

Technical Data Sheet

Protectosil® WS 340 PLUS

Water based water repellent providing an excellent beading effect

PRODUCT DESCRIPTION

Aqueous emulsion based on organofunctional silanes and siloxanes for the water repellent impregnation of mineral substrates while providing an excellent water beading effect.

Typical Properties

Property	Unit	Value
Active Content	%	40
Appearance		milky white liquid
Density	g/cm ³	1.00
DIN 51757 (@20 °C)		
Flash Point, min.	°C	>95
DIN EN ISO 2719		

The data represents typical values (no product specification)

Registration Listings

Registry	Status
Australia (AICIS)	No
Canada (DSL)	Information upon request
China (IECSC)	Information upon request
EU (REACH)	Yes
EU (EINECS/ELINCS)	Yes
Japan (ENCS)	Yes
Korea (KECL)	No
Philippines (PICCS)	No
USA (TSCA)	Yes

TYPICAL APPLICATIONS

Protectosil® WS 340 PLUS is an allrounder system that is applicable for a broad range of mineral substrates that range from dense to porous.

Suitable substrates:

- concrete
- clay bricks
- clay roof tiles
- clinker masonry
- sand limestone
- others

BENEFITS & ADVANTAGES

Protectosil® WS 340 PLUS provides

- significant reduction of water uptake
- shows excellent beading effect
- shows very high reactivity and resistance against alkali
- penetrates deeply into porous, mineral substrates
- shows no formation of sticky silicone films
- gives invisible and water vapor permeable protection
- reduces the uptake of water-soluble pollutants
- may be diluted with water before use (retains beading effect when diluted)

DOSAGE

For most applications a dilution of 1:3 - 1:1 of the product in demineralized water is recommended. The amount of Protectosil® WS 340 PLUS to be applied and the concentration to be used are highly depending on the absorbancy of the substrate and the desired penetration depth.

Very absorbent substrates may require up to 500 – 1000 g/m² Protectosil® WS 340 PLUS (1:3 dilution in water).

To determine the exact amount to be applied and to check whether previous or following treatments are compatible with the Protectosil® WS 340 PLUS treatment it is recommended to do a small test patch first.

Suitable substrates	Approx. consumption	Dilution in water	Mode of application
Concrete	min. 200 g/m ²	1:1	Airless spraying
Clinker masonry	min. 300 g/m ²	1:3	Airless spraying
Sand limestone	min. 250 g/m ²	1:3	Airless spraying

Gently stir the product before preparing the dilution.

Protectosil® WS 340 PLUS should be applied by wet-on-wet flow coating to the saturation point. The solution should be applied in 2 - 3 coats without drying between the coats as the water repellent effect of Protectosil® WS 340 PLUS can develop within minutes.

On vertical surfaces the solution should run down in the form of a clearly visible descending wet curtain. This is achieved by allowing the solution to flow against the surface of the building material without pressure.

HANDLING & PROCESSING

Substrates to be treated should be dry and clean. Acceptable surface cleaning methods include sandblasting and water blasting.

Most liquid delivery devices (e.g. airless spraying equipment) are suitable. The material should not be atomized or applied with a brush.

Due to its high water content Protectosil® WS 340 PLUS is frost-sensitive and should therefore not be used at temperatures below 0 °C. The ideal temperature range for the application is +5 °C to +40 °C.

Do not apply if rain is expected or if high winds or other ambient conditions prevent proper application.

A substrate that has already been made water repellent cannot be treated with Protectosil® WS 340 PLUS as it no longer allows penetration of a water-based silane/siloxane emulsion. In such cases a pure silane system such as Protectosil® 009 can be used.

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® WS 340 PLUS can be cleaned with alcohol (spirit) or aqueous soap solutions. 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 against 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 silanes.evonik.com 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® WS 340 PLUS is supplied in 27 l PE canisters, 200 l steel drums and 920 l IBCs.

STORAGE

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

SHELF LIFE

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

For further information
visit our
Customer Portal



World of Protectosil®

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