

1. Product Description

StenSilan® T is a single-component, silane-based water-repellent impregnation material for brick, tile, clay shingle, unglazed ceramics, aerated concrete, prefabricated concrete panels, floor tiles, natural stone, and similar surfaces. **StenSilan® T** is chemically bound to mineral surfaces and makes these surfaces hydrophobic (water-repellent). Surfaces processed by **StenSilan® T** do not get wet with water and do not retain water-soluble contaminants.

It is a very low viscosity transparent liquid; it has high surface covering and diffusion properties. It provides hydrophobic properties to the material it is applied on without forming a separate layer. Consequently, hydrophobic properties remain until the upper surface is completely worn out, and there is no danger of the coating peeling, separating, becoming brittle or slippery over time, as encountered in other impregnation-type materials.

2. Uses

StenSilan® T is used to protect brick, tile, clay shingle, unglazed ceramics, aerated concrete, prefabricated concrete panels, floor tiles, natural stone, and similar surfaces from staining and water penetration. **StenSilan® T** chemically bonds to these materials and diffuses inside the surface, forming a deep hydrophobic structure so the surface does not get wet or stained by water-soluble substances. The surface is protected from water-borne pollutants and can be easily cleaned with water.

Since the material does not absorb water, it is protected from surface-blemishing factors such as salt efflorescence and lime efflorescence. Since **StenSilan® T** does not cover the surface but changes its chemical structure, it does not impede the material from breathing. Although liquid water cannot pass through the surface, water vapor permeability remains at the same level as an uncoated surface.

It considerably prolongs the coating life by preventing water absorbed in micro cracks from freezing, expanding and deforming the surface. Bricks and tiles that do not absorb water conduct less heat and last longer. **StenSilan® T** maintains its hydrophobic properties for 2-5 years depending on the penetration depth and surface abrasion.

At the end of this period, reapplication of **StenSilan® T** is advised.

3. Application

Surface cleaning is 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 note the exact consumption.

Saturating the surface with the product always gives the best results; however, this is not economical on highly absorbent surfaces. On such surfaces, ensure the entire surface is wetted. 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 applied material cures. **StenSilan® T** is applied via brush, roller or spray. It is sufficient if the surface is wetted with **StenSilan® T** during the

Water Repellent Impregnation Material for Brick, Tile and Other Fired Clay Surfaces

Highlights

- Single-component, silane-based
- Low viscosity transparent fluid
- Allows the surface to breathe
- Suitable for many types of fired stone and prefabricated structures
- Very high surface covering and penetration into the material
- Impregnates the surface; creates deep hydrophobic structure without film layer
- Liquids on the surface can be easily cleaned by wiping and leave no stain
- Resistant to UV radiation, increases durability of coated surface
- Prevents salt efflorescence on absorptive surfaces during drying



application.

The consumption is 4 to 20 m²/l depending on the surface properties and desired protection level. On highly absorbent substrates and in spray applications, multiple coats may be necessary. In such circumstances first layer must be still wet prior to subsequent application.

The depth of the water-repellent layer can be increased by using more material, but this may slightly change the visual appearance of the surface. 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 to all materials including glass, it must not get onto unintended surfaces. In indoor 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

Equipment used can be cleaned with water at the end of the job.

5. Safety

Applicators and supervisors must read the Material Safety Data Sheet (SDS) carefully and follow the instructions provided. Emptied packages must be handled in compliance with relevant regulations and laws. The application must be carried out by skilled workers under supervision of experts and the applicators must use all kinds of protective equipment required for the worksite and the task such as goggles, mask and gloves.

6. Storage

Packages must not be exposed to direct sunlight. It must be stored away from open flame and sources of ignition. Storage temperature must be between 5 and 30 °C.

Under these conditions, the material will retain its properties in unopened containers for 6 months from the production date. The material is flammable. The product must be stirred thoroughly before use after prolonged storage.

7. Disclaimer

This document is provided for general information and reflects **Stenkim®**'s laboratory data and field experience at the time of publication. **Stenkim®** reserves the right to revise this information at any time without notice.

Stenkim® warrants that its products conform to the stated specifications on delivery. The buyer is responsible for determining the product's suitability for the intended application and for all conditions of transport, storage, handling, and use. **Stenkim®** accepts no liability for results obtained under conditions outside its control. **Stenkim®**'s liability under this warranty is limited to replacement of non-conforming product and excludes any consequential or indirect damages.



8. Technical Data

Property	Method	Result
Consumption		0.05-0.25 l/m ²
Density	EN ISO 2811-2	0.8 ± 0.05 g/cm ³
Shelf Life		6 months
Packaging		10 liter packages

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

