

Silicone

Transparent sealant for tiles and mosaic.
Green product for bio-building.

Silicone develops a high degree of adhesion to non-absorbent surfaces, guaranteeing the integrity and watertightness of ceramic and porcelain coverings subject to deformation.



Rating 3

- × Regional Mineral $\geq 30\%$
- ✓ VOC Low Emission
- × Solvent ≤ 5 g/kg
- ✓ Low Ecological Impact
- ✓ Health Care

1. Ideal for healthcare environments
2. Walls and floors not subject to heavy traffic, for internal and external use
3. Anti-mould
4. Translucent
5. Resistant to freezing
6. Suitable to seal porcelain and ceramic tiles
7. Limits the risk of loads that could be harmful and dangerous to the environment during storage and transportation

Areas of application

- Elastic, waterproof sealing of expansion and connection joints on:
 - porcelain tiles, low thickness slabs, ceramic tiles, klinker, cotto, glass and ceramic mosaic, of all types and formats
 - bathroom fittings, showers
 - metal doors and windows
 - glass and fibreglass
- Intended use:
For internal and external use, including environments subject to freezing, on

fractionizing, expansion and connection joints in tile coverings on balconies, terraces, internal floors, aquariums and swimming pools.

Do not use on natural stone, cement-based substrates, rubber, plastic and bituminous components or materials that weep oils, solvents and plasticizers. It is recommended that a test be carried out before application on sensitive metal surfaces such as copper, silver and relevant alloys. In the realisation of joints subject to abrasion. For façades.

Instructions for use

- Preparation of substrates
The sides of the joints to be sealed must be perfectly dry, clean and free from any traces of grease, dust or rust. Remove all flaky or loose parts and carefully remove rust from metals. When preparing visible joints, and in order to achieve a clean sealing line, the user should cover the edges with protective masking using normal adhesive tape.
- Preparation
Silicone is ready-to-use. After cutting the conical nozzle of the cartridge, cut the spout at an angle of 45° to suit the width of the seal to be realized and screw it onto the cartridge. Then insert the tube of silicone into the appropriate manual or pneumatic applicator gun, start sealant extrusion and fill the joint.
- Application
Areas close to joints must be protected with masking tape to prevent substrates from being contaminated and to ensure even sealing.

Remove masking tape immediately after smoothing the sealant. Make sure the silicone has been compacted deep into the joints to ensure optimum adhesion. To achieve a perfect finish, pass a metal or plastic spreader soaked in soapy water over the surface in one, continual movement if possible. For long-lasting sealing, capable of withstanding expansion and contraction stress, the following conditions are necessary:

1. the joint is applied so that movement will not exceed 25% of joint width
2. the ratio between width and sealant depth is between 1 and 2
3. the sealant adheres only to the sides of the joint and not to the substrate. Use Joint polyethylene foam sub-joint layer to adapt depth and prevent adhesion to the surface.

- Cleaning
Residual traces of sealant can be removed with common solvents such as toluene or petrol. Once hardened Silicone can only be removed by mechanical means.

Special notes

- Do not use in completely closed areas as the product will polymerise in atmospheric humidity.
- Brush the joint within 5 minutes after application to ensure the best contact between sealant and substrate.
- A base coat is normally not necessary. Specific substrates (porous or made of plastic materials) may require the use of an adhesion promoter to ensure maximum adhesion. This product is recommended for all situations at risk from dust.
- Silicone is non-paintable.

Certificates and marks



* Émission dans l'air intérieur Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

Abstract

Elastic and waterproof sealing of expansion-deformation joints with eco-friendly, silicone, acetic, anti-mould organic sealant with a high level of elasticity and GreenBuilding Rating® 3, CE-marked and compliant with the performance requirements indicated in Standard EN 15651, part 1, 2 and 3, such as Silicone by Kerakoll Spa. The joint must be clean, dry, free from moisture rising and prepared with a suitable polyethylene foam sub-joint layer such as Joint, to be inserted at a depth of between $\frac{2}{3}$ of the joint width and its entire width. One cartridge will cover ≈ 3 linear metres for joints with a width and depth of 1 cm.

Technical Data compliant with Kerakoll Quality Standard

Appearance	transparent thixotropic paste	
Specific weight	$\approx 1.01 \text{ kg/dm}^3$	
Chemical nature	acetoxy cross-linked silicone sealant	
Shelf life	≈ 24 months in the original packaging	
Warning	Protect from frost, avoid direct exposure to sunlight and sources of heat	
Pack	310 ml cartridge	
Maximum movement allowed	$\leq 25\%$	ISO 11600
Joint minimum width	$\geq 6 \text{ mm}$	
Joint max. width	$\leq 25 \text{ mm}$	
W/D ratio sealing cross-section	$> 1 / < 2$	
Temperature range for application	from $+5 \text{ }^\circ\text{C}$ to $+40 \text{ }^\circ\text{C}$	
Skinning time	$\geq 20 \text{ min.}$	
Cross linking	$\approx 2 \text{ mm} / 24 \text{ hrs}$	
Shrinkage	$\leq 15\%$	ISO 10563
Coverage	see approximate coverage table	

Values taken at $+23 \text{ }^\circ\text{C}$, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site, i.e.temperature, ventilation and absorbcency level of the substrate and of the materials laid.

Coverage table**Linear metres of joints sealable with one 310 ml cartridge of Silicone**

Depth	Width				
	6 mm	8 mm	10 mm	15 mm	20 mm
5 mm	≈ 10.4 m	≈ 8 m	≈ 6.2 m	–	–
7 mm	–	≈ 5.6 m	≈ 4.4 m	≈ 3 m	–
10 mm	–	–	≈ 3 m	≈ 2.1 m	≈ 1.6 m
15 mm	–	–	–	≈ 1.4 m	≈ 1.1 m
20 mm	–	–	–	≈ 1.1 m	≈ 0.8 m

If an estimated coverage value has not been given, it means the joint width/depth ratio is outside the specified limits and the joint cannot be sealed.

Performance**VOC Indoor Air Quality (IAQ) - Volatile organic compound emissions**

Conformity	EC 1 GEV-Emicode	GEV certified 9347/11.01.02
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HIGH-TECH

Shore A Hardness	18	ISO 868
Elastic modulus	≈ 0.38 N/mm ²	ISO 8339
Ultimate elongation (%)	250	ISO 8339
Resistance to atmospheric agents	Good	
Resistance to ageing	Good	
Resistance to UV rays	Good	ISO 4892
Application temperature range	from -40 °C to +100 °C	
Classification EN 15651-1	F-EXT-INT-CC	
Classification EN 15651-2	G-CC	
Classification EN 15651-3	S	

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site, i.e. temperature, ventilation and absorbency level of the substrate and of the materials laid.

Warning

- Product for professional use
- abide by any standards and national regulations
- use at temperatures between +5 °C and +40 °C
- when Silicone is used on absorbent substrates such as ceramic, marble, granite and other natural stone coverings, a rim may be left around the edge of the joint. Test prior to application
- uncured Silicone releases acetic acid which irritates the eyes and skin. Rinse thoroughly with water in case of contact
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll Worldwide Global Service +39 0536 811 516 - globalservice@kerakoll.com



The Rating classifications refer to the GreenBuilding Rating® Manual 2013. This information was last updated in November 2019 (ref. GBR Data Report - 12.19); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see www.kerakoll.com. KERAKOLL SpA shall therefore be liable for the validity, accuracy and updating of information provided only when taken directly from its institutional website. The technical data sheet given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building yards and the execution of the work, this information represents general indications that do not bind Kerakoll in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.