

MAKSEAL INDUSTRIAL GRADE

High-Performance Industrial Grade Silicone Sealant

Makseal Industrial Grade Silicone is a high performance, Ultraviolet (U.V.) resistant one component neutral cure silicone sealant.

Makseal Industrial Grade Silicone is a high-performance premium quality neutral cure silicone sealant designed for sealing and adhering a wide variety of products and surfaces while also offering glazing and weather seal applications.

Makseal Industrial Grade Silicone is a high quality 100% oxime curing silicone adhesive/ sealant. It is designed for general purpose glazing, industrial and automotive sealing application where excellent adhesion long term reliability is required. It reacts with atmospheric moisture to produce a form in place silicone rubber seal. Weather & UV resistance is excellent.

RECOMMENDED USES

- Industrial and maintenance applications
 - As an Adhesive
 - As a Multi-Purpose Sealant
 - Metal and Colour-bond roofing
 - Metal to Metal lap joints and flashings
 - Gutters and down pipes
 - Pipe or Sprinkler System Penetrations
 - Air conditioning
 - Aluminium Window Frames
 - General Purpose sealing of building materials, Steel, Aluminium, Timber, Concrete, Brick and Masonry.
 - Most types of plastic and rubber but pre-testing is recommended to ensure adequate adhesion
 - Glass
 - Glazing
 - Concrete
 - Fiberglass
 - Aluminium
 - Steel
 - Galvanised steel
 - Stainless steel
 - Zincalume
 - Roofing profiles
 - Wood
 - Ceramics
 - Plastics
 - Most powder coated surface (pre adhesion test advised)
 - Many common substrates
 - Automotive Assembly
 - Roof & Gutter
- Weather seals between glass and aluminum high performance
 - Back glazing between timber and glass
 - Perimeter seals between aluminum window frames, brick, and masonry
 - Air seals in concrete panels
 - General construction
 - Electrical applications
 - Marine work

FEATURES AND BENEFITS

- Low Slump
- Movement capabilities +25%
- Superior adhesion
- Will not corrode metals
- **Makseal Industrial Grade Silicone** comes with a 10-year manufacturer's warranty.
- AS/NZS 4020 approved, which means it is suitable for use in contact with drinking water (potable water approved).
- 100% Silicone so it does not shrink when curing and customers do not pay for solvents or fillers.
- Excellent adhesion properties so it adheres to most surfaces, included painted surfaces, and the job only needs to be done once.
- Neutral (Non-Acetic) Cure is non-corrosive and so does not react with metals and other surfaces.
- Permanently flexible so it resists cracking, shrinking and vibration.
- Suitable for interior and exterior applications so the product is very versatile.
- Waterproof so it provides a flexible watertight seal.
- Low VOC which means low vapour, low odour and a safer work environment for the plumber or trades person.
- UV resistant so it is not affected significantly by sunlight, making it more durable
- (Less than 50 grams/litre) In accordance with the Californian South Air Quality Management rule 1168
- 5–8-minute skin time

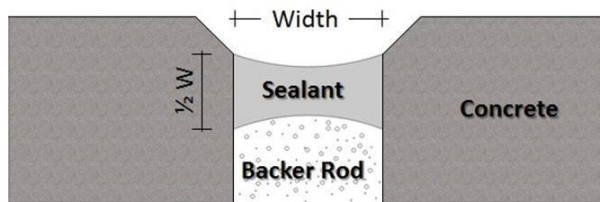
APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surfaces to be sealed must be clean, dry and free of wax, grease or any loose or flaking paint. Clean off any oil or grease using IPA.

1. Use masking tape each side of joint to simplify clean up, to protect surfaces and to ensure a neat job. Complete all painting before applying.
2. Insert a sealant support material such as polyurethane foam into deep joints or gaps to ensure sealant depth is no greater than 10mm.
3. Cut nozzle at 45° angle to desired thickness. Cut diaphragm on cartridge. Insert cartridge into caulking gun. Hold gun at 45° angle with nozzle in contact with both sides of joint. Apply by pushing sealant ahead of nozzle, thus ensuring sealant is pushed firmly into place.
4. Smooth off before skin forms (within 10 minutes). Remove excess sealant immediately with a cloth dampened with mineral turpentine. If used, remove masking tape immediately sealant tooling is complete. Sealant surface skins in 10 minutes and is touch dry in 30 minutes.
5. Cured sealant can be removed by trimming with a sharp blade but avoid under cutting seal.
6. After use, cured plug will form in cartridge nozzle.
7. Before reusing, remove plug and extrude sealant.
8. Entire cartridge contents should be used within 12 months.

