

Technical Data Sheet

S-Protect WS405

Aqueous emulsion on organofunctional silanes for the water repellent impregnation of absorbent, mineral substrates

Product Description

- Milky white emulsion based on organofunctional silane systems
- A hydrophobic agent for mineral building materials with high porosity
- Flash point 72°C
- Viscosity at 20 °C: 15 mPa•s
- pH-value (20°C) 6-8

Intended Use

- suited for the water repellent impregnation of porous, mineral substrates
- penetrates deeply in porous, mineral substrates
- shows no formation of sticky silicone films
- vapour permeable protection
- reduces significantly the uptake of water
- reduces the uptake of water soluble pollutants (eg. chlorides)
- protects hair like cracks of up to 0.3mm

Application

The amount of S-Protect WS405 to be applied is dependent on the absorbance of the substrate and the desired penetration depth.

Very absorbent substrates may require up to 1 Litre/m² of S-Protect WS405

Application Method

Low pressure spray with block brush to control

Airless spray or Silane pump

Substrate

Lightweight Concrete (Poren Panel & Block)

Clinker Masonry

Sand Limestone

Mineral Plaster

Application Rate

min. 250 ml/m²

min. 240 ml/m²

min. 400 ml/m²

min. 200 ml/m²

The substrates to be treated should be dry and clean. Acceptable surface cleaning methods include honing, chemical cleaning and water blasting. During application outside temperature and surfaces temperatures should be between +5°C and +40°C. S-Protect WS405 should not be applied during strong wind or when rain is imminent.

S-Protect WS405 is applied in a full flood coat normally in 2 coats. On vertical surfaces the solution should run down in visible descending wet curtain achieved by allowing the solution to flow against the surface of the building material without pressure. Most liquid delivery devices eg. airless pump or backpack sprayer are suitable. The material should not be atomized or applied with a brush.

The water repellent effect of S-Protect WS405 can develop within minutes depending on the substrate and weather conditions. The impregnation should be applied continuously and without a break to avoid overlapping.

A substrate which has already been treated will repeal any reapplied aqueous silane/siloxane emulsion solution. Non-absorbent sustrates such as window frames, window sills, plastic fittings, window glass, etc., should be covered before application. Surfaces which accidentally come into contact with S-Protect WS405 can be cleaned with alcohol (spirit) or aqueous chemical 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.

S-Protect WS405 reacts with the interfaces in pores and capillaries for the mineral surface and forms an invisible, water repellent interfacial compounds To determine the exact amount to be applied a sample is required as the porosities of mineral materials varies.

Before application read the Material Safety Data Sheet thoroughly for safely and toxicological data as well as for information on proper transportation, storage and use. The Material Safety Data Sheet is available upon request from Stoanz Ltd.

Packaging, Storage and Handling

S-Protect WS405 is supplied in ready-to-use 20 Litre container.

S-Protect WS405 is not resistant to frost and should be stored at temperatures between +3°C and +40°C. S-Protect WS405 has a shelf life of 12 months if stored in originally sealed containers.