

1. Product Description

StenSilan® T is a single-component, silane-based, water-repellent impregnation agent for brick, clay roof tiles, unglazed ceramics, aerated concrete elements, prefabricated concrete panels, floor tiles, natural stone, and similar surfaces. **StenSilan® T** bonds chemically to mineral surfaces and makes these surfaces hydrophobic (water-repellent). Surfaces treated with **StenSilan® T** are not wetted by water and do not retain water-soluble contaminants.

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

2. Uses

StenSilan® T is used to protect brick, clay roof tiles, unglazed ceramics, aerated concrete elements, prefabricated concrete tiles and panels, natural stone, and similar surfaces from staining and water penetration. It chemically bonds to these materials and diffuses into the surface, making it water-repellent in depth so that it does not get wet or stained by water-soluble dirt. 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 disfiguring effects such as salt efflorescence and lime efflorescence. Since **StenSilan® T** does not cover the surface but changes its chemical structure, it does not prevent 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 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 these periods, **StenSilan® T** application must be repeated.

3. Application

3.1. Application

Surface cleaning is required before the application. Contaminants such as fuel, oil and chemicals must be removed. It is advised to perform a small test application before full application and record the 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

Solvent-Borne Water-Repellent Impregnation Material for Brick, Roof Tile and Other Fired Clay Surfaces

Highlights

- Single-component, silane-based
- Low viscosity transparent fluid
- Allows the surface to breathe
- Can be used on fired clay products such as brick, roof tile and unglazed ceramics, and on prefabricated mineral building elements
- Strong surface-covering and material-penetration properties
- Impregnates the surface; makes it water-repellent in depth without forming a film
- Liquids on the surface can be easily cleaned by wiping and leave no stain
- Resistant to UV radiation and increases the durability of the coated surface
- Prevents salt efflorescence on absorptive surfaces during drying



dries. It is applied by brush, roller or spray. It is sufficient if the surface is wetted with **StenSilan® T** during the 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, more than one coat can be applied. In this case, the second coat must be applied wet-on-wet, while the first is still wet.

The depth of the water-repellent layer can be increased by using more material, but it must be borne in mind that this may affect the appearance of the surface. Products in opened packages must be used as soon as possible. If the whole package will not be used, a sufficient amount must be transferred to another container and the package must be reclosed 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 furnishings and plants are covered. Turbid or partially cured material must not be used.

3.2. Cleaning

Equipment used can be cleaned at the end of the job with **StenSolver CL**.

4. Safety

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

5. Storage

Packages must not be exposed to direct sunlight. It must be stored away from open flames and ignition sources. 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. After prolonged storage, the product must be stirred thoroughly before use.

6. Disclaimer

This document is provided for general information and is based on **Stenkim®**'s laboratory data and field experience at the time of publication. **Stenkim®** reserves the right to revise this information without prior 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 purpose and for all conditions of transport, storage, application, 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.



7. 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.

