



SAFETY DATA SHEET

MAKCOTE PU
Makrete Pty Ltd
Version No: 1.0

Issue Date: Apr 2023

GHS7

SECTION 1 MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product Identifier

Product Name	Makcote PU
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Relevant identified uses of the substance or mixture and uses advised against

Relevant Identified uses	Aliphatic Polyurethane Resin Coating
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Details of the supplier of the safety data sheet

Registered Company Name	Makrete Pty Ltd
Address	PO Box 50, Montmorency, VIC 3094
Telephone	1300 911 161
Website	www.makrete.com.au
Email	admin@makrete.com.au

Emergency telephone number

Emergency Telephone Numbers	1300 911 161
Other emergency telephone numbers	

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Poisons Schedule	Not Applicable
Classification	Flammable Liquids Hazard Category 3, Acute Toxicity (Inhalation) Hazard Category 4, Specific Target Organ Toxicity (STOT) – Repeated Exposure Hazard Category 2, Specific Target Organ

	Toxicity (STOT) – Single Exposure Hazard Category 3, Skin Corrosion/Irritation Hazard Category 2, Serious Eye Damage/Eye Irritation Hazard Category 2A, Skin Sensitiser Hazard Category 1A, Aquatic Environment Acute Hazard Category 3, Aquatic Environment Chronic Hazard Category 3
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Label elements

Hazard pictogram(s)	
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SIGNAL WORD	WARNING
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Hazard statement(s)

Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.
Flammable liquid and vapour.
Harmful if inhaled.
May cause an allergic skin reaction.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary statement(s) Prevention

Keep away from heat, sparks and open flame.
No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting and other equipment.
Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye/face protection.
Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Do not breathe vapors or spray mist.

Precautionary statement(s) Response

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.
IF ON SKIN: Wash with plenty of soap and water. Specific treatment - refer to first aid instructions on safety data sheet. Take off contaminated clothing and wash before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Get medical attention/advice if you feel unwell.

Precautionary statement(s) Storage

Store in well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Precautionary statement(s) Disposal

Dispose of contents/container in accordance with local and national regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures.

Chemical Entity

CAS No	%[weight]	Name
1330-20-7	40-50 %	Xylene
100-41-4	10-<15	Ethylbenzene
108-65-6	5-<10	1-Methoxy-2-propanol acetate
25973-55-1	1-<2.5	2-(2'-Hydroxy-3',5'-di-tert-amylphenyl) benzotriazole
5124-30-1	<1	Methylene bis(4-cyclohexylisocyanate)
41556-26-7	<1	Bis(1,2,2,6,6-Pentamethyl-4-piperidinyl) sebacate
77-58-7	<0.25	Dibutyltin dilaurate
82919-37-7	<0.25	Methyl-1,2,2,6,6-pentamethyl-4-piperidinyl sebacate

Other non-hazardous ingredients to 100%

Additional GHS classification or other information may be included in this section but has not been adopted by Work Health and Safety (WHS) Regulations.

See Section 16 for full text of H phrases.

SECTION 4 FIRST AID MEASURES

Description of First Aid Measures

Poisoning	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives. Burning sensation. Poisons Information Centre Australia: 13 11 26
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin Contact	Wash immediately with plenty of water and soap. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Get medical attention if irritation develops and persists. Wash off immediately with soap and plenty of water for at least 15 minutes.
Inhalation	MAY CAUSE ALLERGIC RESPIRATORY REACTION. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Get immediate medical advice/attention. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.
Ingestion	May produce an allergic reaction. If an allergic reaction occurs, stop use and seek medical help right away. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. Call a doctor.

Note to Physician: May cause sensitisation in susceptible persons. Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing Media

Carbon dioxide, Dry chemical powder, Alcohol Resistant Foam, Water Spray

Unsuitable Extinguishing Media

Full water jet

Special hazards arising from the substrate or mixture.

Fire Incompatibility	May be ignited by heat, sparks or flames. In case of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapours. Flammable. Risk of ignition. Keep product and empty container away from heat and sources of ignition.
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Advice for firefighters

Fire Fighting	In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Product is or contains a sensitizer. May cause sensitization by skin contact.
HAZCHEM	3Y

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures	Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take action to prevent static discharge. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Ventilate the area.
Methods For Containment	Stop leak if safe to do so. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Methods For Cleaning Up	Take action to prevent static discharge. Dam up. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal.
Environmental Precautions	Avoid release to the environment.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe Handling	Keep away from heat, sparks and open flame. - No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting and other equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye/face protection. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Do not breathe vapors or spray mist.
Other information	Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take action to prevent static discharge. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Provide extract ventilation to points where emissions occur. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes without delay. Take off contaminated clothing and wash it before reuse. Containers must be bonded and grounded when pouring or transferring material.

