

# MAKROFLEX

## SANITARY PREMIUM MOLD RESISTANT SILICONE

### CHARACTERISTICS

MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE is a low modulus, one component, ready-to-use, silicone sealant (acetox type) for sanitary or other construction sealing applications where very high mildew resistance is required.

- ▶ high mildew resistance by unique triple protection system:
  1. Avoids adhesion of mould spores
  2. Stops growth of mould on the surface
  3. Inhibits the production of mould spores
- ▶ low modulus
- ▶ 12.5% movement capability
- ▶ easy to extrude
- ▶ smooth and glossy appearance which complements glazed sanitary ware and ceramic tiles
- ▶ excellent UV-, weather and ageing resistance
- ▶ waterproof
- ▶ primerless adhesion to glass, ceramics, glazed surfaces and anodized aluminum
- ▶ good resistance against conventional cleaning products and a lot of chemicals

### APPLICATION FIELD

MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE can be used for:

- sealing of joints in sanitary and similar applications
- sealing of joints at bathtubs, wash basins, shower cabins, kitchen, toilets, aluminum profiles, tiles etc.
- sealing of joints in wet rooms / areas

### STANDARDS

EN 15651-1 (CE marking)	product type F-EXT-INT: sealant for facade for interior and exterior applications
EN 15651-3 (CE marking)	product type S: sealant for sanitary applications
EN 15301-1	reaction to fire: class F
ISO 846-B	microbiological growth: level 1
ISO 1600	Class F-12, 5E



## INSTRUCTION FOR USE

MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE is supplied ready-to-use silicone and can be applied from the original packaging with no special pre-treatment.

## TECHNICAL DATA

### Before curing

Type of silicone	Acetoxy
Appearance	Paste
Density (ISO 2811-1), g/ml	~ 0.99
Resistance to flow (ISO 7390), mm	~ 0

### Curing

Skin formation time (+23 °C / 50% RH), min	~ 15
Curing speed (+23°C, 50% RH, cross-section of joint 20x10mm), mm/day	~ 2
Application temperature, °C	5 - 40

### After curing

Shore A hardness (ISO 868)	~ 20
Movement capability (ISO 11600), %	12.5
Max. joint width, mm	30
Change of volume (ISO 10563), %	~ 25
Temperature resistance, °C	-30 - 120

### Mechanical properties

Elastic recovery (ISO 7389-A), %	~ 95
Modulus at 100% elongation (ISO 8339-A), N/mm <sup>2</sup>	~ 0.4
Elongation at break (ISO 8339-A), %	~ 100

### Surface preparation

All surfaces must be clean and dry, free from any dust and grease or anything which may be detrimental to correct adhesion of the sealant.

Residues of old sealant or other materials as well as mould on the substrate must be removed completely (if necessary, use a silicone remover).

Degreasing is performed using a pad soaked in solvent (alcohol or white spirit) followed by wiping with a clean cloth.

Dust should be removed using oil-free compressed air.

To get best sealing results it is recommended to mask edges of the joints with a tape before application of the sealant mass.

### Priming

Although MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE will bond well to most surfaces it is recommended to use a primer on certain substrates to ensure a strong and uniform bond.

On steel, metals and plastics use primer P819 before application of MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE. In case of porous materials it is recommended to use primer P800.

## Opening guidelines

- Preparation** – remove the protective upper plug and position the nozzle on the thread. Keep the plug for post use. The nozzle should be cut off aslant according to the joint width and recommended joint dimensions.
- Insertion** – insert the cartridge into a compatible sealant gun. Make sure it is seated correctly.
- Opening** – press the trigger until a click is heard. An audible click signals the break of the transport lock. Keep pressing firmly until you feel a burst – this opens cartridge & initiates flow of the sealant.
- Application** – apply the product directly to the joint – i.e. the area where two surfaces meet. Use the product like a conventional sealant (All surfaces must be clean and dry, free from any dust and grease or anything which may be detrimental to correct adhesion of the sealant) .
- Closing a nozzle by the plug after usage.**

## Joint dimensions

The movement capability of the sealant as well as local regulations must be considered.

In general, the joint width must be > 10 mm and < 35 mm and the joint width should be twice the depth.

In case of rectangular sanitary joints, it is necessary to maintain a minimal depth of 5 mm.

In case of triangular joints, both contact areas should be minimum 5 mm wide.

## Sealant application

- Once a seal back-up material has been put in place (closed-cell polyethylene foam with surface skin or open-cell polyurethane foam), the sealant should be applied ensuring that the seal is completely filled.
- Smoothing off the seal ensures good contact between the sealant and the bonding surfaces.
- Directly after application, spray the joint with a mild detergent solution (soapy water) and smooth off with an appropriate tool.
- Remove any tape immediately before surface skin is formed.
- Smooth over any proud sealant edges immediately.

## Cleaning tools

Areas soiled with fresh sealant may be cleaned with a dry pad or a pad soaked in a solvent. Any cured sealant can be removed by scraping (e. g. using a razor blade) or by using a special silicone remover product.

## Please note

The joint must be cleaned and maintained regularly. Take care of a good and regular air circulation in the room where the sealant is applied. Curing speed is depending on temperature, air humidity and on the dimensions of the joint. Low temperatures, low air humidity or big joint dimensions need longer curing speeds.



**LIMITATIONS**

For any applications on sensitive surfaces carry out preliminary testing to check compatibility with the sealant.

MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE must not be used on sensitive surfaces which could react with the acetic acid which is released during cure.

MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE is not recommended for structural glazing applications.

MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE is not recommended for joints that are in direct food contact.

MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE is not recommended for swimming pool joints, for aquarium joints or for applications under water.

MAKROFLEX MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE seals must not be over-painted (poor covering and adhesion of the paint).

Before using MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE on painted substrates, paint has to be completely dry and cured. Prior compatibility tests are recommended, considering the variety of paints that exist.

MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE is not recommended on materials which can exude certain components over time (butyl sealant, EPDM rubbers, polychloroprene, etc.). Discolouration or reduction of adhesion properties could take place.

Application of MAKROFLEX SANITARY PREMIUM MOLD RESISTANT SILICONE on natural stone (e.g. marble, granite) is not recommended. For applications on natural stone use a special natural stone silicone.

MAKROFLEX SX101 is not recommended for applications on PMMA (Plexiglass®), PTFE (Teflon®), polyethylene and polypropylene.

**GENERAL INFORMATION****Storage**

Store cartridges in a cool, dry environment, protected from frost & direct sunlight. Recommended storage temperature is between 5 - 25°C. The product maintains a shelf life of 24 months from the date of manufacture when kept in its original, unopened packaging. For best use, it is recommended to use the product up to 4 - 6 weeks after the initial opening. This is valid when products are sealed with the protective plug, stored in cool, dry environment between 5 - 25°C and protected from frost and direct sunlight.

**Colours**

translucent  
white

**HEALTH AND SAFETY**

Before using the product please see related Safety Data Sheet that is available on request.

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.