

Technical Data Sheet

Protectosil® SC CONCENTRATE

Aqueous formulation based on silane chemistry for an easy-to-clean treatment of porous mineral surfaces.

PRODUCT DESCRIPTION

Protectosil® SC CONCENTRATE is suited for an easy-to-clean treatment of many mineral substrates.

Typical Properties

Property	Unit	Value
Appearance		Yellowish, slightly cloudy liquid
Density DIN 51757 (@20 °C)	g/cm ³	~1.06
pH Value		~4
Viscosity DIN 53015 (@20 °C)	mPa · s	~1.6

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

Protectosil® SC CONCENTRATE may be used on mineral building materials such as:

- Concrete
- Brick/clinker
- Sandstone
- Marble and granite
- Glass fibre reinforced concrete
- Mineral-based stucco
- Mineral-based paints

BENEFITS & ADVANTAGES

Protectosil® SC CONCENTRATE

- is an aqueous silane-based system intended to render porous mineral substrates hydro- and oleophobic, making them easy to clean
- makes stains caused by common liquids (coffee, coke, oils, ...) easily removable
- weakens the adhesion of chewing gum or posters to e.g. facades

- treated facades remain clean longer and are less susceptible to the growth of microorganisms such as mold and algae
- treated facades show no unsightly dark water streaks
- shows high reactivity and good resistance against alkaline attack
- forms an invisible and fully water vapor permeable impregnation
- shows no formation of sticky silicone films
- provides a very good beading effect with water and oily substances on porous mineral substrates
- is supplied ready-to-use
- can be diluted with demineralized water when required

DOSAGE

Protectosil® SC CONCENTRATE may be used undiluted or diluted using demineralized water. The exact amount to be applied, suitable dilution rate and mode of application is highly depending on the porosity of the substrate and should be determined on a small test patch. The long-term efficiency of the described effects can be varied using comparable products such as Protectosil® SC 30, Protectosil® SC 60 or Protectosil® SC 100.

In some cases (especially on very coarse and very porous substrates) the easy-to-clean effect of Protectosil® SC CONCENTRATE may be enhanced by additional treatments. The amount of product required for the second and all subsequent treatments is considerably less. Several layers should only be applied using HVLP technology and resulting droplets must be rubbed in quickly using a brush or swab to distribute the liquid evenly across the surface.

In the case of polished stone (e. g. marble) simply apply Protectosil® SC CONCENTRATE once with a cloth, micro-fiberglove or other suitable aid by polishing until a liquid film is no longer visible. Significantly less product is required for polished surfaces (about 30 g/m²) compared to rough ones.

It is strongly recommended to arrange and observe test patches prior to the final application in order to determine the consumption, to check the compatibility with the substrate and subsequent treatments, to avoid unwanted colour changes and to verify required work and waiting times.

Substrate	Consumption rate (total)	Consumption rate per coat
concrete	110 g/m ²	70 g/m ² (1. coat), 40 g/m ² (2. coat)
sand limestone	80 – 130 g/m ²	80 g/m ² (1. coat), 50 g/m ² (2. coat)
marble and granite (polished)	30 g/m ²	30 g/m ² (1 coat)
mineral plaster	140 – 160 g/m ²	70 g/m ² (1. coat), 70 g/m ² (2. coat)
glazed tiles	30 g/m ²	30 g/m ² (1 coat)
red brick	90 g/m ²	60 g/m ² (1. coat), 30 g/m ² (2. coat)

HANDLING & PROCESSING

The facade to be treated must be clean and the surface dry. Dirt, grime, efflorescence, algae and moss must be removed. High pressure or water vapor cleaning is suitable. Water absorbed during cleaning must be allowed to dry so that the surface is dry before application begins. Imperfections such as cracks, cracked joints or defective seams must be repaired using appropriate methods. Mortar used for repairs must be fully cured and surface dry.

In case a water repellent such as e.g. Protectosil® BHN or a corrosion inhibitor such as Protectosil® CIT was applied to the substrate prior to the easy-to-clean treatment, it is recommended to wait at least 5 days before Protectosil® SC CONCENTRATE is applied.

During the application, both surface and ambient temperatures should range between 3 °C and 40 °C. Protectosil® SC CONCENTRATE should not be sprayed at high wind speeds (>18 km/h) or applied to uncovered or unshielded surfaces during rain.

Adjacent surfaces, such as windows, painted or unpainted surfaces, glass, plants, and soil that is not supposed to come into contact with the product should be covered with appropriate materials (e.g., plastic-sheeting) to protect from spray and run-off.

In the worst case, product not absorbed by the substrate may react with atmospheric moisture to form a greasy,

glossy silicone resin film, which can easily be removed if cleaned immediately using conventional cleaning agents, or alcohol (check for compatibility of the solvent with the surface).

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.

PACKAGING

Protectosil® SC CONCENTRATE is supplied in 25 kg PE container, 200 kg plastic lined steel drums, and 1.000 kg bulk container.

STORAGE

The product should be stored at temperatures between 3 °C and 40 °C.

Do not allow material to freeze.

SHELF LIFE

The product has a shelf life of at least 12 months when stored in originally sealed containers.

Registration Listings

Registry	Status
Australia (AICIS)	Information upon request
Canada (DSL)	No
China (IECSC)	Yes
EU (REACH)	Yes
EU (EINECS/ELINCS)	Yes
South Korea (KECL)	Information upon request
Philippines (PICCS)	No
United States of America (TSCA)	Yes

Disclaimer

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