

Protectosil® WS 700 P

Paste-like impregnation based on silane chemistry for the hydrophobation of dense building materials especially alkaline substrates such as concrete.

Technical Data

Properties and test methods	Value	Unit	Method
Appearance:	white paste	-	-
Active ingredient concentration:	70	%	-
Viscosity:	approx. 400	mPa.s	-
Flash point	72	°C	-

Registration

Protectosil® WS 700 P

DSL/NDSL (Canada):	No
PICCS (Philippines):	Yes
TSCA (USA):	No
IECSC (P.R. China):	*
ENCS (Japan):	No
ECL (South Korea):	Yes
EINECS/ELINCS (EU):	Yes
AICS (Australia):	No
* information upon request	

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Safety and Handling

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 www.protectosil.com or upon request from your local representative, customer service or from Evonik Resource Efficiency GmbH, Product Safety Department, E-MAIL sds-hu@evonik.com.

Packaging and Storage

Protectosil® WS 700 P is delivered in 25 l containers.

Protectosil® WS 700 P is not frost resistant and should be stored at temperatures between 3 °C and 40 °C.

Protectosil® WS 700 P has a shelf life of 12 months when stored in originally sealed containers. It is recommended to consume once opened containers in 3 months time.

Properties and Use

Protectosil® WS 700 P

- is suited for the hydrophobizing impregnation of porous, mineral substrates
- shows very high reactivity and resistance against alkali
- shows optimum penetration even in dense mineral substrates
- shows no formation of sticky silicone films
- gives invisible and water vapor permeable protection
- reduces significantly the uptake of water
- reduces the uptake of water soluble pollutants
- protects hair like cracks of up to 0,3 mm
- serves as a chemical dampf proofing agent (applied by injection)
- is applied undiluted
- has a long contact time with the substrate due to its paste-like consistency thus allowing for very high penetration depth, reducing loss of material by run-offs, and facilitating overhead applications

Protectosil® WS 700 P is used undiluted. The exact amount of Protectosil® WS 700 P to be applied is highly depending on the absorbance and humidity of the substrate. Do not apply too much product since material could get lost by run-offs or shiny or speckled surfaces could result. To determine the exact amount to be applied it is recommended to do a small test patch first.

The substrates to be treated should be dry and clean. Acceptable surface cleaning methods include sandblasting and water blasting. It has to be ensured that the substrate has not just dried out in the areas close to the surface. After direct exposure to water or saturation of the capillaries an adequate drying time has to be provided. The application of Protectosil® WS 700 P in direct, intensive sunlight may result in increased run-offs. Damages such as cracks >0,3 mm or delaminations have to be repaired.

Conditions during the application of Protectosil® WS 700 P:

- temperature of substrate and environment: 5 to 40 °C
- rel. humidity of substrate: < 75%
- rel. humidity of air: < 85%
- wind speed: < 10 m/s (or max. 6 Beaufort)

Application Details

Substrate	Application rate - Mode of application
Concrete	100-600 g/m ² (max. 800 g/m ²) - trowel + roller, spraying

Protectosil® WS 700 P should be applied with a trowel and distributed evenly on the surface by using a roller (e.g. lamb skin roller). The layer thickness required depends on the substrates porosity, conditions, and humidity. On large surfaces Protectosil® WS 700 P can also be applied by spraying. Areas treated with Protectosil® WS 700 P have to be protected from rain or flooding for at least 24 hours.

Non-absorbent substrates such as frames, window sills, plastic fittings, window glass, etc., should be covered before application. Surfaces which accidentally come into contact with Protectosil® WS 700 P can be cleaned with alcohol (spirit) or aqueous soap 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. In the unlikely event of silicone resin films being observed they are best removed using ethanol (or spirit). Plant life should be protected from contact.

Protectosil® WS 700 P 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 whether previous or following treatments are compatible with the Protectosil® WS 700 P treatment it is recommended to do a small test patch first.

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Evonik Degussa GmbH, 79618 Rheinfelden 06	
1119-CFD-610 EN 1504-2	
Protectosil® WS 700P Hydrophobizing Impregnation	
Storage conditions: -10°C up to +40°C; containers must be kept tightly sealed and protected from moisture; shelf life of closed containers: 12 months	
Penetration depth: Class II >= 10mm	
Water absorption and alkali stability: Absorption coefficient < 7,5 % compared to the not treated sample Absorption coefficient < 10 % after storage in alkali solution	
Drying speed for hydrophobizing Impregnation: Class II: > 10	
Harmful substances: in accordance with 5.4	

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