Update to GHS SDS standard

This SDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	WATER BASED DEGREASER
Other Names	None
Manufacturer's Product Code	17033
Recommended Use	Degreasing and cleaning

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au

Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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Hazardous chemical classification	Pictogram	Hazard statement
Eye Damage/Irritation, Category 1	 CORROSION	H318 Causes serious eye damage
Skin Corrosion/Irritation, Category 2	 EXCLAMATION MARK	H315 Causes skin irritation

Product: WATER BASED DEGREASER**Precautionary statements:**

<i>GENERAL</i>	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
<i>PREVENTATIVE</i>	
P264	Wash thoroughly after handling
P280	Wear protective gloves/eye protection/face protection
<i>RESPONSE</i>	
P302 + P352	IF ON SKIN: Wash with water and plenty of soap
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician
P332 + P313	If skin irritation occurs: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Sodium Hydroxide	1310-73-2	2
2-Butoxyethanol	111-76-2	< 5
Alkaline salts	-	< 10
Surfactants	-	< 10
Dye	-	< 1
Water	7732-18-5	Balance

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment
Skin Contact:	If skin contact occurs, wash skin thoroughly with water and follow by washing with soap if available. If any irritation persists, seek medical attention
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. If irritation persists seek medical attention
Ingestion:	If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical attention

Symptoms caused by exposure

Inhalation:	May result in burning sensation of the nose and throat
Skin:	A skin irritant. May include skin burns, redness, swelling and/or blisters.
Eye:	May cause eye irritation. May include burning sensation, redness, swelling, blurred vision. Corneal injury may develop.
Ingestion:	May result in nausea vomiting and stomach pain

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Non-combustible, not considered to be a significant fire risk.

Specific hazards arising from the chemical

May evolve carbon dioxide on decomposition.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code 2X.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Ventilate contaminated area thoroughly.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterways using sand, earth or other appropriate barriers.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), dilute with water and mop up, or absorb with dry inert material, and place in an appropriate labelled, sealable container for product recovery or safe disposal.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Retain as contaminated waste.

Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Avoid breathing vapours. Do NOT ingest. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidisers.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia -

Sodium Hydroxide: 2mg/m³ (peak) TWA

2-Butoxyethanol: 96.9mg/m³ (20ppm) TWA, 242mg/m³ (50ppm) STEL

Alkaline salts: 10mg/m³ in respirable mists

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Product: WATER BASED DEGREASER**Individual protection measures**

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pink liquid
Odour:	Characteristic
Odour threshold (ppm):	Data not available
pH:	11.8
Melting point/freezing point (°C):	0 (approx.)
Initial boiling point and boiling range (°C):	100 (approx.)
Flash point (°C):	Data not available
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Non-combustible
Upper/lower flammability or explosive limits (%):	Data not available
Vapour pressure (mmHg @ 20°C):	Data not available
Vapour density (air = 1):	Data not available
Density (g/ml @ 15°C):	1.05 - 1.06
Solubility:	Soluble in water
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	Data not available
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Product: WATER BASED DEGREASER

Conditions to avoid

Avoid oxidising agents and naked flames.

Incompatible materials

Strong acids, oxidising reagents.

Hazardous decomposition products

May evolve carbon dioxide.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Swallowing this product can result in nausea vomiting and stomach pain
Skin corrosion/irritation:	Irritant, prolonged contact may cause dermatitis
Serious eye damage/irritation:	Irritant. Corneal injury may develop with possible impairment of vision if not promptly and adequately treated
Respiratory or skin sensitisation:	Data not available
Germ cell mutagenicity:	Data not available
Carcinogenicity:	Data not available
Reproductive toxicity:	Data not available
Specific Target Organ Toxicity (STOT) – single exposure:	Slight irritant to respiratory tract when in mist form
Specific Target Organ Toxicity (STOT) – repeated exposure:	Data not available
Aspiration hazard:	Data not available

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Biodegradable.

Bioaccumulative potential

Data not available.

Product: WATER BASED DEGREASER**Mobility in soil**

Miscible with water.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	1760
Proper shipping name:	CORROSIVE LIQUID, N.O.S.
Australian Dangerous Goods class:	8
Australian Dangerous Goods packing group:	III
Hazchem code:	2X

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	5
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	37

SECTION 16 OTHER INFORMATION

Date of preparation:	05/03/2015
Revision number:	3
Changes in this revision:	Update to GHS SDS standard

This MSDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier **DEGREASING FLUID**

Other Names Solvent Degreaser

Manufacturer's Product Code 17077

Recommended Use Dergreasing concrete driveways, garage floors, motor cycle and car engines

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au

Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Non-dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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GHS Classification	Pictogram	Hazard statement
Aspiration Hazard, Category 1	 HEALTH HAZARD	H304 May be fatal if swallowed and enters airways

Precautionary statements:

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
RESPONSE	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Product: DEGREASING FLUID

P331	Do NOT induce vomiting
<i>STORAGE</i>	
P405	Store locked up
<i>DISPOSAL</i>	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Kerosine (petroleum); Straight run kerosine	8008-20-6	< 99

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. If symptoms persist transport to nearest medical facility for additional treatment.
Ingestion:	If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Symptoms caused by exposure

Inhalation:	May cause respiratory irritation, dizziness, nausea or unconsciousness.
Skin:	May include itching and redness.
Eye:	May include burning and temporary redness.
Ingestion:	May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES**Suitable extinguishing equipment**

Foam, water spray or fog, dry chemical powder or carbon dioxide. Do not use water in a jet.

Specific hazards arising from the chemical

Will float and can be reignited on surface water. Vapour is heavier than air, can spread along ground and distant ignition is possible.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment.

Product: DEGREASING FLUID

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Combustible product. Avoid breathing vapours. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Electrostatic charges may be generated during transfer. Electrostatic discharge may cause fire. Ensure electrical continuity by earthing all equipment.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

In the absence of data from National Occupational Health & Safety Commission (NOHSC) Worksafe Australia use -
Mineral Spirits 175-220 HSPA: 350mg/m³ TWA (8hr)

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear colourless liquid
Odour:	Mild
Odour threshold (ppm):	Data not available
pH:	Data not available
Melting point/freezing point (°C):	Data not available
Initial boiling point and boiling range (°C):	175 – 340
Flash point (°C):	> 65
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Combustible
Upper/lower flammability or explosive limits (%):	0.6 – 7.0
Vapour pressure (kPa @ 20°C):	Data not available
Vapour density (air = 1):	> 1
Density (g/ml @ 15°C):	0.79 – 0.81
Solubility (kg/m ³):	Negligible
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	Typical > 200
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 40°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials

Strong acids, strong oxidisers, halogens and alkalis.

Hazardous decomposition products

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids, gases, including carbon monoxide, carbon dioxide, sulphur oxides and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Expected to be of low toxicity.
Skin corrosion/irritation:	Prolonged contact may cause defatting of skin which can lead to dermatitis.
Serious eye damage/irritation:	Not expected to be irritating to eyes.
Respiratory or skin sensitisation:	Not expected to be a sensitiser.
Germ cell mutagenicity:	Not expected to be mutagenic.
Carcinogenicity:	Not expected to be carcinogenic.
Reproductive toxicity:	Not expected to impair reproduction.
Specific Target Organ Toxicity (STOT) – single exposure:	Data not available
Specific Target Organ Toxicity (STOT) – repeated exposure:	Data not available
Aspiration hazard:	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Readily biodegradable. Degrades rapidly in air by photo-chemical means.

Bioaccumulative potential

Not expected to bioaccumulate.

Mobility in soil

Floats on water. Adsorbs to soil and has low mobility.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	Not applicable
Proper shipping name:	Not applicable
Australian Dangerous Goods class:	Not applicable
Australian Dangerous Goods packing group:	Not applicable
Hazchem code:	Not applicable

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	5
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	Not applicable

SECTION 16 OTHER INFORMATION

Date of preparation:	17/03/2016
Revision number:	4
Changes in this revision:	Update to GHS SDS standard Update of CAS number

This SDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	DRAIN CLEANER CONCENTRATE
Other Names	Caustic, Soda lye, Sodium hydrate, Sodium hydroxide
Manufacturer's Product Code	16401
Recommended Use	Drain cleaner, soap making ingredient, paint remover

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au

Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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GHS Classification	Pictogram	Hazard statement
Skin Corrosion/Irritation, Category 1A	 CORROSION	H314 Causes severe skin burns and eye damage

Precautionary statements:

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
PREVENTATIVE	
P260	Do not breathe dusts or mists
P264	Wash thoroughly after handling

Product: DRAIN CLEANER CONCENTRATE

P280	Wear protective gloves/eye protection/face protection
RESPONSE	
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303 + P361 + P353	IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse. Rinse skin with water/shower
P304 + P340	IF INHALED: Remove victim 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
P310	Immediately call a POISON CENTER or doctor/physician
P363	Wash contaminated clothing before reuse
STORAGE	
P405	Store locked up
DISPOSAL	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Sodium Hydroxide	1310-73-2	> 98

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Keep victim calm and remove to fresh air if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin Contact:	DO NOT DELAY. If spilt on skin or hair, immediately drench with running water and remove contaminated clothing. Continue to wash skin and hair with plenty of water until advised to stop by the Poisons Information Centre / doctor. For skin burns, cover loosely with a clean, dry, sterile dressing until medical help is available.
Eye Contact:	DO NOT DELAY. If in eyes, hold eyes open, flood with water for at least 15 minutes or until advised by the Poisons Information Centre / doctor.
Ingestion:	DO NOT DELAY. Do NOT induce vomiting. If victim is alert, rinse mouth and drink 1/2 to 1 glass of water to help dilute the material. Seek immediate medical assistance.

Symptoms caused by exposure

Inhalation:	May cause respiratory irritation, including breathing difficulty, lung inflammation, sneezing and throat swelling.
Skin:	A severe irritant. May include burning sensation, redness, swelling and/or blisters.
Eye:	A severe irritant. Corrosive to eyes; contact can cause corneal burns. May include pain or burning sensation, redness, swelling and/or blurred vision.
Ingestion:	May result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Not combustible, however, if material is involved in a fire use: water fog or fine water spray, foam, dry chemical powder, carbon dioxide.