JOINT DESIGN/CONFIGURATION



PRECAUTIONS

- Not recommended for use in horizontal walkways exposed to high abrasion (pedestrian traffic), in totally confined areas or below grade or in expansion joints that will encounter continuous water immersion.
- Not to be used for structural glazing applications.
- Not paintable.
- Not to be used on extruded type polycarbonates or polyacrylates if they are under tension as stress cracking may occur.
- Ensure that standing water is removed from the bond interface and that the sealant has direct contact/coverage on the substrate.
- Not recommended for direct contact with bituminous or pitch-based adhesives or membranes as bleed through discoloration will occur.
- Do not use in chlorinated water such as swimming pools, spas etc.
- Non-Flammable.

Makseal Industrial Grade Silicone is not suitable for the following applications:

- Submerged joints where porous substrates permit water to the bond interface.
- For certain rubber products where bleeding of plasticiser may occur. In an aquarium construction and structural glazing.

LIMITATIONS

Makseal Industrial Grade Silicone is not recommended for use:

- Do not apply to wet surfaces. Ensure surfaces are clean and dry.
- All applications should be pre-tested to ensure the finished results with **Makseal Industrial Grade Silicone** meet the expectations of the user.
- Adhesion of **Makseal Industrial Grade Silicone** to substrates should be pre-tested to ensure there is adequate adhesion.
- Pre-test **Makseal Industrial Grade Silicone** on substrates for any potential staining. This is especially relevant for natural stone, granite and marble.
- Also refer to SAFETY DIRECTIONS.
- Not to be used for structural glazing.
- Not paintable.
- Not to be used on extruded type polycarbonates or polyacrylates as cracking may occur
- Not recommended for use in trafficable applications or continually submerged conditions
- Not recommended for below water line applications.
- Not recommended for applications in which it will be in constant contact with chlorinated water

PACKAGING

Makseal Industrial Grade Silicone is available in 300ml Cartridges and 20 Cartridges per box.

COLOURS

Makseal Industrial Grade Silicone

Colour	Item
Translucent	MAKS80
White	MAKS81
Matt Black	MAKS82
Grey	MAKS83
Aluminium Grey	MAKS84

SHELF LIFE

12 months shelf life in unopened packaging stored in a cool, dry environment and between +5°C and +25°C.

CLEAN UP

Wet sealant can be cleaned up with acetone or mineral spirits. Cured sealants can only be removed mechanically.

HEALTH AND SAFETY INFORMATION

Safety

Avoid breathing mist/vapours/spray.
 Use only outdoors or in a well-ventilated area.
 Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection.
 Contaminated work clothing should not be allowed out of the workplace.

First Aid

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do NOT induce vomiting. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. Take off contaminated clothing and wash before reuse.
 IF ON SKIN: Wash with plenty of soap and water.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.
 Information Centre: Australia: 13 11 26;
 New Zealand: 0800 764 766.
 For more information and advice on the safe handling, storage and disposal of this product refer to the Safety Data Sheet (SDS).

TECHNICAL SPECIFICATIONS PERFORMANCE CHARACTERISTICS

Industrial Grade Silicone	Trans, White, Aluminium Grey	Matt Black, Grey	Test Method
Type	100% Neutral Oxime	100% Neutral Oxime (Calcium Carbonate)	
Skinning Time	5-10 mins	5-10 mins	
Curing Rate	2-3mm/day	2-3mm/day	
Sag/Slump	Non-Slump	Non-Slump	ASTM C639
Specific Gravity	1.02 g/ml	1.25 g/ml	ASTM D1475
Application Temperature	-5 to 50°C	-5 to 50°C	
Service Temperature	-40 to 180°C	-40 to 180°C	
Shore A Hardness	28	30-35	ASTM D2240
Dynamic Joint Movement	+/- 25%	+/- 25%	ASTM C719
Tensile Strength	1.0 MPa	1.3 MPa	ASTM D412
Elongation @ Break	300%	600%	ASTM D412
UV & Ozone Resistance	Excellent	Excellent	
Water Potability	Approved	Approved	AS 4020

TECHNICAL SUPPORT:

Makrete manufactures a comprehensive range of high-quality, high-performance construction products. In addition, **Makrete** offers technical support and on-site advice to specifiers, end users and contractors. Please contact your **Makrete** sales representative or Makrete for this service.

CONTACT & TECHNICAL SUPPORT
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Product	MAKSEAL INDUSTRIAL GRADE SILICONE
Issue Date	OCT 2022
Issue No:	1
Pack Size	20 Cartridges per box

Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time.

The TDS should be carefully read and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied.

Our responsibility for products sold is subject to our standard terms and conditions of sale. Makrete does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

The information and any recommendations relating to the application and end-use of all MAKRETE products are provided in good faith based on MAKRETE's knowledge and experience of the products. In applications, the differences in materials, and variances of substrates and actual site conditions can vary such that no warranty in respect of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be taken as inferred either from this information, or from any written recommendations, or from any other advice offered by MAKRETE. The proprietary rights of third parties must be observed. All orders are accepted subject to our sale terms and conditions.

It is recommended that all products be properly stored, handled and applied in accordance with the printed literature (TDS).

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.