

Solutions for preventing surface damaging effects




Protectosil[®]

The global brand for building protection



Protectosil® – Your Partner in Building Protection

For more than 50 years, we've been researching, developing, and producing silanes. Silanes are especially useful in building protection, lending structures unprecedented durability and resistance. Protectosil® building protection products are well known as hydrophobizing and

oleophobizing agents, corrosion inhibitors, and products for surface protection, particularly in graffiti and facade protection applications. Most of the products can be combined to achieve optimal results. You can find such possible combinations at www.protectosil.com.

Facade Protection with Protectosil®

Regardless of the problem—whether dust, algae, or grime—the Protectosil® SC product range ensures an easy-to-clean surface, thus considerably reducing maintenance costs. The Protectosil® SC

product range offers ideal properties for the protection of porous substrates such as sandstone or concrete. The products are environmentally friendly and simple to use.



Parts of this wall have been treated with Protectosil® SC CONCENTRATE. The section shown on the right is untreated. After eight years of weathering, the difference can be clearly seen.

Treated with Protectosil® SC CONCENTRATE (not cleaned) Untreated (not cleaned)

Case Study: Stadelhofen Railway Station, Zurich



The railway station in Stadelhofen, Switzerland, is a concrete building used daily by travelers and fully exposed to the elements. During renovation in 2002, all surfaces were cleaned and protected with Protectosil® BHN and Protectosil® SC 60. The products were applied by an airless spraying technique. As a result, the surfaces still look good today.

Case Study: Art School, Essen

School of Management and Design in Essen, Germany, protected with Protectosil®.

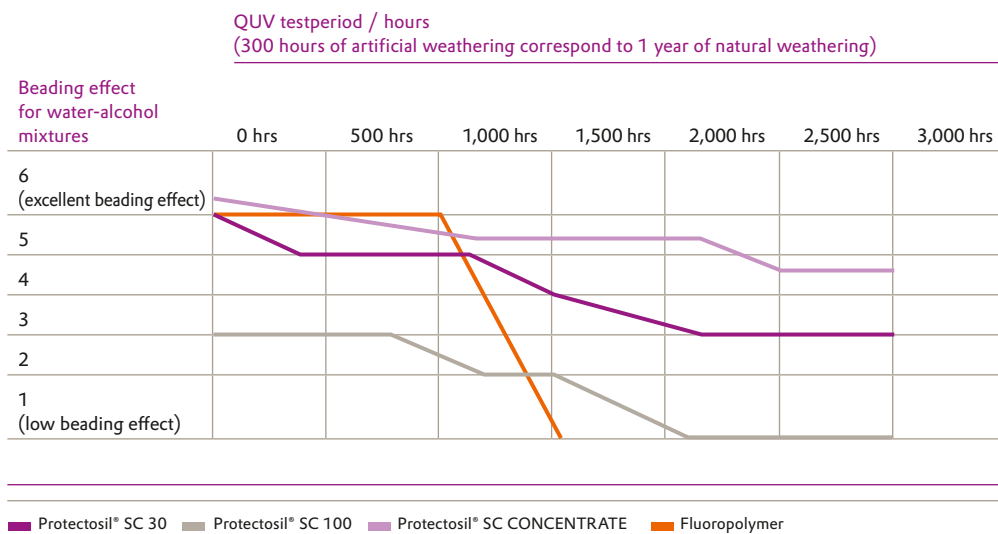


A customized surface protection system for every substrate and requirement

QUV tests using an artificial weathering device in accordance to EN ISO 11507 were performed to evaluate the long-term performance of the Protectosil® SC products. For weather conditions similar to those in southwestern Germany, the correlation between natural and artificial weathering is about 1 year to 300 hours. Customized products ranging from Protectosil® SC CONCENTRATE to Protectosil® SC 100 cover the entire spectrum of long-term effectiveness. The figure below illustrates the effects of the various Protectosil® SC products. The

beading effect, which is an indicator for an easy-to-clean effect, is reduced over time by weathering (e.g., by wear and tear of the product by rain or hail). A number of different water-alcohol mixtures were used for the test. The surface repels mixture 1 (a water-alcohol mixture) more easily than mixture 6 (pure alcohol). The beading effect is stronger for Protectosil® SC CONCENTRATE than for Protectosil® SC 100. However, both products have a much higher weathering resistance than fluoropolymers, which are also used for this kind of application.

Long-term effectiveness of various Protectosil® SC products on red sandstone



Text for invitation of tenders:

Transparent protection against staining for mineral substrates using the Protectosil® SC product range, free movement of water vapor, water-repellent, oil- and grease-repellent, easy-to-clean surfaces, reduces algae and moss growth, UV- and weathering resistant. Please observe the manufacturer's instructions for use.



Facade Protection with the Protectosil® SC Product Range Is Cost-Effective

Protectosil® SC products are aqueous solutions of hydrophobizing and oleophobizing silane systems for facade protection of absorbent mineral building materials. Unsightly staining caused by mud, mosses, or exhaust gases rapidly change the original appearance of a building. Surfaces protected with Protectosil® SC CONCENTRATE stay clean longer, and any cleaning that may be required is easier to perform.

Treated facades

- are easier to clean
- do not show unsightly dark streaking caused by rain
- are less susceptible to growth of micro-organisms
- remain clean longer

Stains caused by strongly colored liquids such as colas, coffee, and household oils, which are quickly absorbed on untreated surfaces, leaving permanent stains, are more easily removed. Additionally, chewing gum and posters adhere less strongly to treated surfaces.

Protectosil® SC products

- provide an impregnation that is colorless, water-vapor permeable, and hydro- and oleophobic
- do not form tacky silicone resin films
- repel water and oily substances effectively from absorbent mineral building materials
- are almost free from volatile organic components

Example calculation

Protectosil® SC 100	
Product costs	1.90–2.50 €/m ²
Consumption	150 ml/m ²

All data represent average values and are for illustrative purposes only. Prices are exclusive of VAT.

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