Specific hazards arising from the chemical

Reacts violently with water. Decomposes on heating emitting toxic fumes.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code 2W.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Wear protective equipment to prevent skin and eye contact and breathing dust. Work upwind or increase ventilation.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Ventilate contaminated area thoroughly. If contamination of sewers or waterways has occurred advise local emergency services.

Methods and materials for containment and cleaning up

Cover with damp absorbent inert material, sand or soil. Avoid generating dust. Caution – heat may be evolved on contact with water.

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Non-combustible material. Avoid skin and eye contact and breathing dust. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Keep away from incompatible materials (see SECTION 10).

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia - Sodium hydroxide: 2mg/m³ (peak limitation) STEL

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Product: DRAIN CLEANER CONCENTRATE**Individual protection measures**

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White Solid
Odour:	None
Odour threshold (ppm):	Data not available
pH:	12.7 (1% solution in water)
Melting point/freezing point (°C):	318
Initial boiling point and boiling range (°C):	1390
Flash point (°C):	Data not available
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Non-combustible
Upper/lower flammability or explosive limits (%):	Data not available
Vapour pressure (kPa @ 20°C):	Data not available
Vapour density (air = 1 @ 15°C):	Data not available
Density (g/ml @ 20°C):	2.13
Solubility (kg/m ³):	Miscible with water
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	Data not available
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 25°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Product: DRAIN CLEANER CONCENTRATE**Conditions to avoid**

Exposure to water vapour.

Incompatible materials

Acids, aluminium, tin, zinc and chlorinated hydrocarbons.

Hazardous decomposition products

None.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	LD50 data not available.
Skin corrosion/irritation:	Contact with skin will result in severe irritation. Corrosive to skin – may cause burns.
Serious eye damage/irritation:	A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.
Respiratory or skin sensitisation:	Data not available.
Germ cell mutagenicity:	Not expected to be mutagenic.
Carcinogenicity:	Not expected to be carcinogenic.
Reproductive toxicity:	Not expected to impair fertility.
Specific Target Organ Toxicity (STOT) – single exposure:	Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Data not available.
Aspiration hazard:	Data not available.

SECTION 12 ECOLOGICAL INFORMATION**Ecotoxicity**

Acute toxicity:

Fish –	Expected to have low toxicity: $10 < LC/EC/IC50 \leq 100\text{mg/l}$
Aquatic invertebrate –	Expected to have low toxicity: $10 < LC/EC/IC50 \leq 100\text{mg/l}$
Algae –	Expected to have low toxicity: $10 < LC/EC/IC50 \leq 100\text{mg/l}$
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Data not available.

Bioaccumulative potential

Not expected to bioaccumulate significantly.

Product: DRAIN CLEANER CONCENTRATE

Mobility in soil

Miscible with water.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	1823
Proper shipping name:	Sodium Hydroxide, Solid
Australian Dangerous Goods class:	8
Australian Dangerous Goods packing group:	II
Hazchem code:	2W

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	6
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	37

SECTION 16 OTHER INFORMATION

Date of preparation:	03/03/2015
Revision number:	2
Changes in this revision:	Update to GHS SDS standard

This MSDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



Orange Oil

Revision:004

Reissue Date: 28/06/2013

Page 1 of 3

Material Safety Data Sheet

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SAFE WORK AUSTRALIA

1. Identification of the Material and Supplier

PRODUCT NAME Orange Oil
PRODUCT CODE: None
RECOMMENDED USE: For maintenance of furniture and timber products

MANUFACTURER

NAME Gilly Stephenson's Waxes & Polishes
ADDRESS P.O. Box 279
Mundaring, Western Australia, 6073
TELEPHONE (08) 9295 1973
FACSIMILE (08) 9295 6973
EMAIL info@gillystephenson.com
WEB SITE www.gillystephenson.com
EMERGENCY PHONE NUMBER Poisons Information Centre. Phone (e.g. Australia 13 11 26; New Zealand 0800 764 766).

2. Hazard Identification

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SAFE WORK AUSTRALIA.
NOT A DANGEROUS GOOD.

HAZARD STATEMENT(S): None
PRECAUTIONARY STATEMENTS(S): None

3. Composition/Information on Ingredients

Name	CAS Number	Concentration
Triglycerides of fatty acids	120962-03-0	>60%
Orange oil	8008-57-9	10 - 30%

4. First-aid Measures

EYE: Hold eyelids open and rinse the eye continuously with a gentle stream of clean running water for at least fifteen minutes. Seek medical attention if any irritation persists.

SKIN: Remove contaminated clothing and wash thoroughly with soap and water. Use water alone, if soap is unavailable. Apply a moisturising hand cream, if available. Seek medical attention if any soreness or inflammation of the skin persists or develops. Launder affected clothing before re-use.

INGESTION: NEVER GIVE AN UNCONSCIOUS PERSON ANYTHING TO DRINK NOR ATTEMPT TO INDUCE VOMITING. If person is conscious, rinse mouth out with water ensuring that mouth wash is not swallowed. Give about 250mL (2 glasses) of water to drink. DO NOT attempt to induce vomiting. Seek medical attention.

INHALATION: First aid is unlikely to be required as a result of exposure during normal use. However, if necessary, remove to fresh air. Keep warm and at rest. Seek medical attention.

Additional Information:

First Aid Facilities: Not required.

Advice to Doctor: Because of the risk of aspiration, gastric lavage should only be undertaken after endotracheal intubation.

Entry Route(s): Inhalation and ingestion.

5. Fire-fighting Measures

SUITABLE EXTINGUISHING MEDIA: Extinguish using whatever is suitable for the primary cause of the fire. .

HAZARDS FROM COMBUSTION PRODUCTS: May evolve carbon monoxide, carbon dioxide and traces of incompletely burned carbon products if heated strongly in a fire situation.

PROTECTIVE EQUIPMENT: Fire fighters should wear self-contained breathing apparatus.

6. Accidental Release Measures

EMERGENCY PROCEDURES: Wear protective equipment as specified for handling.

SPILLS: Cover with an absorbent such as sand, earth or a commercial oil absorber. Scrape up and place in sealable containers. Dispose to an approved land-fill.

7. Handling and Storage

SAFE HANDLING PRECAUTIONS: Avoid generating mists.

SAFE STORAGE PRECAUTIONS: Store out of direct sunlight in a cool well-ventilated area.

INCOMPATIBILITIES: The product may react with strong oxidising agents such as liquid or powdered chlorine.

8. Exposure Controls/Personal Protection.

EXPOSURE STANDARDS: Oil mist **E.S. TWA:** 5mg/m³.

Exposure standards represent the airborne concentration of a particular substance in the worker's breathing zone, exposure to which, according to current knowledge, should not cause adverse health effects nor cause undue discomfort to nearly all workers. The exposure standard can be of three forms; time-weighted average (TWA), peak, or short term exposure limit (STEL).

BIOLOGICAL LIMIT VALUES: None allocated

ENGINEERING CONTROLS: General (mechanical) ventilation is adequate for all anticipated uses of the product.

PERSONAL PROTECTION: Safety glasses and rubber gloves. Respiratory protection is unlikely to be required for normal use of the product but if handling large quantities in a confined or poorly ventilated area, then a half face respirator with organic solvent vapour filter may be required N.B. TAKE THE LIMITS OF ABSORPTION CAPACITY INTO ACCOUNT. CHANGE FILTERS REGULARLY

9. Physical and Chemical Properties

Appearance	Oily liquid
Boiling Point	Decomposes
Melting Point	Liquid at room temperature
Vapour Pressure	Negligible
Vapour Density	>1.0
Specific Gravity	0.9 (approx)
Solubility (Water)	Emulsifiable
Flash Point	>61°C
Explosion Limits	No data available
% Volatiles	Negligible
Ph	Not pertinent

10. Stability and Reactivity

The product is stable in all normal conditions of use and storage.

11. Toxicological information

HEALTH HAZARDS ACUTE

EYE: Product may cause slight to moderate irritation to the eyes.

SKIN: Mildly irritating. Prolonged contact with the product may defat the skin and contribute to dermatitis.

INGESTION: Mildly irritating. May cause gastric irritation, vomiting and diarrhoea. If vomiting occurs after ingestion, small droplets of the liquid may enter the lungs (aspiration) with the risk of chemical pneumonia being induced.

	<h1>Orange Oil</h1>	Revision:004
		Reissue Date: 28/06/2013
		Page 3 of 3

INHALATION: Product has relatively low volatility so inhalation of hazardous quantities of vapour is unlikely to occur during normal use. However, if generated e.g. at elevated temperatures vapours or oil mists can cause irritation to the nose and throat.

HEALTH HAZARDS CHRONIC

Inhalation and ingestion are the routes of entry into the body. Prolonged or repeated skin contact may contribute to dermatitis in sensitive individuals.

12. Ecological Information

Components of this product occur in the natural environment and are not expected to pose a hazard.

13. Disposal considerations

May be disposed in general waste or to approved land fill.

14. Transport Information

This product is not a dangerous good according to the Australian Code for the Transportation of Dangerous Goods by Road and Rail (ADG Code).

UN Number:	None allocated
Proper shipping name:	None allocated
DG Class:	None allocated
HazChem code:	None allocated
Packing group:	None allocated

15. Regulatory information

Not a scheduled poison.