Conditions for safe storage

Storage	Keep container tightly closed and dry in a cool, well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep out of reach of children. Store separately.
Storage Temperature	Ambient temperature

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters – Limits

Source	Ingredient	Material name	TWA	STEL
Australia Exposure Standards	Xylene 1330-20-7	Xylene	80ppm, 350 mg/m ³	150ppm, 655 mg/m ³
Australia Exposure Standards	Ethylbenzene 100-41-4	Ethylbenzene	100ppm, 434 mg/m ³	125ppm, 543 mg/m ³
Australia Exposure Standards	1-Methoxy-2-propanol acetate 108-65-6	1-Methoxy-2-propanol acetate	50ppm, 274 mg/m ³	100ppm, 548 mg/m ³
Australia Exposure Standards	Methylene bis(4-cyclohexylisocyanate) 5124-30-1	Methylene bis(4-cyclohexylisocyanate)	0.02 mg/m ³ NCO	0.07 mg/m ³ NCO
Australia Exposure Standards	Dibutyltin dilaurate 77-58-7	Dibutyltin dilaurate	0.1 mg/m ³ Sn	0.2 mg/m ³ Sn

Exposure Controls

Engineering Measures	Minimize exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.
Respiratory Protection	For operations where inhalation exposure can occur use an approved respirator. Recommendations are listed below. Other protective respiratory equipment may be used based on user's own risk assessment. Where respiratory protection is required, use a respirator selected and in accordance with AS/NZS 1715 and AS/NZS 1716. Recommended: Full Face Mask with organic vapor cartridge, Type A filter (BP >65°C)
Eye Protection	Tight sealing safety goggles. Face protection shield.
Skin Protection	Antistatic footwear. Wear fire/flame resistant/retardant clothing. Gloves made of plastic or rubber. Wear suitable protective clothing. Apron.

<p>Hands Protection</p>	<p>Wear protective gloves. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Replace gloves immediately when torn or any change in appearance (dimension, colour, flexibility etc) is noticed.</p> <p>Gloves for repeated or prolonged exposure - non exhaustive list: Viton®/Butyl rubber, thickness: 0.7 mm, break through time: > 480 min</p> <p>Gloves for short term exposure/splash protection - non exhaustive list: Nitrile rubber (NBR), thickness: > 0.56 mm, break through time: < 60 min</p> <p>The chemical resistance depends on the type of product and amount of product on the glove. Therefore, gloves need to be changed when in contact with chemicals.</p> <p>Not suitable gloves - non exhaustive list: Natural rubber (NRL), thickness: 0.12 mm</p> <p>Due to many conditions (e.g., temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing. Use PE gloves as under gloves for difficult situations like for instance: high exposure, unknown composition or unknown properties of the chemicals.</p>
<p>Additional Advice</p>	<p>When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Wash hands before breaks and after work. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use.</p>

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear Liquid		
Colour	Clear Amber		
Physical state	Liquid	Specific Gravity/Density	0.908 g/cm ³
Odour	Aromatic Petroleum Distillates	Partition coefficient n-octanol /water	Not Available
Odour Threshold	See Section 8 for Exposure Limits	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (Kinematic) Viscosity (Dynamic)	56mm ² /s 55 mPa.s
Initial boiling point and boiling range (°C)	137 – 143°C (based on components)	Vapour Density	3.7 Derived from solvent
Flash point (°C)	29°C Pinsky-Martens Closed Cup	Particle Characteristics	Not Available
Evaporation rate	Not Available		
Flammability	Not Available		
Upper Explosive Limit (%)	7.7		
Lower Explosive Limit (%)	1.1		
Solubility in water (g/L)	Insoluble		
Vapour Pressure	52 hPa, 40°C Derived from solvent		

9.2 OTHER INFORMATION

9.2.1 Information about physical hazard classes

Not applicable

9.2.2 Other safety characteristics

Not applicable

SECTION 10 STABILITY AND REACTIVITY

Reactivity	No information available
Stability Conditions to Avoid	Stable Heat, flames and sparks
Polymerisation Conditions to Avoid	Will not occur None Known
Materials to Avoid	Strong acids Strong bases Strong oxidising agents
Hazardous Decomposition Products	None Known

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body response to such irritations can cause lung damage. Inhalation hazard is increased by higher temperatures.
Ingestion	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis.
Skin Contact	Causes skin irritation.
Eye	Causes serious eye irritation.
Chronic Toxicity	This material can cause serious damage if one is exposed for long periods.

SECTION 12 ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients):>100mg/L

Long-term aquatic hazard: This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data. Acute toxicity estimate (based on ingredients):>100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log Kow<4.

Ecotoxicity: No information available

Persistence and degradability: No information available Bio accumulative potential: No information available Mobility: No information available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product/Packaging disposal	Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers if possible or dispose of in an authorised landfill.
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	No
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, Health and Environmental Regulations / Legislation specific for the substance or mixture

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System – Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

International Agency for Research on Cancer (IARC) – Agents classified by the IARC Monographs

International Air Transport Association (IATA) Dangerous Goods Regulations – Prohibited List Passenger and Cargo Aircraft

PORTLAND CEMENT (65997-15-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (2-Napthalenesulfonic acid/Formaldehyde sodium salt)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	N (2-Napthalenesulfonic acid/Formaldehyde sodium salt)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PIGGS	N (Portland Cement)
USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

This Safety Data Sheet (SDS) summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since the company cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage review the SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.