

## Maleki-LL 100

### Silicate impregnation

Item-No.: 1810

Innovative silicate impregnation and subsoil consolidation. Protects against penetrating moisture in masonry and concrete.



### Technical data

<b>Basis</b>	Inorganic	<b>Density</b>	1.1 g/cm <sup>3</sup>
<b>pH-value</b>	11.4	<b>Color</b>	transparent
<b>Processing temperature</b>	min. +5 °C max. +55 °C	<b>Viscosity</b>	< 100 mPas
<b>Organic solvents</b>	none	<b>Consumption</b>	Depending on substrate
		Concrete / Screed	150 – 400 g per m <sup>2</sup>
		Self-leveling compounds	15 – 30 g per m <sup>2</sup>
<b>Maximum admitted air humidity</b>	max. 80 % r.H.	<b>Necessary number of applications:</b>	1 - 2 applications with a time span of 10 min between

### Properties

- Silicate-Technology
- environmentally friendly
- very low emission EMICODE EC 1<sup>PLUS</sup>
- water vapor permeable
- for waterproofing against salt water, acid, sewage water and other chemicals
- solidifies the substrate und increases the chemical resistance due to durable silicate structures
- reduces surface abrasion
- protection against penetrating water in case of cracking
- odorless
- prevents algae growth on mineral substrates
- protection against efflorescence

### Range of usage

- for indoor and outdoor use
- for impregnation of porous, absorbent and sandy surfaces like concrete, screed, masonry and other cementitious substrates
- for preparation of hydrophobic surfaces
- permanent protection against ground water, salt water and strong chemical stress
- as sealant against penetrating moisture on walls
- suitable in areas with high mechanical and chemical stress

### Product systems

- Industrial Flooring System
- Agriculture
- General use: Hydrophobic impregnation for Maleki products

### Preparation of substrate

The substrate has to be absorbent, free of dust, loose parts, oils, fats and other impurities. Chalk and sandy components must be removed before the solidification using an efficient industrial vacuum cleaner. Coatings and/or render should be stripped off. Concrete and other cementitious substrates must have a minimum age of at least 14 days.

### Application

#### Concrete and screed

Apply Maleki-LL 100 undiluted with brush, roller or spray up to saturation of the dry underground. Mix in a ratio of 1:1 with water on highly absorbent and fine pored substrates. Diluted material should be applied twice wet on wet. The surface should not be dried off between coatings.

Surpluses are to be avoided. Protect the treated areas from rain and condensation at least 24 hours during which the solidified surface may not be coated or treated. Cover the freshly applied surface air-permeably. After 7 days, an air-tight cover is possible. Dry for at least 6 hours and avoid temperatures below the dew-point.

**Attention:** When Maleki-DW 100 is applied in combination with Maleki-LL 100, Maleki-DW 100 has to be applied first. After sufficient drying (surface should not be wet) the subsequent coating with Maleki-LL 100 has to be applied. For optimal results, both coatings have to be applied within one day. Furthermore it has to be attended that due to the combination of both products the treatment with Maleki-LL 100 has to be taken into account with the consumption of Maleki-DW 100. The desired quantity of Maleki-LL 100 is subtracted from the quantity of Maleki-DW 100 so that the maximum quantity is not exceeded. Depending on the substrate, an excess of one of these products could lead to an optical impairment of the surface. For further information about application of Maleki-LL 100 please refer to the technical data sheet of Maleki-LL 100.

# Technical data sheet

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## Self-leveling compounds

On fine-grained and dense substrates like the self-leveling compounds of the IFS product line the surface has to be prewetted with clear water before application of Maleki-LL 100. The water is distributed with a microfiber mop. Following Maleki-LL 100 is applied wet in wet with a low-pressure sprayer, immediately distributed uniformly in one direction with a microfiber mop so that the complete surface is wetted with Maleki-LL 100. In order to ensure a uniform and stripe-free application prevent the microfiber mop from running dry. The formation of puddles and large supernatants should be avoided.

## Tools and cleaning

Brush, wide brush, paint roller or spraying device

All equipment should be washed clean and dried before and after application.

## Lieferung und Lagerung

5 or 30 liter canisters. Container available on request.

Original packing is storable for 12 months in dry and controlled temperate areas (not below 0 °C, recommended 10 – 25 °C). Reseal opened containers immediately and use within a very short time.

## Associated products

Maleki-DW 100           Item-No. 1815  
Maleki-LL 100           Item-No. 1810

## Safety notes

Maleki-LL 100 is an alkaline liquid.

Please refer to the Material Safety Data Sheet which can be requested on [www.malekigmbh.com](http://www.malekigmbh.com) for further information on safety during transportation, storage, handling and disposal. Follow instructions on the packaging.

## Notes

In case of decorative surfaces a small sample should be created on an uncritical position at least one day before application. Do not apply on non-absorbent surfaces.

Please protect glasses, glass, tiles, clinker and similar from splashing material! Aluminum may not come in contact with the material. Impurities have to be washed off immediately with water. With each interruption of work the tools have to be cleaned.

It is important to ensure that no Maleki-LL 100 reaches the surface prior to application. For example, by dripping work tools or footwear under which Maleki-LL 100 has collected. Otherwise, efflorescence can occur on pre-wetted areas. Also clean footwear should be worn during application to avoid contamination on fresh applied surface.

The content of this technical data sheet corresponds to the latest development and our applications experience. All information is based on ideal conditions and therefore does not apply for every application purpose. Due to different materials, substrates and different actual site conditions no warranty is given for the customer's application. In particular, we assume no liability based on this information or any verbal statements. The only exception is when we can be blamed for the case of intent or gross negligence. In that case the customer has to prove that he has transmitted all required information completely and in a timely

manner for a proper and promising evaluation by Maleki GmbH. Any further details regarding the application of our products have to be confirmed in writing by Maleki GmbH. The customer must test the product's suitability for the intended application and purpose. We reserve the right to change the product specifications due to the ongoing development. Apart from that our general terms and conditions are valid. This data sheet supersedes all earlier technical data on this product. The technical data sheet can be requested on [www.malekigmbh.com](http://www.malekigmbh.com).



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No. 1810 EN

**EN 1504-2:2004**  
**Surface protection product – Hydrophobic impregnation**  
**EN 1504-2: ZA.1a**  
Innovative silicate impregnation and subsoil consolidation protects against penetrating moisture in masonry and concrete.

Penetration depth	Class I: < 10 mm
Water absorption und alkaline resistance:	Absorption coefficient < 7,5% compared with untreated sample < 10% in alkaline solution
Drying speed:	Class II: > 10 mm
Loss of mass after freeze-thaw conditions:	Loss of mass 20 cycles later as non-impregnated sample
Dangerous substances:	None