

## 1. Product Profile

**StenSilan M PLUS** is a single component, silane based, water and oil impermeability and impregnation material for natural stone, marble and granite surfaces. **StenSilan M PLUS** is chemically bound to mineral surfaces and make these surfaces hydrophobic (water repellent) and oleophobic (oil repellent). Surfaces processed by **StenSilan M PLUS** 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 provides hydrophobic and oleophobic properties to the material it is applied on without forming a separate layer. Consequently, hydrophobic and oleophobic properties remain until the upper layers of the stone is completely worn out and, unlike member forming materials, there is no danger of coating getting peeled, parted, brittle or slippery with time.

**StenSilan M PLUS** is available in 10 liter packages.

## 2. Uses

**StenSilan M PLUS** provides long lasting protection against oleophobic staining and water penetration to a wide variety of mineral surfaces such as marble, granite, natural stone, sandstone, limestone and etc. By chemical bonding to these materials and diffusing inside the surface, it forms hydrophobic and oleophobic structures and does not allow liquids such as coffee, tea, wine, carbonated drinks, lemon, olive oil and etc. to enter the structure. Liquids left on the surface can be easily cleaned by wiping and leave no stain. **StenSilan M PLUS** is ideal for protection of floors and exteriors especially touristic facilities, restaurants, shopping malls and all trafficable and non-trafficable natural stones.

Since **StenSilan M PLUS** does not clog capillary canals, it does not impede the structure to breath and gas permeability. 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 M PLUS** is applied, but it may give a wet look effect on some kind of stones. It does not form a hydrophobic coating that may separate from the surface. **StenSilan M PLUS** is used in protection of all kinds of mineral surfaces and natural stones exposed to

## Hydrophobic and Oleophobic Surface Impregnation and Protection Material

### Highlights

- Silane based and single component
- Best for marble, granite and travertine
- Low viscosity transparent fluid
- Allows breathing of surface
- Keeps the natural appearance of surface
- Impregnates the surface; no film layer
- Resistant to UV radiation
- Sprayable

atmospheric conditions and wetting effect of rain water from other sources due to these properties.

**StenSilan M PLUS** maintains its hydrophobic and oleophobic properties for 5-20 years depending on the penetration depth and surface abrasion. At the end of these period reapplication of **StenSilan M PLUS** is advised.

## 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.

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 M PLUS** is applied via brush and roller. It is sufficient if the surface is wetted with **StenSilan M PLUS** during the application. The consumption is 4 to 20 m<sup>2</sup>/l depending on the surface properties and desired protection level. Applying in excess of **StenSilan M PLUS** 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.

## 8. Technical Data

Property	Result
Density	0.85 ± 0.05g/cm <sup>3</sup>
Consumption	0.05 - 0.25 l/m <sup>2</sup>

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