16. Further information

Revision Number: 004

Initial Date of Preparation: 23/04/2008

Revised: 28/06/2013

REFERENCES

1. Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals, Safe Work Australia, 2011
2. Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC: 1003(1995)] and subsequent amendments
3. Australian Code for the Transportation of Dangerous Goods by Road and Rail (ADG Code), 7th Edition, 2008

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SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	GLUE RID
Other Names	None
Manufacturer's Product Code	GLR
Recommended Use	Solvent based glue remover

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au



Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	WARNING
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GHS Classification	Pictogram	Hazard statement
Flammable Liquids, Category 3	 FLAME	H226 Flammable liquid and vapour
Skin Corrosion/Irritation, Category 2	 EXCLAMATION MARK	H315 Causes skin irritation
Acute Toxicity – Dermal, Category 4		H312 Harmful in contact with skin
Acute Toxicity – Inhalation, Category 4		H332 Harmful if inhaled

Product: GLUE RID**Precautionary statements:**

<i>GENERAL</i>	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
<i>PREVENTATIVE</i>	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilation/lighting equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P261	Avoid breathing mist/vapours/spray
P264	Wash thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/eye protection/face protection
<i>RESPONSE</i>	
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P303 + P361 + P353	IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse. Rinse skin with water/shower
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P332 + P313	If skin irritation occurs: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P370 + P378	In case of fire: Use foam/water spray/fog for extinction
<i>STORAGE</i>	
P403 + P235	Store in a well-ventilated place. Keep cool
<i>DISPOSAL</i>	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Xylene	1330-20-7	> 90
Ethanol	64-17-5	< 1
Gelling Agent	-	< 10
Note – contains < 0.1% benzene		

SECTION 4 FIRST AID MEASURES

Description of necessary first aid measures

Inhalation:	Keep victim calm and remove to fresh air if safe to do so. Obtain medical treatment immediately.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available. Transport to nearest medical facility for additional treatment if necessary.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. Transport to nearest medical facility for additional treatment if necessary.
Ingestion:	If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Symptoms caused by exposure

Inhalation:	In high concentrations, may cause central nervous system depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continuous inhalation may result in unconsciousness and death.
Skin:	May include burning sensation, redness, swelling and/or blisters.
Eye:	May include burning sensation, redness, swelling and/or blurred vision.
Ingestion:	May include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not use water in a jet.

Specific hazards arising from the chemical

Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. Vapour is heavier than air, can spread along ground and distant ignition is possible.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code ●3Y.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

Product: GLUE RID

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Flammable product. Avoid breathing vapours. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Electrostatic charges may be generated during transfer. Electrostatic discharge may cause fire. Ensure electrical continuity by earthing all equipment.

Conditions for safe storage, including any incompatibilities

Bulk storage tanks should be bunded. Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia -
Xylene: 350mg/m³ (80ppm) TWA (8hr), 655mg/m³ (150ppm) STEL

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colourless gel
Odour:	Aromatic
Odour threshold (ppm):	0.27
pH:	Data not available
Melting point/freezing point (°C):	-48
Initial boiling point and boiling range (°C):	136 - 145
Flash point (°C):	26 (Abel)
Evaporation rate (Butyl acetate = 1):	Data not available

Product: GLUE RID

Flammability:	Flammable
Upper/lower flammability or explosive limits (%):	1.0 - 7.1
Vapour pressure (kPa):	0.8 - 1.2
Vapour density (air = 1):	3.7
Density (g/ml @ 15°C):	0.87
Solubility (kg/m ³):	0.175
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	Typical 432 - 530
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials

Strong oxidising agents.

Hazardous decomposition products

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids, gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Expected to be of low toxicity LD50 Oral (rat) > 2000mg/kg
Skin corrosion/irritation:	Irritating to skin
Serious eye damage/irritation:	Irritating to eyes
Respiratory or skin sensitisation:	Not expected to be a sensitiser
Germ cell mutagenicity:	Not expected to be mutagenic
Carcinogenicity:	Not expected to be carcinogenic
Reproductive toxicity:	Not expected to be impair fertility
Specific Target Organ Toxicity (STOT) – single exposure:	Inhalation of vapours or mists may cause irritation to the respiratory system

Product: GLUE RID

Specific Target Organ Toxicity (STOT) – repeated exposure:	Central nervous system: repeated exposure affects the nervous system. Liver, Kidneys: can cause damage.
Aspiration hazard:	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal

SECTION 12 ECOLOGICAL INFORMATION**Ecotoxicity**

Acute toxicity:

Fish –	Toxic: 1 < LC/EC/IC50 <= 10mg/l
Aquatic invertebrate –	Toxic: 1 < LC/EC/IC50 <= 10mg/l
Algae –	Toxic: 1 < LC/EC/IC50 <= 10mg/l
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Readily biodegradable. Oxidises by photo-chemical reactions in air.

Bioaccumulative potential

Not expected to bioaccumulate significantly.

Mobility in soil

Floats on water, highly mobile and may contaminate groundwater.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	1263
Proper shipping name:	PAINT or PAINT RELATED MATERIAL
Australian Dangerous Goods class:	3
Australian Dangerous Goods packing group:	III
Hazchem code:	●3Y

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	6
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	14

SECTION 16 OTHER INFORMATION

Date of preparation:	22/02/2016
Revision number:	5
Changes in this revision:	Update to GHS SDS standard Change in formulation

This SDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	HYDROCHLORIC ACID
Other Names	Muriatic Acid, Hydrogen Chloride Solution
Manufacturer's Product Code	16409
Recommended Use	General chemical – acid

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178, Australia
Phone:	+617 3308 5200 Fax: +617 3308 5201
Website:	www.recochem.com.au

Details of Distributor

Company:	Owens Logistics
Address:	3-5 Kahu Street, Otahuhu, Auckland
Phone:	(09) 270 1310 Fax: (09) 270 1311



Emergency Telephone Numbers

Poisons Information:	0800 764 766
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SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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GHS Classification	Pictogram	Hazard statement
Skin Corrosion/Irritation, Category 1B	 CORROSION	H314 Causes severe skin burns and eye damage
Specific Target Organ Toxicity (Single exposure), Category 3	 EXCLAMATION MARK	H335 May cause respiratory irritation

Product: HYDROCHLORIC ACID**Precautionary statements:**

<i>GENERAL</i>	P101 P102 P103	If medical advice is needed, have product container or label at hand Keep out of reach of children Read label before use
<i>PREVENTATIVE</i>	P260 P261 P264 P271 P280	Do not breathe dusts or mists Avoid breathing mist/vapours/spray Wash thoroughly after handling Use only outdoors or in a well-ventilated area Wear protective gloves/eye protection/face protection
<i>RESPONSE</i>	P301 + P330 + P331 P303 + P361 + P353 P304 + P340 P305 + P351 + P338 P310 P312 P363	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse. Rinse skin with water/shower IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician Call a POISON CENTER or doctor/physician if you feel unwell Wash contaminated clothing before reuse
<i>STORAGE</i>	P403 + P233 P405	Store in a well-ventilated place. Keep container tightly closed Store locked up
<i>DISPOSAL</i>	P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Hydrochloric Acid	7647-01-0	< 30

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing. Seek immediate medical advice.
Skin Contact:	If spilt on large area of skin or hair, immediately drench with running water and remove contaminated clothing. Continue to wash skin and hair with plenty of water until advised to stop by the Poisons Information Centre or a doctor. For skin burns, cover with a clean, dry dressing until medical help is available.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes or until advised by the Poisons Information Centre or a doctor.
Ingestion:	Immediately rinse mouth with water. Do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

Product: HYDROCHLORIC ACID

Symptoms caused by exposure

Inhalation:	May cause respiratory irritation, including breathing difficulty, lung inflammation, sneezing and throat swelling.
Skin:	A severe irritant. May include burning sensation, redness, swelling and/or blisters.
Eye:	A severe irritant. May include pain or burning sensation, redness, swelling and/or blurred vision.
Ingestion:	Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Not combustible, however, if material is involved in a fire use: water fog or fine water spray, foam, dry chemical powder, carbon dioxide.

Specific hazards arising from the chemical

Contact with metals may liberate hydrogen gas.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code 2R.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Wear protective equipment to prevent skin and eye contact and inhalation of vapours. Work upwind or increase ventilation.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Ventilate contaminated area thoroughly. If contamination of sewers or waterways has occurred advise local emergency services.

Methods and materials for containment and cleaning up

Cover with absorbent material (inert material, sand or soil). Neutralise with lime or soda ash. Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. Caution - heat may be evolved on contact with water.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Non-combustible material. Avoid skin and eye contact and breathing vapour. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Before eating, drinking or smoking, remove contaminated clothing and wash hands.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated place out of direct sunlight. Store away from incompatible materials (see SECTION 10). Keep containers closed when not in use – check regularly for spills.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia -
Hydrogen chloride: 7.5mg/m³ (5ppm) (peak limitation) TWA

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use. Always wash hands before eating, drinking or using the toilet.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colourless to yellow fuming liquid
Odour:	Hydrogen chloride gas
Odour threshold (ppm):	Data not available
pH:	< 1
Melting point/freezing point (°C):	-63 to -27
Initial boiling point and boiling range (°C):	91 - 98
Flash point (°C):	Data not available
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Non-combustible
Upper/lower flammability or explosive limits (%):	Data not available
Vapour pressure (mmHg @ 20°C):	11 - 115
Vapour density (air = 1):	1.26
Density (g/ml @ 20°C):	1.18
Solubility (kg/m ³):	Miscible with water
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	Data not available
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 25°C):	Data not available

Product: HYDROCHLORIC ACID

SECTION 10 STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Reacts exothermally with water.

Conditions to avoid

Exposure to water vapour. Will absorb moisture from the atmosphere.

Incompatible materials

Alkalis, aluminium, tin, zinc and organic materials.

Hazardous decomposition products

None.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	LD50 Oral (rat) > 900 mg/kg. LC50 Inhalation (rat) 3124ppm/1h; LC50 Inhalation (mouse) 1108ppm/1h
Skin corrosion/irritation:	Highly corrosive to skin – may cause burns.
Serious eye damage/irritation:	Highly corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.
Respiratory or skin sensitisation:	Not expected to be a sensitiser.
Germ cell mutagenicity:	Not expected to be mutagenic.
Carcinogenicity:	Not expected to be carcinogenic.
Reproductive toxicity:	Not expected to impair fertility.
Specific Target Organ Toxicity (STOT) – single exposure:	Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract. Breathing in mists or aerosols may result in respiratory irritation.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Data not available.
Aspiration hazard:	Data not available.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Avoid contaminating waterways. This product is highly acidic. If large spills occur a water pH drop could be responsible for an environmental effect on aquatic organisms.

