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Protectosil® SC CONCENTRATE

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

Product description

- · Yellowish to orange, slightly turbid liquid
- Essentially free of volatile organic compounds (VOC)
- Flash point > 90 °C
- pH (1:1 in water): 4

Intended use

Protectosil® SC CONCENTRATE

- · treated porous, mineral substrates show very good water and oil repellency
- treated surfaces remain clean for longer times and are more easy to clean (common liquids like coffee, coke, oils and dark liquids are easily removed)
- · weakens the adhesion of chewing gum or posters to e.g. facades
- slows down the growth of microorganisms such as mold and algae
- helps avoid unsightly dark water streaks
- is highly reactive and resistant against alkali
- · generates water-vapor-permeable, colorless impregnation
- reduces the uptake of water and soluble salts (e.g. chlorides)
- no formation of sticky silicone films
- · can be diluted using demineralized water
- · is suited for the treatment of hydrophobated substrates

Application

Protectosil® SC CONCENTRATE is suited for an easy-to-clean treatment of many mineral substrates. **Protectosil®** SC CONCENTRATE may be used undiluted or may be diluted using demineralized water. The exact amount to be applied, suitable dilution rate and mode of application is highky depending on the porosity of the subsrate 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.

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Suitable substrates	Approximate consumption	Mode of application
concrete	70 g/m² (1. coat),	HVLP, low pressure pumping
	40 g/m² (2. coat)	
sand limestone	80 g/m² (1. coat),	HVLP, low pressure pumping
	50 g/m² (2. coat)	
marble and granite	30 g/m² (1 coat)	polishing (e.g. microfiber glove)
(polished)		
glazed tiles	30 g/m² (1 coat)	polishing (e.g. microfiber glove)
red brick	60 g/m² (1. coat),	HVLP, fluten
	30 g/m² (2. coat)	
mineral plaster	70 g/m² (1. coat),	HVLP, fluten
	40 g/m² (2. coat)	
limestone	80 g/m² (1. coat),	HVLP, fluten
	50 g/m² (2. coat)	

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 vapour 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.

The application is recommended if air and substrate temperatures are between 5 °C and 40 °C. **Protectosil**® SC CONCENTRATE should not be applied during rain or strong wind.

In the case that a hydrophobizing agent such as **Protectosil**[®] BHN or a corrosion inhibitor such as **Protectosil**[®] CIT have been applied to the substrate, it is recommended to wait at least 5 days before **Protectosil**[®] SC CONCENTRATE is applied.

The recommended application method for **Protectosil®** SC CONCENTRATE is with HVLP (High Volume Low Pressure) equipment. Product application using airless sprayers (low pressure, so-called "flooding" method) is also possible if the substrate is sufficiently absorbent. The ready-to-use solution is best applied starting from the bottom and going up the wall. This avoids pre-treating the substrate with run-off from above. Avoid using dirty application equipment, which can contaminate the product.

In most cases the hydro- and oleophobic effect develops within just a few minutes (especially in warm, dry weather). Some substrates such as limestone are less reactive. In these cases the effect may take some days to fully develop. The application should be continuous and uninterrupted so that no overlapping occurs. The aqueous solution of **Protectosil**® SC CONCENTRATE cannot penetrate a section previously treated with a hydrophobizing agent. The resulting droplets can cause mottling if not rubbed in with a brush.

If doplets form on the surface they should be evenly disributed using a soft brush. It should be avoided to distribute a dried film with a brush.

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Phone: +86-21-6119-1052 Fax: +86-21-6119-1075 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, microfiber glove 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.

Non-absorbent substrates such as, for example, glass, wood, plastic and metal cannot be treated with **Protectosil®** SC CONCENTRATE. Glass, wood and metal are not attacked by **Protectosil®** SC CONCENTRATE. Neither are most plastics used in construction. Therefore covering is normally not necessary. To make sure we recommend to carry out a test. 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).

Plants in the vicinity of the substrate to be treated should be protected against contact with **Protectosil®** SC CONCENTRATE.

Protectosil® SC CONCENTRATE reacts with the interfaces in pores and capillaries of the mineral surface and forms invisible, water-repellent interfacial compounds. To determine the exact amount to be applied and to check weather previous or following treatments are compatible with the **Protectosil**® SC CONCENTRATE treatment it is recommended to do a small test patch first.



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Registration and product safety

Inventory	
EINECS/ELINCS (EU)	yes
AICS (Australia)	*
DSL/NDSL (Canada)	no
PICCS (Philippines)	no
TSCA (USA)	yes (spraying not allowed)
IECS (P.R. China)	yes
ENCS (Japan)	*
ECL (South Korea)	*

^{*}information upon request

Before considering the use of any chemical read its Material Safety Data Sheet thoroughly for safety and toxicological data as well as for information on proper transportation, storage and use. The Material Safety Data Sheet is available upon request from your local Evonik Degussa representative or through our internet page www.dynasylan.com.

Packaging, storage, and handling

Protectosil® SC CONCENTRATE is supplied in 25 kg PE container, 200 kg plastic lined steel drums, and 1000 kg bulkcontainer.

Protectosil® SC CONCENTRATE should only be diluted using demineralized water if needed. **Protectosil®** SC CONCENTRATE is not resistant to frost and should be stored at temperatures between +3 °C and +40 °C.

Protectosil® SC CONCENTRATE has a shelf life of at least 12 months if stored in originally sealed containers.

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