

MAKROFLEX

SANITARY MOULD RESISTANT SILICONE

CHARACTERISTICS

MAKROFLEX SANITARY MOULD RESISTANT SILICONE is a low modulus, one component, ready-to-use, silicone sealant (acetoxo type) which contains a fungicide for general sanitary sealing applications.

- Fast no-cut opening, high extrudability, limited post-dripping effect
- 12.5% movement capability
- 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 aluminium
- Good resistance against conventional cleaning products and a lot of chemicals
- Recycled cardboard cartridge

APPLICATIONS

MAKROFLEX SANITARY MOULD RESISTANT SILICONE can be used for:

- Sealing of joints in sanitary and similar applications
- General sealing and bonding applications
- Sealing of joints at bathtubs, washbasins, 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 15651-2 (CE marking)	product type G: sealant for glazing applications
EN 15651-3 (CE marking)	product type S: sealant for sanitary applications
EN 15301-1	reaction to fire: class E
ISO 846-B	microbiological growth: level 1
ISO 1600	Class F-12,5E



INSTRUCTION FOR USE

Surface preparation

All surfaces must be clean and dry, free from any dust and grease or anything that 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.

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.

Priming

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

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. Insert the cartridge into a compatible sealant gun. Make sure it is seated correctly (selected smaller extruders might not match the cartridge).

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. Any cutting operations are not require.

Application

Apply the product directly to the joint – i.e. the area where two surfaces meet. Use the product like a conventional sealant. 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. Upon completion of the application, remove the cartridge from the gun and place the plug to preserve the product for future use.

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.

Disposal instructions

1. Detach the bottom plastic ring from the cartridge.
2. Unwind the cardboard cartridge body in a spiral motion.
3. Recycle the plastic ring and cardboard tube in accordance with local recycling regulations **
4. Dispose of the nozzle and internal foil. **

** Please consult your local authority about specific recycling and disposal guidelines.

TECHNICAL DATA

Uncured product

Type of silicone	Acetoxo
Appearance	Paste
Density (ISO 2811-1), g/ml	~ 0.98 - 1.0
Application temperature, °C	5 - 40
Skin formation time (+23 °C / 50% RH), min	~ 15
Curing rate (+23°C, 50% RH, cross-section of joint 20x10mm), mm/day	~ 2.2
Colour	Clear. white

Cured product

Shore A hardness (ISO 868)	~ 18
Temperature resistance, °C	-30 - 120
Elongation at break (ISO 8339-A), %	~ 400
Elastic recovery (ISO 7389-A), %	~ 95
Modulus at 100% elongation (ISO 8339-A), N/mm ²	~ 0.4
Change of volume (ISO 10563), %	~ 20
Movement capability (ISO 11600), %	~ 12.5



LIMITATIONS

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

- MAKROFLEX SANITARY MOULD RESISTANT SILICONE must not be used on sensitive surfaces which (e.g. copper, brass, lead, mirror silver) could react with the acetic acid that is released during cure.
- MAKROFLEX SANITARY MOULD RESISTANT SILICONE is not recommended for structural glazing applications.
- MAKROFLEX SANITARY MOULD RESISTANT SILICONE is not recommended for joints that are in direct food contact.
- MAKROFLEX SANITARY MOULD RESISTANT SILICONE is not recommended for swimming pool joints, for aquarium joints or for applications under water.
- MAKROFLEX SANITARY MOULD RESISTANT SILICONE seals must not be over-painted (poor covering and adhesion of the paint).
- Before using MAKROFLEX SANITARY MOULD 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 MOULD RESISTANT SILICONE is not recommended on materials which can exude certain components over time (butyl sealant, EPDM rubbers, polychloroprene, etc.).
- Discoloration or reduction of adhesion properties could take place.
- Application of MAKROFLEX SANITARY MOULD RESISTANT SILICONE on natural stone (e.g. marble, granite) is not recommended.
- For applications on natural stone use a special natural stone silicone.
- MAKROFLEX SANITARY MOULD RESISTANT SILICONE is not recommended for applications on PMMA (Plexiglass®), PTFE (Teflon®), polyethylene and polypropylene.

GENERAL INFORMATION

Storage

Store MAKROFLEX SANITARY MOULD RESISTANT SILICONE in a dry place between 5 - 25°C in dry environment, protected from frost & direct sunlight. The product maintains a shelf life of 24 months from the date of manufacture when kept in its original, unopened packaging. Refer to the packaging for production and/or expiry dates. 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 according to the instructions.

Colours

Transparent, white

HEALTH AND SAFETY

Before using the product please see related Safety Data Sheet that is available on request. Use general protective clothing while working with the sealant. Acetic acid is released during vulcanization. These vapors should not be inhaled for long periods or in high concentration. Hence, good ventilation of the work place is necessary. Cured silicone rubber, however, can be handled without any risk to health.

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.