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# Maleki-DW 100

## Silicate based densifier

Innovative silicate densifier. Protects against penetrating moisture and chemical stress.



## **Technical data**

Basis	Inorganic	Density	1.1 g/cm <sup>3</sup>
pH-value	11.4	Color	transparent
Processing temperature Maximum admitted air humidity	min. +5 °C max. +55 °C max. 80 % r.H.	Viskosity	< 100 mPas
Organic solvents	none	Necessary number of applications:	min. of 2 applications
Consumption (depending on substrate)			
Concrete / Screed	400 – 800 g per m²	Self-leveling (acid-resistant)**	150 – 200 g per m²
Self-leveling / flowing screed	50 – 80 g per m²	Maleki-IFS 500	
Maleki-BV 310		Lithokor Terrazzo***	Up to 150 g per m²
Maleki-FEC 370 Maleki-IFS 400			
Maleki-IFS 500			

- Use as basic final coat / industrial floor.
- \*\* Use in the product systems "Agriculture" or "Acid protection"
- \*\*\* Surface treatment of Lithokor Terrazzo during grinding process. Application quantity depends on the surface condition

#### **Properties**

- Silicate-Technology
- · environmentally friendly
- very low emission EMICODE EC 1PLUS
- water vapor permeable
- solidifies the substrate und increases the chemical resistance
- reduces surface abrasion
- · protection against penetrating water in case of cracking
- odorless
- protection against efflorescence

## Range of usage

- for indoor and outdoor use
- solidifies porous cementitious substrates
- permanent protection against ground water, salt water and strong chemical stress
- as sealant against penetrating moisture on walls
- protection against carbonation
- for protection and restoration of drinking water reservoirs, sewage plants and wastewater pipes
- suitable for use in food processing companies
- suitable for concrete, facades, walls, cellars, horizontal barriers, pipes and all cementitious substrates
- for factory-set protection of concrete products and parts
- applicable for subsequent paintings

## **Product systems**

- Industrial Flooring System
- Sewer renovation
- Interior basement waterproofing

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- Lithokor Terrazzo
- Agriculture
- Maleki-SlagSil
- Acid protection
- General use: 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**

Maleki-DW 100 is to be sprayed undiluted on substrates or brushed/rolled on surfaces to cover all areas. Maleki-DW 100 should be applied at least twice (wet-on-wet). Every application has to penetrate completely into the substrate. On absorbent substrates like unpolished concrete or screed the application should be repeated until the substrate is saturated, with any surpluses cleaned up.

The surface must be protected against rain and moisture for 24 hours after application.

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Cover the freshly applied surface air-permeably. After 7 days, an air-tight cover is possible. In case of new concrete surfaces or other new cementitious materials the above-mentioned minimum age has to be observed. The recommended consumption volume should not be exceeded.

#### Self-leveling compounds

On the following Maleki products (System Industrial floor) the surface has to be prewetted with clear water before application of Maleki-DW 100:

- Maleki-BV 310
- Maleki-FEC 370
- Maleki-IFS 400 or Maleki-IFS 500

Pre-wetting serves to avoid application marks and thus improves the visual appearance. The water is distributed with a microfiber mop. Following Maleki-DW 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-DW 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. Maleki-DW 100 has to be applied wet in wet in two thin layers to provide a sufficient protection. As soon as the last application with Maleki-DW 100 is completely dried (approx. 2 hours), the surface can be polished if required. Further information is available on request.

#### Self-leveling compounds - acid-resistant

When using Maleki-IFS 500 in the product systems "Agriculture" and "Acid protection", it is not necessary to optimise the visual appearance by pre-wetting the substrate, as the protective function of Maleki-DW 100 is the main focus here. The required application quantity per square meter increases to the specified quantity (see table).

#### **Lithokor Terrazzo**

During the grinding process of Terrazzo surfaces (Lithokor Terrazzo), Maleki-DW 100 is used for surface finishing. The application quantity must be adapted to the existing conditions. The maximum value can also be found in the table.

## **Combination with other products**

For use on self-leveling compounds or flowing screed (see previous sections), Maleki-DW 100 can be combined with other impregnation or sealing products depending on the application. The respective application cases can be found in the respective technical data sheets. The following points must be taken into account for a combined application:

#### Maleki-LL 100

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. For further information about application of Maleki-LL 100 please refer to the respective technical data sheet.

#### Maleki-VS 930

When Maleki-DW 100 is applied in combination with Maleki-VS 930, Maleki-DW 100 must also be applied first.

The substrate must be completely dry before applying Maleki-VS 930. Depending on the prevailing ambient conditions, it may be necessary to wait 24 hours before applying the final coat of Maleki-VS 930. For further information about application of Maleki-VS 930 please refer to the respective technical data sheet.

#### Concrete protection

For factory-set protection of paving stones, concrete slabs and concrete parts Maleki-DW 100 can be used directly in the production process. Therefore use 2.0-2.5 liter in  $1\text{m}^3$  of an adjusted concrete formulation. To ensure an optimal distribution of the silicate ingredients, Maleki DW 100 is added to the mixing water. Please refer to the Maleki-SlagSil brochure for information about the adjustment of the concrete formulation and about the required amount of Maleki-DW 100. The brochure can be requested on <a href="https://www.malekigmbh.com">www.malekigmbh.com</a>.

## **Tools and cleaning**

Brush, wide brush, paint roller or spraying device All equipment should be washed clean and dried before and after application.

## Packaging and shelf-life

 ${\bf 5}$  or  ${\bf 30}$  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 Maleki-VS 930 Item-No. 1828

#### Safety notes

Maleki-DW 100 is an alkaline liquid.

Please refer to the Material Safety Data Sheet which can be requested on <a href="www.malekigmbh.com">www.malekigmbh.com</a> for further information on safety during transportation, storage, handling and disposal. Follow instructions on the packaging.

## Relevant regulations and fact sheets

When applying Maleki-DW 100 the following regulations and fact sheets must generally be observed, depending on the intended application:

Maleki-SlagSil brochure

Lithokor Grinding Instruction Terrazzo (GM Terrazzo)

System Installation Manual - Maleki-Industrial Flooring System

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#### **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-DW 100 reaches the surface prior to application. For example, by dripping work tools or footwear under which Maleki-DW 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.



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No. 1815 EN

## EN 1504-2:2004 Surface protection product – Impregnation EN 1504-2: ZA.1b

Innovative silicate sealant and subsoil consolidation protects against penetrating moisture and chemical stress.

Penetration depth	Class I: < 10 mm	
Water absorption und alkaline resistance:	Absorption coefficient < 7,5% compared with untreated sample < 10% in alkaline solution	
Chemical resistance:	No visible defects	
Reaction to fire:	A1	
Drying speed:	Class II: > 10 mm	
Dangerous substances:	None	