

Product information

## Protectosil® 009

# Hydrophobizing impregnation for concrete and other porous mineral substrates with excellent beading effect

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- clear, colorless to slightly yellow liquid
- frost resistant
- solvent free, 100% active ingredient
- low volatility
- not miscible with water

## 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 after registration on our website www.protectosil.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 and Storage

Protectosil 009 is supplied in quantities of 25 I, 200 I, and 1000 I. Protectosil 009 should not come into contact with moisture. Material should be stored at temperatures between -10 °C und +40 °C. Protectosil 009 has a shelf life of at least 12 months when stored in originally sealed containers.

## **Properties and Use**

#### Intended use

#### Protectosil® 009

- is specially suited for the water-repellent impregnation of concrete in outdoor areas
- is highly reactive and resistant against alkali
- reaches very high penetration depth
- generates water-vapor-permeable, colorless impregnation
- reduces significantly the uptake of water and soluble salts (e.g. chlorides)
- protects hairline cracks of up to 0.3 mm
- is supplied ready to use
- creates an excellent beading effect

Protectosil® 009 is suitable for the waterproofing of mineral substrates, in particular low-porosity substrates such as concrete. Protectosil® 009 has to be used undiluted. The amount to be applied depends to a large extent on how absorbent the substrate is.

## **Application Details**

| concrete         | nin. 180 g/m² |
|------------------|---------------|
| sand limestone m | nin. 230 g/m² |
| red brick m      | nin. 300 g/m² |

#### **Application**

A curing time of 28 days should be allowed for fresh concrete before Protectosil® 009 is applied. Protectosil® 009 can also be used on aged concrete.

The substrates to be treated should be dry and clean in order to ensure deep penetration of the active ingredient. Usually, the substrate to be treated is dry enough if it feels dry to the touch by hand. Acceptable surface cleaning methods include sandblasting, water blasting and chemical cleaners. During application the outside temperature and the temperature of the substrate should be within the range of 0 °C to +40 °C. Protectosil® 009 should not come into contact with water before or during application and should not be applied if there is a strong wind or if it is raining. Allow a minimum of 24h of drying after a heavy rainfall before applying the product. After application the treated surface should be protected from rain for at least 24h.

Protectosil® 009 must be applied by flowcoating to the saturation point. This is achieved by allowing it to flow without pressure against the surface to be treated. All delivery devices for liquids are suitable (airless sprayguns are recommended). The material must not be atomized or applied with a brush.

A liquid film of Protectosil® 009 must remain in contact with the substrate for several seconds. Horizontal surfaces should have a shiny, wet appearance for 3-5 seconds. Vertical surfaces should exhibit a 30-50 cm shiny curtain of liquid.

All equipment and containers must be clean and dry. After use they can be cleaned with any organic solvent (methylated spirit, petrol or thinners).

Non-absorbent substrates such as, for example, glass, wood, plastic and metal cannot be treated with Protectosil® 009 and should be covered during application. 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 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® 009.

In addition Protectosil\* 009 should not come into contact with asphalt as it would dissolve.

Protectosil® 009 reacts with the interfaces in pores and capillaries of the mineral surface and forms invisible, water-repellent interfacial compounds. It is always recommended to do a test patch first to determine the exact amount to be applied, to check for any unwanted side effects, and to check whether previous or following treatments are compatible with the Protectosil® 009.

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