

Technical Data Sheet

Protectosil® 266

Hydrophobic treatment for mineral facade construction materials

PRODUCT DESCRIPTION

Protectosil® 266 is a free-flowing colorless to slightly yellow, frost resistant liquid based on an oligomeric siloxane. Protectosil® 266 can be applied at full-strength or after dilution with suitable solvents, such as ethanol or white spirit.

Typical Properties

Property	Unit	Value
Appearance		clear, colorless to slightly yellow liquid
Active Content	%	>97
Density DIN 51757 (@20 °C)	g/cm ³	~1.035
Flash Point EN 22719	°C	>63
Functional Groups		Alkylsilane
Viscosity DIN 53015 (20 °C)	mPa·s	~35

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

Protectosil® 266 can be used on mineral facade construction materials such as

- plaster facades
- sand-lime brickwork
- Brickwork
- autoclaved aerated concrete
- fiber cement boards

BENEFITS & ADVANTAGES

Protectosil® 266

- provides significant reduction of water uptake
- penetrates into porous, mineral substrates
- gives invisible and water vapor permeable protection
- shows no formation of sticky silicone films
- is effective on hairline cracks up to 0.3 mm
- is suitable as a primer for facade topcoats
- is frost resistant

DOSAGE

Protectosil® 266 can be applied at full-strength or after dilution with a suitable solvent. We recommend a minimum concentration of 20% active content (1 part Protectosil® 266 and 4 parts solvent).

Suitable solvents are

- Ethanol water free* (denatured with petroleum hydrocarbons)
- Aliphatic hydrocarbon solvents (pentane, hexane, heptane, etc.)
- White spirit

* highly recommended solvent

The amount to be applied depends to a large extent on how absorbent the substrate is. The exact amount to be applied must be determined by a trial application. Typical product consumptions are

- >180 g/m² for concrete
- >210 g/m² for sandlimestone
- >240 g/m² and more for brick

In order to reach these consumption rates it might be necessary to apply the material in several steps.

HANDLING & PROCESSING

All surfaces should be air-dry and clean in order to ensure deep penetration of the active ingredient. Cleaning is required to remove dirt, dust, efflorescence, mold, salt, grease, oil, asphalt, laitance, curing compounds, paint, coatings as well as other foreign materials. Acceptable surface cleaning methods include shotblasting, sand blasting, water blasting and using 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® 266 should not come into contact with water before or during application and should not be applied if there is strong wind or if it is raining. Allow a minimum of 24 h of drying after a heavy rainfall before applying the product. After application the treated surface should be protected from rain for at least 24h.

The prepared solution of Protectosil® 266 must be applied by flow coating 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 (e.g. airless sprayguns). The material must not be atomized or applied with a brush.

A liquid film of Protectosil® 266 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 an organic solvent (e.g. methylated spirit, petrol or thinners).

Protectosil® 266 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 treatment.

Non-absorbent substrates such as, for example, glass, wood, plastic and metal cannot be treated with Protectosil® 266 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® 266.

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 <https://silanes.evonik.com/en> or upon request from your local representative, customer service or from Evonik Operations GmbH, Product Safety Department, E-MAIL sds-hu@evonik.com.

PACKAGING

Pails (24 l) and plastic lined steel drums (192 l) are available for order with an extended lead time

STORAGE

The product should be stored at temperatures between -10 °C and 40 °C.

SHELF LIFE

Protectosil® 266 has a shelf life of at least 12 months if stored in originally sealed containers.

Registration Listings

Registry	Status
Australia (AIIC)	No
Canada (DSL)	Information upon request
China (IECSC)	Information upon request
European Union (EINECS/ELINCS)	Yes
Japan (ENCS)	Yes
South Korea (KECL)	Yes
Philippines (PICCS)	Yes
United States of America (TSCA)	Yes

Disclaimer

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