

## Technical Data Sheet

# Protectosil® 100 SK

**Highly effective water repellent providing an excellent beading effect**

## PRODUCT DESCRIPTION

High performance solvent-free ethoxy-functional oligomeric siloxane providing an excellent beading effect on mineral substrates, as well as outstanding water repellency.

### Typical Properties

Property	Unit	Value
<b>Appearance</b>		colorless/slightly turbid liquid
<b>Active Content</b>	%	~100
<b>Chemical Name</b>		oligomeric alkylalkoxysiloxane
<b>Density</b> DIN 51757 (@20 °C)	g/cm <sup>3</sup>	1.0-1.1
<b>Viscosity</b> DIN 53015	mPa·s	40-100

The data represents typical values (no product specification)

## TYPICAL APPLICATIONS

Solvent-based masonry water repellents formulated from Protectosil® 100 SK are mainly used for:

- Impregnation of facades
- waterproofing of porous mineral building materials such as concrete, brick and masonry

## BENEFITS & ADVANTAGES

Protectosil® 100 SK

- is suited for the water repellent impregnation of absorbent, mineral substrates
- provides an excellent water beading effect
- provides high penetration depth (depending on active content)
- shows very high reactivity and resistance against alkali
- gives invisible and water vapor permeable protection
- reduces significantly the uptake of water

- reduces the uptake of water-soluble pollutants (e.g. chlorides)
- seals hairline cracks up to 0.3 mm
- can be applied at full strength or after dilution with suitable solvents

## DOSAGE

Protectosil® 100 SK is normally applied as a solvent-based dilution. Depending on the application the active content may vary from 5 – 50 wt%.

To determine the exact amount to be applied and to check whether previous or following treatments are compatible with the Protectosil® 100 SK treatment it is recommended to do a small test patch first.

Please note: it may take up between 7 to 10 days for the treated system to develop its full water repellent performance. This reaction can be accelerated by addition of an organotin catalyst.

## HANDLING & PROCESSING

As solvent we recommend water-free aliphatic hydrocarbons with a boiling range from 130 to 200°C and evaporation indices of >90 (DIN 53170) or ethanol.

In case the product shows sedimentation it should be thoroughly stirred before use.

All surfaces must be thoroughly cleaned and air-dried before treatment. Acceptable surface cleaning methods include sandblasting, water blasting and chemical cleaners.

During application the outside temperature as well as substrate temperature should range between +5 and +40 °C. Protectosil® 100 SK should not be applied if there is strong wind or if it is raining.

Protectosil® 100 SK should be applied using low pressure pumping equipment with a wet fan type spray nozzle. Alternate methods include power roller or by brush. Do not apply to a wet or damp substrate. On vertical surfaces Protectosil® 100 SK should be applied in a flooding application, so that the material runs down 6 to 8 inches (15-20 cm) below the spray pattern. On horizontal surfaces the liquid material should pond on the surface at least 5 seconds before being absorbed. All equipment and containers must be clean and dry. After use, they can be cleaned with any organic

solvent (methylated spirit or petrol). The material must not be atomized.

In order to reach the recommended consumption rates it may be necessary to apply the material using multiple application steps. It is recommended to let the surface dry between the application steps.

Non-absorbent substrates such as window frames, window sills, plastic fittings, window glass, etc., should be covered before application. Surfaces which accidentally come into contact with Protectosil® 100 SK can be cleaned with alcohol (spirit) or aqueous soap solution. Cleaning should be carried out as quickly as possible (within a few hours) otherwise formation of a silicone resin film can make cleaning more difficult. Silicone resin films are best removed using ethanol (or spirit). Plant life should be protected from overspray.

## SAFETY

Before considering the use of Protectosil® products please read its Safety Data Sheet (SDS) thoroughly for safety and toxicological data as well as for information on proper transportation, storage and use.

The Safety Data Sheet is available on our website <https://silanes.evonik.com/en> or upon request from your local representative, customer service or from Evonik Operations GmbH, Product Safety Department, E-MAIL [sds-hu@evonik.com](mailto:sds-hu@evonik.com).

## PACKAGING

Protectosil® 100 SK is supplied in 190 l drums.

## STORAGE

Protectosil® 100 SK may be stored in closed containers for 12 months provided moisture is excluded and storage temperature does not exceed 35 °C.

## SHELF LIFE

Protectosil® 100 SK has a shelf life of at least 12 months if stored in originally sealed containers and storage temperature does not exceed 35 °C.

## Registration Listings

Registry	Status
Australia (AIC)	Information on Request
Canada (DSL)	Information on Request
China (IECSC)	Information on Request
European Union (EINECS/ELINCS)	Yes
EU (REACH)	Yes
Taiwan (TCSI)	Yes
United States of America (TSCA)	Yes

For further information  
visit our  
Customer Portal



World of Protectosil®

### Disclaimer

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third-party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

### Evonik Operations GmbH

Silanes  
Rodenbacher Chaussee 4  
63457 Hanau-Wolfgang  
Germany  
[evonik.click/silanes](https://www.evonik.click/silanes)