StenSilan WO



1. Product Profile

StenSilan WO is a single component, silane based, water and oil impermeability and impregnation material. **StenSilan WO** is chemically bound to mineral surfaces like natural stone, concrete and make these surfaces hydrophobic (water repellent) and oleophobic (oil repellent).

Surfaces processed by StenSilan WO do not get wet and stained with water, oil and many similar liquids. It is a very low viscosity transparent liquid; it has high surface covering and diffusion properties. It does not form a separate layer on concrete, instead it provides concrete to gain hydrophobic and oleophobic properties. Consequently, hydrophobic and oleophobic properties remain until the upper layers of the concrete is completely worn out and, unlike member forming materials, there is no danger of coating getting peeled, parted, brittle or slippery with time.

StenSilan WO is available in 10 liter packages.

2. Uses

StenSilan WO prevents all types of gas permeable, breathing surfaces such as mineral, concrete, natural stone, ceramic and gas concrete to absorb water and oil. By chemically binding to these materials and diffusing inside the surface, it forms hydrophobic and oleophobic structures on micro crack surfaces and does not allow liquids to enter the structure. Liquids left on the surface can be easily cleaned by wiping and leaves no stains.

Since StenSilan WO does not clog capillary canals, it does not impede the structure to breath and permeate gases. It considerably prolongs the coating life by preventing water absorbed in micro cracks to freeze, expand and deform the surface. Since heat transmission coefficient of the water absorbing materials will be increased, it also indirectly contributes to heat isolation.

Natural appearance of the surfaces does not change when StenSilan WO is applied; it does not form a hydrophobic coating that may separate from the surface. StenSilan WO is used in protection of all kinds of mineral surfaces exposed to atmospheric conditions and wetting effect of rain water or water from other sources due to these properties. It is ideal for protection of floors at workshops, repair shops and factories where staining and deteriorating contaminants for concrete are present.

Hydrophobic and Oleophobic Surface Impregnation and Protection Material

Highlights

- Silane based and single component
- Low viscosity transparent fluid
- Allows breathing of surface
- Keeps the natural appearance of surface
- Very high surface covering and diffusion
- Impregnates the surface; no film layer
- Prevents salt buildup at surfaces that are repeatedly wetted and dried
- Resistant to UV radiation
- Sprayable

StenSilan WO maintains its hydrophobic and oleophobic properties for 5-10 years depending on the penetration depth and surface abrasion. At the end of these periods StenSilan WO must be reapplied.

3. Application

Surface cleaning, removing dust and loose parts, and repairing the cracks are required before the application. Contaminants such as fuel, oil, chemicals must be removed. It is advised to make a preliminary test prior to full application and noted exact consumption. To test; 24 hours after application drop some pollutants such as water, coffee, olive oil and leave it for 2 hours on substrate and clean by wiping. By correct application on appropriate substrates pollutants must leave no stain. Unlike other water repellents this product does not have a beading effect, so it is important that not to come to a determination by beading effect of pollutants on substrates.

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Application can be carried out on moist or dry surfaces. However, it is required to protect the material from water contact and rain until the material applied cures. StenSilan WO is applied via brush and roller. It is sufficient if the surface is wetted with StenSilan WO during the application. The consumption is 4 to 20 m²/l depending on the surface properties and desired protection level. Applying in excess of StenSilan WO may result a wet look. On highly absorbent substrates a second application might be necessary. In such circumstances first layer must be still wet prior to subsequent application. Depth of the layer with hydrophobic and oleophobic properties can be increased by using more material but this might change the visual aspects of the surface slightly.

Opened packages must be consumed as soon as possible. If the whole package will not be used, sufficient amount must be taken to another container and the container must be closed again tightly. Tools used must be cleaned at the end of the job. Since the material may adhere on all materials including glass, it must not smear on undesired places. In indoors applications, application must be carried out after the goods and plants are covered. Turbid and settled, partially cured materials must not be used.

4. Cleaning

Mixing and application tools must be cleaned with plenty of water right after being used.

5. Safety

Applicators and supervisors must read Material Safety Data Sheet (MSDS) carefully and observe the considerations written therein. Emptied packages must be handled in compliance with relevant regulations and laws.

6. Storage

Storage temperature must be between 10°C and 30°C. The packages must not be exposed to direct sunlight. Stored unopened in these conditions, the shelf life is 6 months. It is inflammable. It must be stored away from open fire and sources of ignition.

7. Company Liability

The information contained in this document is based on site experience of and laboratory tests done by **Stenkim®** and meant to give general information. It is the purchaser's responsibility to ensure applicability of products to their use. All **Stenkim®** products are available in specified quality and conditions. The company accepts no liability whatsoever unless the transportation, storage, application conditions and customer use are overseen by **Stenkim®**.

Stenkim® reserves the right to update all information contained in this document without notice.

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8. Technical Data

Property	Result
Viscosity	1 cps
Density	0.82 ± 0.05 g/cm ³
Consumption	0.05 - 0.25 l/m ²
Concentration	Min 50%

Stenkim® reserves the right to make changes in the values in this table at any time.