Acute toxicity:

Fish –	LC50 (Mosquito fish, female) = 282 mg/L/24h
Aquatic invertebrate –	LC50 (Shore crab) = 240mg/L/48h; LC50 (Sand shrimp) = 260mg/L/48h
Algae –	Data not available
Microorganisms –	Data not available

Product: HYDROCHLORIC ACID

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Data not available.

Bioaccumulative potential

Data not available.

Mobility in soil

Miscible with water.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	1789
Proper shipping name:	HYDROCHLORIC ACID
Australian Dangerous Goods class:	8
Australian Dangerous Goods packing group:	II
Hazchem code:	2R

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	6
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	40
New Zealand HSNO, Classification:	Solvents (Flammable) Group Standard Classification - 3.1B, 6.1D (oral, inhalation), 6.3A, 6.3B, 6.4A, 6.8B, 6.9B (inhalation), 9.1D (fish, crustacean, algal), 9.3C

SECTION 16 OTHER INFORMATION

Date of preparation:	12/11/2015
Revision number:	2
Changes in this revision:	Update to GHS SDS standard

This SDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on +617 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	METHYLATED SPIRITS
Other Names	Ethanol, Ethyl Alcohol, IMS
Manufacturer's Product Code	15000
Recommended Use	Solvent, Fuel, Cleaning Solvent

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au


Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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GHS Classification	Pictogram	Hazard statement
Flammable Liquids, Category 2	 FLAME	H225 Highly flammable liquid and vapour

Precautionary statements:

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
PREVENTATIVE	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233	Keep container tightly closed

Product: METHYLATED SPIRITS

P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilation/lighting equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P280	Wear protective gloves/eye protection/face protection
RESPONSE	
P303 + P361 + P353	IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse. Rinse skin with water/shower
P370 + P378	In case of fire: Use foam/water spray/fog for extinction
STORAGE	
P403 + P235	Store in a well-ventilated place. Keep cool
DISPOSAL	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Ethanol	64-17-5	>= 95
Water	7732-18-5	<= 5

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. If symptoms persist transport to nearest medical facility for additional treatment.
Ingestion:	If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment.

Symptoms caused by exposure

Inhalation:	May cause irritation to the respiratory system. Inhalation of the vapour may result in drunkenness (as per effects of ingestion). Early symptoms may occur at airborne levels of 1000 to 5000ppm.
Skin:	May include burning sensation and/or a dried/cracked appearance. Prolonged contact may cause defatting of skin which can lead to dermatitis.
Eye:	May include burning sensation, redness, swelling and/or blurred vision.
Ingestion:	Can cause drunkenness or harmful central nervous system effects. The deliberate ingestion of ethanol (50-100ml) may cause inebriation such that safety is impaired. Effects of a small intake may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, and fatigue. Ingestion of a large amount may lead to severe acute intoxication, tremours, convulsion, loss of consciousness, coma, respiratory arrest and death.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Alcohol stable foam, water spray or fog. Dry chemical powder, carbon dioxide for small fires only. Do not use water in a jet.

Specific hazards arising from the chemical

Carbon monoxide and/or carbon dioxide may be evolved.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code •2YE.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Highly flammable product. Avoid breathing vapours. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Electrostatic charges may be generated during transfer. Electrostatic discharge may cause fire. Ensure electrical continuity by earthing all equipment. Flameproof equipment necessary in area where chemical is being used. Vapours may accumulate in low or confined areas.

Conditions for safe storage, including any incompatibilities

Bulk storage tanks should be bunded. Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia -
Ethanol: 1880mg/m³ (1000ppm) TWA (8hr)

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Product: METHYLATED SPIRITS**Individual protection measures**

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colourless clear liquid
Odour:	Alcoholic
Odour threshold (ppm):	Data not available
pH:	Data not available
Melting point/freezing point (°C):	-117
Initial boiling point and boiling range (°C):	78
Flash point (°C):	13 (Abel)
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Data not available
Upper/lower flammability or explosive limits (%):	3.5 - 19.0
Vapour pressure (mmHg @ 20°C):	44
Vapour density (air = 1, @ 15°C):	1.59
Density (g/ml @ 15°C):	0.79 - 0.81
Solubility:	Data not available
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	392
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Product: METHYLATED SPIRITS**Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials

Strong oxidising agents.

Hazardous decomposition products

Burning can produce carbon monoxide and/or carbon dioxide.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Low toxicity in animals - LD50 Oral (rat) : 7060mg/kg LC50 Inhalation (rat, 6h) : 5900mg/m ³
Skin corrosion/irritation:	Mild irritant. Prolonged contact may cause defatting of skin which can lead to dermatitis.
Serious eye damage/irritation:	Vapours may irritate the eyes. Liquid or mists may severely irritate or damage the eyes.
Respiratory or skin sensitisation:	Not expected to be a sensitiser.
Germ cell mutagenicity:	Not expected to be mutagenic.
Carcinogenicity:	Not expected to be carcinogenic.
Reproductive toxicity:	Not expected to impair fertility.
Specific Target Organ Toxicity (STOT) – single exposure:	Data not available.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Long term exposure by swallowing or repeated inhalation, may cause degenerative changes in the liver, kidneys, gastrointestinal tract and heart muscle.
Aspiration hazard:	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity:

Fish –	Expected to be harmful
Aquatic invertebrate –	Expected to be harmful
Algae –	Expected to be toxic
Microorganisms –	Expected to be harmful

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Biodegradable.

Bioaccumulative potential

Data not available.

Product: METHYLATED SPIRITS

Mobility in soil

Miscible with water.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	1170
Proper shipping name:	Ethanol
Australian Dangerous Goods class:	3
Australian Dangerous Goods packing group:	II
Hazchem code:	•2YE

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	5
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	14

SECTION 16 OTHER INFORMATION

Date of preparation:	29/12/2014
Revision number:	6
Changes in this revision:	Update to GHS SDS standard

This MSDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	METHYLATED SPIRITS
Other Names	Ethanol, Ethyl Alcohol, IMS
Manufacturer's Product Code	15000
Recommended Use	Solvent, Fuel, Cleaning Solvent

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178, Australia
Phone:	+617 3308 5200 Fax: +617 3308 5201
Website:	www.recochem.com.au

Details of Distributor

Company:	Owens Logistics
Address:	3-5 Kahu Street, Otahuhu, Auckland
Phone:	(09) 270 1310 Fax: (09) 270 1311

Emergency Telephone Numbers

Poisons Information:	0800 764 766
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SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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GHS Classification	Pictogram	Hazard statement
Flammable Liquids, Category 2	 FLAME	H225 Highly flammable liquid and vapour

Precautionary statements:

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use

Product: METHYLATED SPIRITS

<i>PREVENTATIVE</i>	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilation/lighting equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P280	Wear protective gloves/eye protection/face protection
<i>RESPONSE</i>	
P303 + P361 + P353	IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse. Rinse skin with water/shower
P370 + P378	In case of fire: Use foam/water spray/fog for extinction
<i>STORAGE</i>	
P403 + P235	Store in a well-ventilated place. Keep cool
<i>DISPOSAL</i>	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Ethanol	64-17-5	>= 95
Water	7732-18-5	<= 5

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. If symptoms persist transport to nearest medical facility for additional treatment.
Ingestion:	If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment.

Symptoms caused by exposure

Inhalation:	May cause irritation to the respiratory system. Inhalation of the vapour may result in drunkenness (as per effects of ingestion). Early symptoms may occur at airborne levels of 1000 to 5000ppm.
Skin:	May include burning sensation and/or a dried/cracked appearance. Prolonged contact may cause defatting of skin which can lead to dermatitis.
Eye:	May include burning sensation, redness, swelling and/or blurred vision.
Ingestion:	Can cause drunkenness or harmful central nervous system effects. The deliberate ingestion of ethanol (50-100ml) may cause inebriation such that safety is impaired. Effects of a small intake may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, and fatigue. Ingestion of a large amount may lead to severe acute intoxication, tremours, convulsion, loss of consciousness, coma, respiratory arrest and death.

Medical attention and special treatment

Treat symptomatically.

Product: METHYLATED SPIRITS

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Alcohol stable foam, water spray or fog. Dry chemical powder, carbon dioxide for small fires only. Do not use water in a jet.

Specific hazards arising from the chemical

Carbon monoxide and/or carbon dioxide may be evolved.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code •2YE.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Highly flammable product. Avoid breathing vapours. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Electrostatic charges may be generated during transfer. Electrostatic discharge may cause fire. Ensure electrical continuity by earthing all equipment. Flameproof equipment necessary in area where chemical is being used. Vapours may accumulate in low or confined areas.

Conditions for safe storage, including any incompatibilities

Bulk storage tanks should be bunded. Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia -
Ethanol: 1880mg/m³ (1000ppm) TWA (8hr)

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Product: METHYLATED SPIRITS**Individual protection measures**

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colourless clear liquid
Odour:	Alcoholic
Odour threshold (ppm):	Data not available
pH:	Data not available
Melting point/freezing point (°C):	-117
Initial boiling point and boiling range (°C):	78
Flash point (°C):	13 (Abel)
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Data not available
Upper/lower flammability or explosive limits (%):	3.5 - 19.0
Vapour pressure (mmHg @ 20°C):	44
Vapour density (air = 1, @ 15°C):	1.59
Density (g/ml @ 15°C):	0.79 - 0.81
Solubility:	Data not available
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	392
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Product: METHYLATED SPIRITS**Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials

Strong oxidising agents.

Hazardous decomposition products

Burning can produce carbon monoxide and/or carbon dioxide.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Low toxicity in animals - LD50 Oral (rat) : 7060mg/kg LC50 Inhalation (rat, 6h) : 5900mg/m ³
Skin corrosion/irritation:	Mild irritant. Prolonged contact may cause defatting of skin which can lead to dermatitis.
Serious eye damage/irritation:	Vapours may irritate the eyes. Liquid or mists may severely irritate or damage the eyes.
Respiratory or skin sensitisation:	Not expected to be a sensitiser.
Germ cell mutagenicity:	Not expected to be mutagenic.
Carcinogenicity:	Not expected to be carcinogenic.
Reproductive toxicity:	Not expected to impair fertility.
Specific Target Organ Toxicity (STOT) – single exposure:	Data not available.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Long term exposure by swallowing or repeated inhalation, may cause degenerative changes in the liver, kidneys, gastrointestinal tract and heart muscle.
Aspiration hazard:	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

SECTION 12 ECOLOGICAL INFORMATION**Ecotoxicity**

Acute toxicity:

Fish –	Expected to be harmful
Aquatic invertebrate –	Expected to be harmful
Algae –	Expected to be toxic
Microorganisms –	Expected to be harmful

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Biodegradable.

