

SAFETY DATA SHEET

MAKSEAL HYBRID LM

Makrete Pty Ltd

Version No: 1.0 Issue Date: Jun 2023

SECTION 1 MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product Identifier

Product Name	MAKSEAL HYBRID LM

Relevant identified uses of the substance or mixture and uses advised against

Relevant Identified uses	Bonding and Sealing

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	13 11 26 (Poison Information Centre)

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code

Poisons Schedule	Not Applicable
Classification	Flammable Liquid Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Chronic Aquatic Hazard Category 3

Label elements

Hazard pictogram(s)	<u>(1)</u>
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SIGNAL WORD	WARNING

Hazard statement(s)

H227	Combustible Liquid.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statement(s) Prevention

P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370 + P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.
P337 + P313	If eye irritation persists. Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 +P313	If skin irritation occurs: Get medical advice/attention.

Precautionary statement(s) Storage

P403 + P235	Store in a well-ventilated place. Keep cool.
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Precautionary statement(s) Disposal

P501		Dispose of contents/container in accordance with local regulations.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures.

Chemical Entity

CAS No	%[weight]	Name
13822-56-5	0 - 3 %	3-aminopropyltrimethoxysilane
2768-02-7	0 - 3 %	trimethoxyvinylsilane

SECTION 4 FIRST AID MEASURES

Description of First Aid Measures

Eye Contact	If this product meets the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

Inhalation	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested.
	Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid
	procedures.
	Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket
	mask as trained. Perform CPR if necessary.
	Transport to hospital, or doctor, without delay.
Ingestion	If swallowed do NOT induce vomiting.
	If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and
	prevent aspiration.
	Observe the patient carefully.
	Never give liquid to a person showing signs of being sleepy or with reduced awareness, i.e. becoming unconscious.
	Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
	Seek medical advice.

Indication of any immediate medical attention and special treatment needed - Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Foam

Dry chemical powder

BCF (where regulations permit)

Carbon dioxide

Water spray or fog – Large fires only

Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition
. ,	may result

Advice for firefighters

Fire Fighting	Alert Fire Brigade and t ell them location and nature of hazard.	
	Wear breathing apparatus plus protective gloves.	
	Prevent by any means available, spillage from entering drains or water course.	
	Use water delivered as a fine spray to control fire and cool adjacent area.	
	DO NOT approach containers suspected to be hot.	
	Cool fire exposed containers with water spray from a protected location.	
	If safe to do so, remove containers from path of fire.	
	Equipment should be thoroughly decontaminated after use.	
Fire Explosion Hazard	Combustible.	
	Slight fire hazard when exposed.	
	Heating may cause expansion or decomposition leading to violent rupture of containers.	
	On combustion, may emit toxic fumes of carbon monoxide (CO).	
	May emit poisonous fumes.	
	May emit corrosive fumes.	
HAZCHEM	Not Applicable	

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Minor Spills	Clean up all spills immediately.
	Avoid contact with skin and eyes.
	Wear impervious gloves and safety goggles.
	Trowel up/scrape up.
	Place spilled material in clean, dry, sealed container.
	Flush spill area with water.
Major Spills	Clear area of personnel and move upwind.
	Alert Fire Brigade and tell them location and nature of hazard.
	Wear breathing apparatus plus protective gloves.
	Prevent, by any means available, spillage from entering drains or water course.
	Stop leak if safe to do so.
	Contain spill with sand, earth or vermiculite.
	Collect recoverable product into labelled containers for recycling.
	Neutralise/decontaminate residue(see Section 13 for specific agent).
	Collect solid residues and seal in labelled drums for disposal.
	Wash area and prevent runoff into drains.
	After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-
	using.
	If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe Handling	Avoid all personal contact, including inhalation.
	Wear protective clothing when risk of exposure occurs.
	Use in a well- ventilated area.
	Prevent concentration in hollows and sumps.
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	DO NOT enter confined spaces until atmosphere has been checked.
	DO NOT allow material to contact humans, exposed food or food utensils.
	Avoid contact with incompatible materials.
	When handling, do not eat, drink or smoke.
	Keep containers securely sealed when not in use.
	Avoid physical damage to containers.
	Always wash hands with soap and water after handling.
	Work clothes should be laundered separately. Launder contaminated clothing before re-use.
	Use good occupational work practice.
	Observe manufacturer's storage and handling recommendations contained within this SDS.
	Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are
	maintained.
Other information	Store in original containers.
	Keep containers securely sealed.
	Store in a cool, dry, well-ventilated area.
	Store away from incompatible materials and foodstuff containers.
	Protect containers against physical damage and check regularly for leaks.
	Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities.

