

TECHNICAL DATA SHEET - MAXISIL "N" NATURAL STONE SILICONE SEALANT

DESCRIPTION - MAXISIL "N" NATURAL STONE

Non – Staining Silicone Sealant for Natural Stone e.g. Granite and Marble

- Is a high-performance one-component silicone sealant
- Is based on a neutral cross-linking system
- Vulcanizes at room temperature (RTV)
- Best long, life reliability – stays rubbery from - 40°C to +180°C without tearing,
- Cracking, drying or becoming brittle.
- Higher tear resistance.

FIELDS OF APPLICATION - EXAMPLES

Maxisil N Natural Stone does not stain natural stone. e.g. granite and marble and is designed for:

- Sealing medium movement and connection joints of natural stone façades
- The natural stone flooring, bathroom and kitchen sector
- Sealing other natural stone building components
- Interior / exterior use



Maxisil N Natural Stone guarantees that there is no danger of migration of softeners or other components into the edges of the stone, however, when combined with commercially available standard sealing materials, the combination can lead to staining of the edges. This also applies to sandstone, granite, aggregate and concrete.

ADVANTAGES

- Designed for natural stone applications (In contrast to conventional sealants, Maxisil N natural stone does not stain natural stone)
- Fast curing and short tack free time
- Good tooling and smoothing properties
- Very good adhesion and compatibility, especially to metals (non-corrosive) and various paint systems
- Primerless adhesion to many substrates/surfaces
- Excellent ability to withstand weather, resistance to ageing, UV-radiation, chemicals and very good temperature resistance
- High tensile strength and high shore-A-hardness ensure a high notched impact value (suitable for medium expansion joints in the flooring sector)
- Ready-to-use
- Low odour
- Contains no solvents, formaldehyde, CFC, PCB, PCP
- Equipped with fungicides
- Huge range of colours in stock - special colours available on request

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1. TECHNICAL DATA

Viscosity	non-sag and pasty
Density at 23 0C, 50 % RH	~ 1.04 g/cm ³ ~ 1.22 g/cm ³
Shore-A-hardness	~ 35 ~ 38
Temperature resistance	- 40 to + 180 0C - 40 to + 180 0C
Tooling temperature	+ 5 to + 35 0C + 5 to + 35 0C
Skin-forming time at 23 0C, 50 % RH	~5 min. ~5 min.
Curing in 24 hours at 23 0C, 50 % RH	~3 mm ~3 mm
Tensile strength	~1.0N/mm ² ~1.0N/mm ²
Tensile elongation	~200 % ~390%
Modulus at 100 % elongation	~0.55 N/mm ² ~0.48 N/mm ²
Movement capability	~20% ~20%
Shelf - life at 23 0C, 50 % RH	
Cartridge/sachet: 12 months	
Pail/drum: 6 months	

This technical data is not intended for use in preparing specifications. Please contact ROBERTS DESIGNS AUSTRALIA before writing specifications.

2. INSTRUCTIONS FOR USE

2.1. SURFACE PREPARATION

Compatibility: Paints, lacquers, plastics and any other coatings must be compatible to the sealant.

Cleaning: Clean all joints/substrates, remove all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants, glazing compound, protective coatings (e.g. bituminous coatings) and other substances which can affect adhesion. The joint edges must be firm.

Cleaners for porous substrates: They should be cleaned with stiff-bristled brush, rubbed down or sandblasted.

Cleaners for non-porous substrates: Cleaned with Maxisil N Ceramic Cleaner, methylated spirit or other cleaners with an acetone or isopropanol basis. Use a clean, lint free, cotton cloth.

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2.2 BACK-UP FOAM AND TAPE

Back-up foam should be inserted in order to establish the correct depth of the joint and to avoid adhesion to the bottom of the joint.

Indoor use: PUR (polyurethane) back-up foam

Outdoor use: PE (polyethylene) back-up foam as cells are closed and water repellent

Shallow joints: PE back-up tape

2.3. PRIMER SCHEDULE

	SUBSTRATES	RECOMMENDED PRIMER
Concrete, Masonry, Natural stone	Concrete, porous concrete, fibre-reinforced cement	1215
	Mortar	1215
	Brick	1215
	Plaster	1215
	Sandstone	102
	Marble, granite and all other kinds of natural stone	+ /1216
	Artificial stone	+ /1216
Glass, Ceramics, porcelain	Glass	+
	Glass, reflective	+
	Porcelaine coated materials	+
	Ceramic tiles, glazed	+
	Ceramic tiles unglazed	+
	Mirror glass	Mirror Adhesives
	Enameled/vitrified surfaces	+
Metals	Aluminium	+
	Aluminium, anodized	+
	Aluminium, lacquered	+
	Aluminium, fluoro-carbon coating	1217/T
	Chrone	+ /1216

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	Brass	+
	Iron, red lead painted	+
	Stainless steel	+/1216
	Lead	+
	Steel, galvanized	+
	Zinc	+
	Copper	+
Plastics	ABS	T
	Acrylic glass, Perspex®, melamine-formaldehyde resin	Use Adhesive for plastics
	Epoxide	T
	Formica®, Respoal®, melamine-formaldehyde resin	1216
	PVC, unplasticized	1217
	PVC, plasticized	1217
	Polyacrylate (sanitary tubs etc.)	+ / 1217
	Polycarbonate	Use Adhesive for plastics
	Polyethylene, PE	-
	Polyamide	+/T
	Polystyrene	+/T
Wood	Polypropylene, PP	T
	Polyester	+/T
	Wood, painted (solvent - based)	+
	Wood, untreated	+
	Wood, varnished (solvent/water based)	+