Bioaccumulative potential

Data not available.

Product: METHYLATED SPIRITS**Mobility in soil**

Miscible with water.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	1170
Proper shipping name:	Ethanol
Australian Dangerous Goods class:	3
Australian Dangerous Goods packing group:	II
Hazchem code:	•2YE

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	5
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	14
New Zealand HSNO, Classification:	3.1B, 6.4A

SECTION 16 OTHER INFORMATION

Date of preparation:	29/12/2014
Revision number:	6
Changes in this revision:	Update to GHS SDS standard

This MSDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on +617 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	LOW ODOUR TURPENTINE
Other Names	Turpentine substitute
Manufacturer's Product Code	17062
Recommended Use	Solvent, paint thinner

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au



Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766


SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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GHS Classification	Pictogram	Hazard statement
Flammable Liquids, Category 3	 FLAME	H226 Flammable liquid and vapour
Aspiration Hazard, Category 1	 HEALTH HAZARD	H304 May be fatal if swallowed and enters airways

Product: LOW ODOUR TURPENTINE

Skin Corrosion/Irritation, Category 2	 EXCLAMATION MARK	H315 Causes skin irritation
Chronic Aquatic Toxicity, Category 3	N/A	H412 Harmful to aquatic life with long lasting effects

Precautionary statements:

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
PREVENTATIVE	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilation/lighting equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P264	Wash thoroughly after handling
P273	Avoid release to the environment
P280	Wear protective gloves/eye protection/face protection
RESPONSE	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P303 + P361 + P353	IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse. Rinse skin with water/shower
P331	Do NOT induce vomiting
P332 + P313	If skin irritation occurs: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse
P370 + P378	In case of fire: Use foam/water spray/fog for extinction
P391	Collect spillage
STORAGE	
P403 + P235	Store in a well-ventilated place. Keep cool
P405	Store locked up
DISPOSAL	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients Names and Proportions

Chemical Entity	CAS Number	Proportion (%)
Low Aromatic White Spirit	64742-82-1	100
With components:		
1,2,4-Trimethylbenzene	95-63-6	< 10
1,3,5-Trimethylbenzene	108-67-8	< 10
Xylene, Mixed Isomers	1330-20-7	< 10
Note – contains < 0.1% benzene		

SECTION 4 FIRST AID MEASURES

Description of necessary first aid measures

Inhalation:	Keep victim calm and remove to fresh air if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. If irritation persists seek medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Symptoms caused by exposure

Inhalation:	Breathing of high vapour concentrations may cause central nervous system depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continuous inhalation may result in unconsciousness and death.
Skin:	May include redness and cracking.
Eye:	May include redness and swelling.
Ingestion:	May include headache, nausea, coughing and shortness of breath.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Foam, water spray or fog, dry chemical powder or carbon dioxide. Do not use water in a jet.

Specific hazards arising from the chemical

Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. Vapour is heavier than air, can spread along ground and distant ignition is possible.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code ●3Y.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Flammable product. Avoid breathing vapours. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Electrostatic charges may be generated during transfer. Electrostatic discharge may cause fire. Ensure electrical continuity by earthing all equipment. Flameproof equipment necessary in area where chemical is being used. Vapours may accumulate in low or confined areas.

Conditions for safe storage, including any incompatibilities

Bulk storage tanks should be banded. Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

In the absence of data from National Occupational Health & Safety Commission (NOHSC) Worksafe Australia use -
Mineral Spirits 150-200 HSPA: 350mg/m³ TWA (8hr)

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colourless liquid
Odour:	Paraffinic
Odour threshold (ppm):	Data not available
pH:	Data not available
Melting point/freezing point (°C):	Data not available
Initial boiling point and boiling range (°C):	149 - 194
Flash point (°C):	42 (Abel)
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Flammable
Upper/lower flammability or explosive limits (%):	0.7 - 6.5

Product: LOW ODOUR TURPENTINE

Vapour pressure (kPa @ 20°C):	Typical 0.37
Vapour density (air = 1 @ 15°C):	4.35
Density (g/ml @ 15°C):	0.78
Solubility (kg/m ³):	Not miscible with water
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	Typical 296 (ASTM E-659)
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 25°C):	Typical 1.08

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials

Strong oxidising agents.

Hazardous decomposition products

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids, gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Expected to be of low toxicity - LD50 Oral (rat) > 2000 mg/kg LC50 Inhalation greater than near-saturated vapour concentration (rat, 4h) LD50 Dermal (rabbit) > 2000 mg/kg
Skin corrosion/irritation:	Mild irritant. Prolonged contact may cause defatting of skin which can lead to dermatitis.
Serious eye damage/irritation:	Mild irritant.
Respiratory or skin sensitisation:	Not expected to be a sensitiser.
Germ cell mutagenicity:	Not mutagenic.
Carcinogenicity:	Not expected to be carcinogenic.
Reproductive toxicity:	Not expected to impair fertility.
Specific Target Organ Toxicity (STOT) – single exposure:	Inhalation of vapours or mists may cause irritation to the respiratory system.
Specific Target Organ Toxicity (STOT) –	Central nervous system: repeated exposure affects the nervous system. Effects seen at high doses only.

Product: LOW ODOUR TURPENTINE

repeated exposure:	Auditory system: prolonged and repeated exposures to high concentrations have resulted in hearing loss in rats. Solvent abuse and noise interaction in the work environment may cause hearing loss.
Aspiration hazard:	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

SECTION 12 ECOLOGICAL INFORMATION**Ecotoxicity**

Acute toxicity:

Fish –	Expected to be harmful: 10 < LC/EC/IC50 <= 100mg/l
Aquatic invertebrate –	Expected to be harmful: 10 < LC/EC/IC50 <= 100mg/l
Algae –	Expected to be harmful: 10 < LC/EC/IC50 <= 100mg/l
Microorganisms –	Expected to be harmful: 10 < LC/EC/IC50 <= 100mg/l

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Readily biodegradable. Oxidises by photo-chemical reactions in air.

Bioaccumulative potential

Has the potential to bioaccumulate.

Mobility in soil

Floats on water.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	1993
Proper shipping name:	Flammable Liquid N.O.S. (100% Liquid Hydrocarbon)
Australian Dangerous Goods class:	3
Australian Dangerous Goods packing group:	III
Hazchem code:	●3Y

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	5
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	14

SECTION 16 OTHER INFORMATION

Date of preparation:	22/04/2015
Revision number:	7
Changes in this revision:	Update to GHS SDS standard

This MSDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	PAINT STRIPPER PLUS
Other Names	Stripper
Manufacturer's Product Code	16883
Recommended Use	Stripping paint

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au


Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Non-dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	WARNING
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Hazardous chemical classification	Pictogram	Hazard statement
Acute Toxicity - Oral, Category 4	 EXCLAMATION MARK	H302 Harmful if swallowed

Precautionary statements:

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
PREVENTATIVE	
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product

Product: PAINT STRIPPER PLUS

<i>RESPONSE</i>	
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P330	Rinse mouth
<i>DISPOSAL</i>	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Ethylene Glycol	107-21-1	< 50
Ingredients classed as non-hazardous	-	balance

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Keep victim calm and remove to fresh air if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available. If irritation persists, seek medical attention
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. If irritation persists, seek medical attention
Ingestion:	If swallowed, do NOT induce vomiting. Have conscious person drink several glasses of water or milk. SEEK IMMEDIATE MEDICAL ATTENTION

Symptoms caused by exposure

Inhalation:	May include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing
Skin:	May include burning sensation, redness, swelling and/or blisters
Eye:	May include burning sensation, redness, swelling and/or blurred vision
Ingestion:	May include nausea, vomiting, abdominal cramps, diarrhoea, lumbar pain shortly after ingestion, and possibly narcosis and death. Kidney toxicity may be recognized by blood in the urine or increased or decreased urine flow

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES**Suitable extinguishing equipment**

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not use water in a jet.

Specific hazards arising from the chemical

Carbon dioxide and/or carbon monoxide may be evolved if incomplete combustion occurs. Material will not burn unless preheated. When heated to decomposition, emits acid smoke and irritating fumes. Not a product presenting risks of explosion.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Do NOT ingest. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Ventilate contaminated area thoroughly.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterways using sand, earth or other appropriate barriers.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Avoid breathing vapours. Do NOT ingest. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidisers.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia -
Monoethylene glycol: 52mg/m³ (20ppm) TWA (vapour), 104mg/m³ (40ppm) STEL (vapour) and 10mg/m³ TWA (particulate)

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear colourless viscous liquid/gel
Odour:	Characteristic
Odour threshold (ppm):	Data not available
pH:	Data not available
Melting point/freezing point (°C):	Data not available
Initial boiling point and boiling range (°C):	197 - 225
Flash point (°C):	103 (closed cup)
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Not flammable
Upper/lower flammability or explosive limits (%):	3.2 - 15.3
Vapour pressure (mmHg @ 20°C):	0.06
Vapour density (air = 1):	2.1
Density (g/ml @ 15°C):	1.11 approx.
Solubility:	Soluble in water, methanol, diethyl ether
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	412
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

Data not available.

Incompatible materials

Strong oxidising agents, strong acids, strong alkalis.