Suitable Container	Metal can or drum.	
	acking as recommended by manufacturer.	
	Check all containers are clearly labelled and free from leaks.	
Storage Incompatibility	Avoid reaction with oxidising agents.	
	Segregate from alcohol, water.	

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
3-aminopropyltrimethoxysilane	Trimethoxysilyl)-1-propanamine, 3-(30 mg/m3	330 mg/m3	2000 mg/m3
trimethoxyvinylsilane	Trimethoxyvinylsilane; (Vinyltrimethoxysilane;Silane, trimethoxyvinyl-)	9.5ppm	100 ppm	120 ppm

Ingredient	Original IDLH	Revised IDLH
3-aminopropyltrimethoxysilane	Not available	Not Available
trimethoxyvinylsilane	Not available	Not Available

Exposure controls

Appropriate Engineering	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed
Controls	engineering controls can be highly effective in protecting workers and will typically be independent of worker
	interactions to provide this high level of protection.
	The basic types of engineering controls are:
	Process controls which involve changing the way a job activity or process is done to reduce the risk.
	Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and
	ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant in use.
	Employers may need to use multiple types of controls to prevent employee overexposure.
	Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential
	to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection.
	An approved self-contained breathing apparatus (SCBA) may be required in some situations.
	Provide adequate ventilation in warehouse or closed storage area. Air contaminants generated in the workplace possess
	varying "escape" velocities which in turn determine the "capture velocities" of fresh circulating air required to effectively
	remove the contaminant.
Personal Protection	
Eye and Face Protection	Safety glasses with side shields.
	Chemical goggles.
	Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy
	document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
	This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury
	experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily

	available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation – lens should be removed in a clean environment only after worker have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]
Skin Protection	See Hand protection below.
Hands/Feet protection	Wear chemical protective gloves. e.g. PVC Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	See Other protection below.
Other protection	Protective overalls, closely fitted at neck and wrist. Eye-wash unit. IN CONFINED SPACES: Non-sparking protective boots Static-free clothing Ensure availability of lifeline Staff should be trained in all aspects of rescue work. Rescue gear: Two sets of SCBA breathing apparatus Rescue Harness, lines etc

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Grey powder with slight odour, mixes with water.		
Physical state	Solid	Relative density (Water = 1)	0.6 to 0.8
Odour	Not Available	Partition coefficient n- octanol / water	Not Available
Odour Threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular Weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Negligible
Solubility in water (g/L)	Miscible	pH as a solution (1%)	9-10
Vapour density (Air = 1)	Negligible	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See Section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See Section 7
Conditions to avoid	See Section 7
Incompatible materials	See Section 7
Hazardous decomposition products	See Section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Generated dust may be discomforting.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual. Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition. Open cuts abraded or irritated skin should not be exposed to this material. Entry into the bloodstream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	If applied to the eyes, this material causes severe eye damage.
Chronic Toxicity	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Harmful: danger of serious damage to health by prolonged exposure through inhalation. This material has been classified as not mutagen. The material has been classified as not a carcinogen. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

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.		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.

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	Υ
Canada - DSL	Υ
Canada - NDSL	N (2-Napthalenesulfonic acid/Formaldehyde sodium salt)
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	Υ
Japan - ENCS	N (2-Napthalenesulfonic acid/Formaldehyde sodium salt)
Korea - KECI	Υ
New Zealand - NZIoC	Υ
Philippines - PIGGS	N (Portland Cement)
USA - TSCA	Υ
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.