Symbols used for Recommended Primer

- Not recommended
- + Good primerless adhesion
- T Test recommended

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2.4 ADHESION AND PRIMING / PRIMER SCHEDULE

Primerless adhesion Primer 1216

Africa Red	Multicolor	Ararat Rosa polished
Balmoral	Rosa Porrino	Calculta
Baltic Brown	Sarrizio Silver	Carrara White
Bianco Bahia	Solnhofer	Daino Chiaro
Bianco Sando	Spluga Verde	Daino Suro
Bianco Silver	Yuparana	Rosso Verona
Bianco Tarin polished		Statuario
Bohus Grey		
Granit		
Jura		
Cashmere White		
Labrador Dark		

2.5 ADHESION AND PRIMING

Application Primer: The primer must be applied in a thin even layer on the flanks of the joint. Primers - do not spread primers on the surface of the natural stone: Primers must be applied carefully, because stains/spots might appear if primers are spread or spattered on the surface of some natural stones.

Permanent water/wet stress: For natural stone joints, which are subject to permanent water/wet stress e.g. in bathrooms, showers, we recommend you apply always Primer 1216 on the flanks of the joint.

Sandstone: For sandstone joints, we recommend you apply always Primer 102 after the joints have been cleaned with a stiff-bristled brush.

Other natural stones: Please make your own tests or consult our technical department.

High demands on adhesion: Extreme fluctuations in temperature, tensile or shear forces and permanent water cause high stress on adhesion. In such cases, it is advisable to apply primer according to the recommendations of our technical department.

2.6 APPLICATION SEALANT

Avoid direct contact between sealant and plasticiser - emitting products: Direct contact between sealant and the following plasticiser - emitting products should be avoided because these products may cause yellowing of lightcoloured silicone sealants e.g. butyl rubber, ethylenepropylenedienemonomerpolymer (EPDM), neoprene and bituminous coatings and products.

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Application sealant: Sealant must be applied after the primer has dried for at least 15 minutes. Avoid air entrapment: The joint must be completely filled to avoid air entrapment and to make joint leak-proof.

Tooling/smoothing: The sealant must be smoothly tooled before a skin forms in order to ensure integral contact with joint flanks. Our smoother shows an excellent tuning to our sealant and is particularly kind to the skin.

- **Tooling** - do not spread the sealant on the surface of natural stone: The sealant must be applied in the joints and not on the surface of the natural stone, because it is difficult to remove the sealant once it has seeps into the pores of the natural stone, especially in the pores of unpolished natural stones.
- **Smoothing** - apply Smoothtex: Some natural stones are sensitive to conventional smoothers, such as washing-up liquids. Stains /spots are caused often on the surface of the natural stone. Therefore we recommend that you do not use conventional smoothers, but use instead Smoothtex undiluted.

Masking tapes: Masking tapes must be removed immediately after tooling

Silicone sealant and overprinting: The paint film will not stretch with the extension of the silicone sealant. The paint film may crack or peel; the silicone sealant may be damaged.

Non-ferrous metals: Trapped-splitting products may react with non-ferrous metals (e.g. copper and brass). Splitting products must evaporate easily.

3. TECHNICAL SERVICE AND CONSULTING

Our technical department provides access to laboratory facilities and application support.

4. COLOUR

Please contact your local distributor for a list of available colours.

5. PACKAGING

Unit	310 g cartridge	400 ml sachet
Units per carton	20	20
Units per pallet	1200	900

Other packaging on request

Primer: 100ml, 250ml, 500ml or 1000ml aluminium bottle

Smoother: 250ml, 1000ml, 5 L, 10 L, 60 L and 200 L

6. SAFETY

Please refer to the products material safety data sheet.

7. DISPOSAL

Disposal should be made in accordance with federal, state and local regulations.

8. WARRANTY

All information, data, direction or advice presented by ROBERTS DESIGNS is believed to be accurate and reliable, but do not absolve the user from carefully checking all supplies immediately on receipt. However, as ROBERTS DESIGNS has no control over the uses to which its products may be put or the conditions of use, it is the users responsibility to determine suitability of use e.g. by performing own tests.

ROBERTS DESIGNS makes no warranties concerning the fitness or suitability of its products for a particular use. Statements concerning possible or suggested uses of the materials described herein cannot be seen as warranty for your application. ROBERTS DESIGNS warrants only that its products will meet its specifications. We reserve the right to alter product constants within the scope of technical progress or new developments.

Of course, ROBERTS DESIGNS can perform tests and deliver a special written recommendation for a specific application on request. If the application in which the products are used requires governmental approval or clearance, the user must obtain it.

In the event of a claim due to failure of our products, ROBERTS DESIGNS sole liability is limited to provide sufficient product for replacement. ROBERTS DESIGNS will not be liable for any labour or any other costs associated with the failure.

The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position.

9. EDITION

01/10/2011

This edition becomes invalid in the event of a republication

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