Hazardous decomposition products

Burning can produce carbon monoxide and/or carbon dioxide.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Ethylene Glycol – Low toxicity in animals. LD50 Oral (rat) = 4700mg/kg LD50 Dermal (rabbit) = 9530mg/kg Note that there is a marked difference in acute oral toxicity between animals and humans, humans being more susceptible than animals. The estimated fatal dose for humans is 100ml
Skin corrosion/irritation:	May cause skin irritation; prolonged contact may cause dermatitis
Serious eye damage/irritation:	May cause eye irritation
Respiratory or skin sensitisation:	Not expected to be a sensitiser
Germ cell mutagenicity:	No evidence of mutagenic activity
Carcinogenicity:	Not carcinogenic in animal studies
Reproductive toxicity:	Not expected to impair fertility
Specific Target Organ Toxicity (STOT) – single exposure:	May cause drowsiness or dizziness. Inhalation of vapours or mists may cause irritation to the lungs and respiratory system
Specific Target Organ Toxicity (STOT) – repeated exposure:	May cause damage to organs or organ systems through prolonged or repeated exposure. Toxic to liver and kidneys
Aspiration hazard:	Not considered an aspiration hazard

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Biodegradable.

Bioaccumulative potential

Data not available.

Mobility in soil

Miscible with water.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	Not applicable
Proper shipping name:	Not applicable
Australian Dangerous Goods class:	Not applicable
Australian Dangerous Goods packing group:	Not applicable
Hazchem code:	Not applicable

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	5
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	Not applicable

SECTION 16 OTHER INFORMATION

Date of preparation:	19/10/2015
Revision number:	3
Changes in this revision:	Update to GHS SDS standard

This SDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	PAINT STRIPPER
Other Names	None
Manufacturer's Product Code	16885
Recommended Use	Removal of paint from surfaces

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au



Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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GHS Classification	Pictogram	Hazard statement
Acute Toxicity - Oral, Category 3	 SKULL AND CROSSBONES	H301 Toxic if swallowed
Acute Toxicity - Dermal, Category 3		H311 Toxic in contact with skin
Acute Toxicity - Inhalation, Category 3		H331 Toxic if inhaled
Skin Corrosion/Irritation, Category 2	 EXCLAMATION MARK	H315 Causes skin irritation

Product: PAINT STRIPPER

Carcinogenicity, Category 2	 HEALTH HAZARD	H351 Suspected of causing cancer
Specific Target Organ Toxicity (Single exposure), Category 1		H370 Causes damage to organs through inhalation, in contact with skin and if swallowed

Precautionary statements:

<i>GENERAL</i>	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
<i>PREVENTATIVE</i>	
P260	Do not breathe mist/vapours/spray
P261	Avoid breathing mist/vapours/spray
P264	Wash thoroughly after handling
P270	Do not eat drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/protective clothing/eye protection/face protection
<i>RESPONSE</i>	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P307 + P311	IF exposed: Call a POISON CENTER or doctor/physician
P311	Call a POISON CENTER or doctor/physician
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P330	Rinse mouth
P332 + P313	If skin irritation occurs: Get medical advice/attention
P361	Remove/Take off immediately all contaminated clothing
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
<i>STORAGE</i>	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed
P405	Store locked up
<i>DISPOSAL</i>	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Methylene Chloride	75-09-2	> 60
Methanol	67-56-1	10 - 30

SECTION 4 FIRST AID MEASURES

Description of necessary first aid measures

Inhalation:	Keep victim calm and remove to fresh air if safe to do so. Remove contaminated clothing. Transport to nearest medical facility for additional treatment.
Skin Contact:	If skin contact occurs, remove contaminated clothing and immediately flush skin thoroughly with large amounts of water and follow by washing with soap if available. Transport to nearest medical facility for additional treatment.
Eye Contact:	If in eyes, hold eyes open, flood with large amounts of water for at least 15 minutes. Transport to nearest medical facility for additional treatment.
Ingestion:	If swallowed, do NOT induce vomiting. Rinse mouth with water. Obtain medical treatment immediately. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Symptoms caused by exposure

Inhalation:	Inhalation of vapours can result in headaches, dizziness, and possible nausea. Inhalation of higher concentrations can produce central nervous system depression, unconsciousness, irregular heart beat and may prove suddenly fatal.
Skin:	May include redness and swelling. Repeated exposure may cause severe ulceration.
Eye:	May include inflammation and burning sensation. Repeated or prolonged exposure may cause conjunctivitis.
Ingestion:	May result in nausea, vomiting and central nervous system depression.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Alcohol stable foam, water spray or fog, dry chemical powder.

Specific hazards arising from the chemical

Non-combustible material. Decomposes on heating emitting toxic fumes, including hydrogen chloride, phosgene and oxides of carbon.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code 2X.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. If contamination of sewers or waterways has occurred advise local emergency services.

Methods and materials for containment and cleaning up

For spills, transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Non-combustible product. Avoid breathing vapours. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area. Incompatible with amines, alkali metals, nitric acid. May react on prolonged contact with aluminium releasing gas and causing subsequent pressure build up.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia -
Methylene Chloride: 174mg/m³ (50ppm) TWA (8hr), Carcinogen Category 3, Skin
Methanol: 262mg/m³ (200ppm) TWA (8hr), 328mg/m³ (250ppm) STEL

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light blue viscous liquid
Odour:	Data not available
Odour threshold (ppm):	Data not available
pH:	Data not available
Melting point/freezing point (°C):	Data not available
Initial boiling point and boiling range (°C):	40 (approx.)
Flash point (°C):	Data not available
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Non-combustible
Upper/lower flammability or explosive limits (%):	Data not available
Vapour pressure (mmHg @ 20°C):	Data not available

Product: PAINT STRIPPER

Vapour density (air = 1, @ 15°C):	Data not available
Density (g/ml):	1.14 – 1.18
Solubility (kg/m ³):	Miscible
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	Data not available
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

Insufficient ventilation.

Incompatible materials

Incompatible with amines, alkali metals, powdered metals, nitric acid. Avoid reaction with oxidising agents.

Hazardous decomposition products

Decomposes on heating emitting toxic fumes, including hydrogen chloride, phosgene and oxides of carbon.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Product expected to be of low toxicity. Methylene Chloride: LD50 Oral (rat) = 1600mg/kg Methanol: LD50 Oral (rat) > 2000mg/kg, LDLo Oral (human) = 143mg/kg
Skin corrosion/irritation:	Mild irritant. Prolonged contact may cause defatting of skin which can lead to dermatitis. Can be absorbed through the skin with resultant toxic effects
Serious eye damage/irritation:	Mild eye irritant
Respiratory or skin sensitisation:	Not expected to be a sensitiser
Germ cell mutagenicity:	Not expected to be a mutagen
Carcinogenicity:	Methylene Chloride is possibly carcinogenic to humans (IARC Group 2B)
Reproductive toxicity:	Not expected to impair fertility
Specific Target Organ Toxicity (STOT) – single exposure:	Inhalation of vapours and mists may produce toxic effects and central nervous system depression. Ingestion of material may produce toxic effects and serious damage to health.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Available evidence from animal studies indicates repeated or prolonged exposure could result in effects on liver and kidneys
Aspiration hazard:	Not considered an aspiration hazard

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Avoid contaminating waterways.

Acute toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Data not available.

Bioaccumulative potential

Data not available.

Mobility in soil

Data not available.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	2810
Proper shipping name:	Toxic Liquid, Organic N.O.S.
Australian Dangerous Goods class:	6.1
Australian Dangerous Goods packing group:	III
Hazchem code:	2X

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	6
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	36

SECTION 16 OTHER INFORMATION

Date of preparation:	02/02/2016
Revision number:	5
Changes in this revision:	Update to GHS SDS standard

This SDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	RUST AND STAIN CLEANER (OXALIC ACID)
Other Names	Oxalic acid
Manufacturer's Product Code	OXA
Recommended Use	Cleaning/bleaching of timber and timber stains. Rust stain remover

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au

Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Non-dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	WARNING
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GHS Classification	Pictogram	Hazard statement
Acute Toxicity - Oral, Category 4	 EXCLAMATION MARK	H302 Harmful if swallowed
Acute Toxicity - Dermal, Category 4		H312 Harmful in contact with skin

Precautionary statements:

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
PREVENTATIVE	
P264	Wash thoroughly after handling
P270	Do not eat drink or smoke when using this product

Product: RUST AND STAIN CLEANER (OXALIC ACID)

P280	Wear protective gloves/ protective clothing
RESPONSE	
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
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P330	Rinse mouth
P363	Wash contaminated clothing before reuse
DISPOSAL	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Oxalic Acid	144-62-7	100

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available. Seek medical assistance if symptoms persist.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. Seek medical assistance.
Ingestion:	If swallowed, do NOT induce vomiting. Rinse mouth with water; give plenty of water to drink. Seek immediate medical attention.

Symptoms caused by exposure

Inhalation:	Irritation of mucous membranes, coughing and dyspnoea.
Skin:	May cause irritation – redness and itching. Prolonged contact may cause corrosive injury.
Eye:	May be a severe eye irritant. May cause redness, swelling and/or blurred vision.
Ingestion:	May cause severe burns of mouth, throat and stomach. Symptoms may include vomiting abdominal pain, collapse and possible convulsions.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES**Suitable extinguishing equipment**

Combustible solid. Use dry chemical, carbon dioxide, water spray or foam.

Specific hazards arising from the chemical

May produce irritating, poisonous and/or corrosive gases, carbon monoxide, carbon dioxide and formic acid.

Special protective equipment and precautions for fire fighters

Wear self-contained breathing apparatus and full protective clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Avoid generating dust. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Eliminate all sources of ignition.

Environmental precautions

Do not allow product to reach drains sewers or waterways.

Methods and materials for containment and cleaning up

Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable labelled container and hold for safe disposal. Dispose of in accordance with regional regulations.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with eyes, skin and clothing. Do not ingest and avoid breathing dust. Wash thoroughly after handling. Handle open containers in well-ventilated area. Do not empty into drains. Do not eat, drink or smoke in contaminated areas. Before eating, drinking or smoking, remove contaminated clothing and wash hands.

Conditions for safe storage, including any incompatibilities

Do not store near oxidising agents and alkalis.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia - Oxalic Acid: 1mg/m³ TWA (8hr), 2mg/m³ STEL.

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Avoid generating and inhaling dusts. Keep containers closed when not in use. A system of local and/or general exhaust is recommended to keep exposure as low as possible.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes. No special protection is ordinarily required beyond standard issue work clothes.
Respiratory protection:	Wear appropriate respirator when ventilation is inadequate.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White crystalline solid
Odour:	Data not available
Odour threshold (ppm):	Data not available
pH:	1.3 (0.1m aqueous solution)
Melting point/freezing point (°C):	101

Product: RUST AND STAIN CLEANER (OXALIC ACID)

Initial boiling point and boiling range (°C):	149 - 160
Flash point (°C):	Data not available
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Combustible
Upper/lower flammability or explosive limits (%):	Data not available
Vapour pressure (mbar @ 20°C):	Data not available
Vapour density (air = 1, @ 20°C):	Data not available
Density (g/ml):	1.65
Solubility in water (g/l):	102
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	Data not available
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

Avoid excessive heat, generating dust, direct sunlight, moisture, static discharges and high temperatures.

Incompatible materials

Incompatible with oxidizing agents, acids, bases, alkalis, iron, iron compounds, silver, ammonia and salts of oxyhalogenic acids.

Hazardous decomposition products

May evolve oxides of carbon and formic acid.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Oral LD50 (male rat): 475mg/kg Oral LD50 (female rat): 375mg/kg Dermal LD50 (rabbit): 2000mg/kg
Skin corrosion/irritation:	Harmful in contact with skin. Prolonged contact may cause corrosive injury.
Serious eye damage/irritation:	Severe irritant. Contamination of eyes can result in permanent injury.
Respiratory or skin sensitisation:	Not expected to be a sensitiser
Germ cell mutagenicity:	Not expected to be a mutagen
Carcinogenicity:	Not expected to be a carcinogen

Product: RUST AND STAIN CLEANER (OXALIC ACID)

Reproductive toxicity:	Not expected to impair fertility
Specific Target Organ Toxicity (STOT) – single exposure:	Inhalation may cause irritation.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Data not available.
Aspiration hazard:	Not considered an aspiration hazard

SECTION 12 ECOLOGICAL INFORMATION**Ecotoxicity**

Acute toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Biodegradable.

Bioaccumulative potential

Data not available.

Mobility in soil

Miscible with water.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	Not applicable
Proper shipping name:	Not applicable
Australian Dangerous Goods class:	Not applicable
Australian Dangerous Goods packing group:	Not applicable
Hazchem code:	Not applicable

Product: RUST AND STAIN CLEANER (OXALIC ACID)

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	6
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	Not applicable

SECTION 16 OTHER INFORMATION

Date of preparation:	18/07/2016
Revision number:	4
Changes in this revision:	Update to GHS SDS standard

This SDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	ALL PURPOSE THINNERS
Other Names	Paint thinner, APT
Manufacturer's Product Code	17000
Recommended Use	General purpose paint thinner and cleaner for spray lines and spray guns

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au



Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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GHS Classification	Pictogram	Hazard statement
Flammable Liquids, Category 2	 FLAME	H225 Highly flammable liquid and vapour
Skin Corrosion/Irritation, Category 2	 EXCLAMATION MARK	H315 Causes skin irritation
Serious Eye Damage/Irritation, Category 2A		H319 Causes serious eye irritation
Specific Target Organ Toxicity (Single exposure), Category 3		H336 May cause drowsiness or dizziness

Product: ALL PURPOSE THINNERS

Specific Target Organ Toxicity (Repeated exposure), Category 2	 HEALTH HAZARD	H373 May cause damage to organs through prolonged or repeated exposure
Aspiration Hazard, Category 1		H304 May be fatal if swallowed and enters airways
Toxic to Reproduction, Category 2		H361 Suspected of damaging the unborn child
Chronic Aquatic Toxicity, Category 3	N/A	H412 Harmful to aquatic life with long lasting effects

Precautionary statements:

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
PREVENTATIVE	
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/hot surfaces. – No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilation/lighting equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P260	Do not breathe mist/vapours/spray
P261	Avoid breathing mist/vapours/spray
P264	Wash thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P273	Avoid release to the environment
P280	Wear protective gloves/eye protection/face protection
P281	Use personal protective equipment as required
RESPONSE	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P303 + P361 + P353	IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse. Rinse skin with water/shower
P304 + P340	IF INHALED: Remove victim 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
P308 + P313	IF exposed or concerned: Get medical advice/attention
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P314	Get medical advice/attention if you feel unwell
P331	Do NOT induce vomiting
P332 + P313	If skin irritation occurs: Get medical advice/attention
P337 + P313	If eye irritation persists: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse
P370 + P378	In case of fire: Use foam/water spray/fog for extinction
P391	Collect spillage
STORAGE	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed

Product: ALL PURPOSE THINNERS

P403 + P235 P405	Store in a well-ventilated place. Keep cool Store locked up
<i>DISPOSAL</i> P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Toluene	108-88-3	30 - 40
Solvent naphtha (petroleum), light aliphatic	64742-89-8	30
With components:		
n-Hexane	110-54-3	3 - 9
Ethylbenzene	100-41-4	< 3
Acetone	67-64-1	20 - 30
Ethanol	64-17-5	< 10
Note – product contains < 0.1% benzene		

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Keep victim calm and remove to fresh air if safe to do so. Obtain medical treatment immediately. Remove any contaminated clothing.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available. If symptoms occur, transport to the nearest medical facility for treatment.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. Seek immediate medical assistance.
Ingestion:	If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Symptoms caused by exposure

Inhalation:	Breathing of high vapour concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Skin:	May include redness, swelling, pain and/or blisters.
Eye:	May include burning sensation, redness, swelling and/or blurred vision.
Ingestion:	May include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath and/or fever.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES**Suitable extinguishing equipment**

Foam, water spray or fog, dry chemical powder or carbon dioxide. Do not use water in a jet.

Specific hazards arising from the chemical

Carbon dioxide. Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. Vapour is heavier than air, can spread along ground and distant ignition is possible.

Product: ALL PURPOSE THINNERS

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code ●3YE.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Highly flammable product. Avoid breathing vapours. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Electrostatic charges may be generated during transfer. Electrostatic discharge may cause fire. Ensure electrical continuity by earthing all equipment.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia -
Toluene: 191mg/m³ (50ppm) TWA (8hr), 574mg/m³ (150ppm) STEL
Acetone: 1185mg/m³ (500ppm) TWA (8hr), 2375mg/m³ (1000ppm) STEL
Ethanol: 1880mg/m³ (1000ppm) TWA (8hr)

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators

Product: ALL PURPOSE THINNERS

	should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colourless liquid
Odour:	Characteristic
Odour threshold (ppm):	Data not available
pH:	Data not available
Melting point/freezing point (°C):	Data not available
Initial boiling point and boiling range (°C):	50 - 166
Flash point (°C):	-30 (closed cup)
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Highly flammable
Upper/lower flammability or explosive limits (%):	0.8 - 19.0
Vapour pressure (kPa):	30
Vapour density (air = 1):	> 1
Density (g/ml @ 15°C):	0.78 - 0.82
Solubility (g/l):	80 approx.
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	480 - 536
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials

Strong oxidising agents.

Hazardous decomposition products

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids, gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Expected to be of low toxicity - LD50 Oral (rat) > 2000mg/kg
Skin corrosion/irritation:	Irritating to skin. Prolonged contact may cause defatting of skin which can lead to dermatitis.
Serious eye damage/irritation:	Irritating to eyes.
Respiratory or skin sensitisation:	Not expected to be a sensitiser.
Germ cell mutagenicity:	Not mutagenic.
Carcinogenicity:	Not expected to be carcinogenic.
Reproductive toxicity:	Suspected human reproductive toxicant. Damage to foetus possible.
Specific Target Organ Toxicity (STOT) – single exposure:	Data not available.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Central nervous system: repeated exposure affects the nervous system. Respiratory system: repeated exposure affects the respiratory system
Aspiration hazard:	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity:

Fish –	Toxic: $1 < LC/EC/IC50 \leq 10\text{mg/l}$
Aquatic invertebrate –	Harmful: $10 < LC/EC/IC50 \leq 100\text{mg/l}$
Algae –	Low toxicity: $1 < LC/EC/IC50 > 100\text{mg/l}$
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Readily biodegradable. Oxidises by photo-chemical reactions in air.

Bioaccumulative potential

Does not bioaccumulate significantly.

Mobility in soil

Floats on water, highly mobile and may contaminate groundwater.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	1993
Proper shipping name:	Flammable Liquid N.O.S.
Australian Dangerous Goods class:	3
Australian Dangerous Goods packing group:	II
Hazchem code:	●3YE

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	6
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	14

SECTION 16 OTHER INFORMATION

Date of preparation:	20/01/2015
Revision number:	7
Changes in this revision:	Update to GHS SDS standard

This MSDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	TIMBER CLEANER (OXALIC ACID SOLUTION)
Other Names	Oxalic acid
Manufacturer's Product Code	16407
Recommended Use	Cleaning/bleaching of timber and timber stains. Rust stain remover

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au

Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	WARNING
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GHS Classification	Pictogram	Hazard statement
Acute Toxicity - Oral, Category 4	 EXCLAMATION MARK	H302 Harmful if swallowed
Acute Toxicity - Dermal, Category 4		H312 Harmful in contact with skin

Precautionary statements:

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
PREVENTATIVE	
P264	Wash thoroughly after handling
P270	Do not eat drink or smoke when using this product

Product: TIMBER CLEANER (OXALIC ACID SOLUTION)

P280	Wear protective gloves/ protective clothing
RESPONSE	
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
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P330	Rinse mouth
P363	Wash contaminated clothing before reuse
DISPOSAL	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
Oxalic Acid	144-62-7	< 15

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available. Seek medical assistance if symptoms persist.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. Seek medical assistance if symptoms persist.
Ingestion:	If swallowed, do NOT induce vomiting. Seek immediate medical attention.

Symptoms caused by exposure

Inhalation:	May result in slight irritation to respiratory tract – coughing, dryness.
Skin:	May cause irritation – redness and itching. Prolonged contact may cause corrosive injury.
Eye:	A severe eye irritant, corrosive to eyes, may cause redness, swelling and/or blurred vision. Can result in permanent eye injury.
Ingestion:	Hazardous. Highly corrosive. Swallowing may cause severe burns of mouth, throat and stomach. Symptoms may include vomiting abdominal pain, collapse and possible convulsions.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES**Suitable extinguishing equipment**

Non-combustible, not considered to be a significant fire risk.

Specific hazards arising from the chemical

None expected.

Special protective equipment and precautions for fire fighters

Wear protective clothing. Hazchem code 2X.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Ventilate contaminated area thoroughly.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), dilute with water and mop up, or absorb with an inert dry material. Transfer to a labelled, sealable container for product recovery or safe disposal.

For larger spills (> 1 drum), absorb with an inert material, transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Retain as contaminated waste.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with eyes, skin and clothing. Do not ingest and avoid breathing mist. Wash thoroughly after handling. Handle open containers in well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Do not empty into drains. Do not eat, drink or smoke in contaminated areas. Before eating, drinking or smoking, remove contaminated clothing and wash hands.

Conditions for safe storage, including any incompatibilities

Do not store near strong oxidising agents and alkalis.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia - Oxalic Acid: 1mg/m³ TWA (8hr), 2 mg/m³ STEL.

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If inhalation risk exists an approved organic vapour respirator (AS/NZS 1715 and 1716) should be worn.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid
Odour:	Data not available
Odour threshold (ppm):	Data not available
pH:	2 (approx.)
Melting point/freezing point (°C):	0 (approx.)

Product: TIMBER CLEANER (OXALIC ACID SOLUTION)

Initial boiling point and boiling range (°C):	100 (approx.)
Flash point (°C):	Data not available
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Non-combustible
Upper/lower flammability or explosive limits (%):	Data not available
Vapour pressure (mbar @ 20°C):	Data not available
Vapour density (air = 1, @ 20°C):	Data not available
Density (g/ml):	1.06
Solubility:	Soluble in water
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	Data not available
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

No additional remark.

Incompatible materials

May react vigorously with alkalis, alkali metals and oxidising agents.

Hazardous decomposition products

May evolve oxides of carbon.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Oxalic acid is highly corrosive. Oral LD50 (rat): 475mg/kg Dermal LD50 (rabbit): 2000mg/kg
Skin corrosion/irritation:	Irritant.
Serious eye damage/irritation:	Severe irritant.
Respiratory or skin sensitisation:	Not expected to be a sensitiser
Germ cell mutagenicity:	Not expected to be a mutagen
Carcinogenicity:	Not expected to be a carcinogen
Reproductive toxicity:	Not expected to impair fertility

Product: TIMBER CLEANER (OXALIC ACID SOLUTION)

Specific Target Organ Toxicity (STOT) – single exposure:	Data not available.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Data not available.
Aspiration hazard:	Not considered an aspiration hazard

SECTION 12 ECOLOGICAL INFORMATION**Ecotoxicity**

Acute toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Biodegradable.

Bioaccumulative potential

Data not available.

Mobility in soil

Miscible with water.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	1760
Proper shipping name:	CORROSIVE LIQUID, N.O.S.
Australian Dangerous Goods class:	8
Australian Dangerous Goods packing group:	III
Hazchem code:	2X

Product: TIMBER CLEANER (OXALIC ACID SOLUTION)

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	6
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	37

SECTION 16 OTHER INFORMATION

Date of preparation:	23/07/2015
Revision number:	4
Changes in this revision:	Update to GHS SDS standard

This MSDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	WAX AND GREASE REMOVER
Other Names	Hydrocarbon Solvent, Cleaner
Manufacturer's Product Code	17060
Recommended Use	Solvent, degreaser, cleaning fluid

Details of Supplier/Manufacturer

Company:	Recochem Inc. ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178
Phone:	(07) 3308 5200 Fax: (07) 3308 5201
Website:	www.recochem.com.au



Emergency Telephone Numbers

Business Hours:	(07) 3308 5200
After Hours:	1300 131 001
Poisons Information:	Australia: 13 11 26 New Zealand: 0800 764 766


SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	DANGER
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GHS Classification	Pictogram	Hazard statement
Flammable Liquids, Category 2	 FLAME	H225 Highly flammable liquid and vapour
Aspiration Hazard, Category 1	 HEALTH HAZARD	H304 May be fatal if swallowed and enters airways
Specific Target Organ Toxicity (Repeated exposure), Category 2		H373 May cause damage to organs through prolonged or repeated exposure
Toxic to Reproduction, Category 2		H361 Suspected of damaging the unborn child

Product: WAX AND GREASE REMOVER

Skin Corrosion/Irritation, Category 2	 EXCLAMATION MARK	H315 Causes skin irritation
Specific Target Organ Toxicity (Single exposure), Category 3		H336 May cause drowsiness or dizziness
Chronic Aquatic Toxicity, Category 3	N/A	H412 Harmful to aquatic life with long lasting effects

Precautionary statements:

<i>GENERAL</i>	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
<i>PREVENTATIVE</i>	
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/hot surfaces. - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilation/lighting equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P260	Do not breathe mist/vapours/spray
P261	Avoid breathing mist/vapours/spray
P264	Wash thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P273	Avoid release to the environment
P280	Wear protective gloves/eye protection/face protection
P281	Use personal protective equipment as required
<i>RESPONSE</i>	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P303 + P361 + P353	IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse. Rinse skin with water/shower
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P308 + P313	IF exposed or concerned: Get medical advice/attention
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P314	Get medical advice/attention if you feel unwell
P331	Do NOT induce vomiting
P332 + P313	If skin irritation occurs: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse
P370 + P378	In case of fire: Use foam/water spray/fog for extinction
P391	Collect spillage
<i>STORAGE</i>	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed
P403 + P235	Store in a well-ventilated place. Keep cool
P405	Store locked up
<i>DISPOSAL</i>	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients Names and Proportions

Chemical Entity	CAS Number	Proportion (%)
Solvent naphtha (petroleum), light aliphatic	64742-89-8	40 - 60
Low Aromatic White Spirit	64742-82-1	40 - 60
With components:		
n-Hexane	110-54-3	5 – 15
Ethylbenzene	100-41-4	< 5
1,2,4-Trimethylbenzene	95-63-6	< 5
1,3,5-Trimethylbenzene	108-67-8	< 5
Xylene, Mixed Isomers	1330-20-7	< 5
Note – product contains < 0.1% benzene		

SECTION 4 FIRST AID MEASURES

Description of necessary first aid measures

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. If symptoms persist transport to nearest medical facility for additional treatment.
Ingestion:	If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Symptoms caused by exposure

Inhalation:	Breathing of high vapour concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Skin:	May include burning sensation and/or a dried/cracked appearance.
Eye:	May include burning sensation, redness, swelling and/or blurred vision.
Ingestion:	May include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath and/or fever.

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Foam, water spray or fog, dry chemical powder or carbon dioxide. Do not use water in a jet.

Specific hazards arising from the chemical

Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. Vapour is heavier than air, can spread along ground and distant ignition is possible.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus. Hazchem code 3YE.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Highly flammable product. Avoid breathing vapours. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Electrostatic charges may be generated during transfer. Electrostatic discharge may cause fire. Ensure electrical continuity by earthing all equipment.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia -
Mineral Spirits 150-200 HSPA: 350mg/m³ TWA (8hr)
n-Hexane: 72mg/m³ (20ppm) TWA (8hr)
X55: 450mg/m³ TWA (8hr)

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colourless liquid
Odour:	Paraffinic sweet
Odour threshold (ppm):	Data not available
pH:	Data not available
Melting point/freezing point (°C):	Data not available
Initial boiling point and boiling range (°C):	50 - 194
Flash point (°C):	-30 (Abel)
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Highly flammable
Upper/lower flammability or explosive limits (%):	0.7 - 7.5
Vapour pressure (kPa):	Typical 34.5
Vapour density (air = 1):	> 1
Density (g/ml @ 15°C):	0.72 - 0.77
Solubility (kg/m ³):	Not miscible with water
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	280 (ASTM E-659)
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

SECTION 10 STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials

Strong oxidising agents.

Hazardous decomposition products

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids, gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Expected to be of low toxicity - LD50 Oral (rat) > 2000mg/kg
Skin corrosion/irritation:	Irritating to skin. Prolonged contact may cause defatting of skin which can lead to dermatitis.
Serious eye damage/irritation:	Expected to be non-irritating to eyes.
Respiratory or skin sensitisation:	Not expected to be a sensitiser.
Germ cell mutagenicity:	Not expected to be mutagenic.
Carcinogenicity:	Not expected to be carcinogenic.
Reproductive toxicity:	n-Hexane - Causes foetal toxicity in animals at doses which are maternally toxic. Affects reproductive system in animals at doses which produces other toxic effects.
Specific Target Organ Toxicity (STOT) – single exposure:	Inhalation of vapours or mists may cause irritation to the respiratory system.
Specific Target Organ Toxicity (STOT) – repeated exposure:	High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Aspiration hazard:	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity:

Fish –	Expected to be toxic: $1 < LC/EC/IC50 \leq 10\text{mg/l}$
Aquatic invertebrate –	Expected to be toxic: $1 < LC/EC/IC50 \leq 10\text{mg/l}$
Algae –	Expected to be toxic: $1 < LC/EC/IC50 \leq 10\text{mg/l}$
Microorganisms –	Expected to be toxic: $1 < LC/EC/IC50 \leq 10\text{mg/l}$

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Readily biodegradable. Oxidises by photo-chemical reactions in air.

Bioaccumulative potential

Has the potential to bioaccumulate.

Mobility in soil

Floats on water. Absorbs on soil.

Other adverse effects

Data not available.

Product: WAX AND GREASE REMOVER

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	1268
Proper shipping name:	Petroleum Distillates, N.O.S. (Solvent Naphtha)
Australian Dangerous Goods class:	3
Australian Dangerous Goods packing group:	II
Hazchem code:	3YE

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	5
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	14

SECTION 16 OTHER INFORMATION

Date of preparation:	29/04/2015
Revision number:	3
Changes in this revision:	Update to GHS SDS standard

This MSDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.
