

# Protectosil® Stone Sealer

## WATER REPELLENT

### Product Data and Test Information



#### PRODUCT DESCRIPTION

A clear, penetrating, breathable water repellent for use on exterior above-grade calcareous stones such as limestone, travertine and marble. **Protectosil Stone Sealer** also has consolidative properties, penetrates the surface and reinforces the natural mineral binders, thus preventing degradation due to weathering, freezing and thawing as well as other natural degradation processes. **Protectosil Stone Sealer** is not a coating and as a result will not change the surface appearance of the substrate, nor will it change the water vapor permeability. By reducing the amount of water that enters the substrate, **Protectosil Stone Sealer** reduces the intrusion of waterborne contaminants such as acid rain, dirt and pollutants. Also reduces the deteriorating effects of these contaminants, such as spalling, deicer scaling, efflorescence, subflorescence, leaching and staining.

#### APPROPRIATE APPLICATIONS

Will makes calcareous stones, such as limestone and marble, water repellent, as well as acting as a surface consolidant.

Will protect against the ingress of wind-driven rain into stone masonry.

Will reduce the damage that salt burst has on natural stone.

Will reduce the effects of mildew, efflorescence and stains on stone masonry buildings.

For use on concrete that has a high percentage of limestone or coral aggregate, to consolidate and make water repellent.

#### ADVANTAGES

**Protectosil Stone Sealer** is a silicate/siliconate mixture in a water carrier. The silicate/siliconate mixture is designed to chemically bond to the mineral substrate and crosslink with other silicate/siliconate molecules, creating a protection matrix against water intrusion. **Protectosil Stone Sealer** also acts as a surface consolidant for binding loose or powdery surfaces. The mixture fills in the calcium carbonate in limestone and marble to form a denser material. Sandstone also is hardened when the silicate bonds with the quartz grains. By incorporating **Protectosil Stone Sealer** into your integrated design, you can earn Leadership in Energy & Environmental Design (LEED) credits for both new construction and major renovation projects.

The main benefits of the product are:

- Water based, VOC free
- High resistance to wind-driven rain
- Excellent resistance to chloride ion ingress
- Excellent resistance to acid rain
- Increased compressive and Flexural Strengths
- Excellent Abrasion resistance
- Reduced efflorescence
- Breathable system
- Deep penetration into substrate
- High resistance to alkali attack
- Keeps substrates cleaner

#### LIMITATIONS

Will leave a residue on glass, metal and painted surfaces. These surfaces should be masked prior to application. **Protectosil Stone Sealer** may darken certain substrates, therefore a test patch should be applied before main application. Not intended for below-grade waterproofing. Should not be applied if the surface temperature is below 40°F (5°C) or above 100°F (40°C) or if high winds or other conditions prevent proper application. If rain has preceded the application, the surface should be allowed to dry for at least 24 hours. Caution should be taken with specialty coated glass, asphaltic materials and plastic windows. Check compatibility before application.

#### TECHNICAL DATA

**Protectosil Stone Sealer** is a clear, colorless liquid containing a silicate/siliconate mixture in water carrier in water.

Color:	water white
Active Substance	silicate/siliconate
Solvent	Water
Flash Point	> 200°F
Density	8.6 lb/gal
VOC	0 g/L
Shelf Life	1 Year

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## INSTALLATION

All surfaces must be cleaned to remove all traces of dirt, dust, efflorescence, mold, salt, grease, oil, asphalt, laitance, curing compounds, paint, coatings and other foreign materials. Acceptable surface cleaning methods include shotblasting, sandblasting, waterblasting and using chemical cleaners. Check with your Protectosil representative to verify that surface preparation is adequate.

**Protectosil Stone Sealer** should be applied using low-pressure (15 to 25 psi) pumping equipment with a wet fan type spray nozzle. Alternate methods include using either a power roller with a 1" nap or a brush. Do not alter or dilute the material. Do not apply to a wet or damp substrate. A test patch should be applied to the substrate to verify coverage rate, desired results and application conditions.

On vertical surfaces, apply **Protectosil Stone Sealer** in a flooding application from the bottom up, so the material runs down 6 to 8 inches below the spray pattern. Coverage rates on limestone surfaces are between 75 and 125 ft<sup>2</sup>/gal. Multiple applications may be needed for denser consolidation. Surfaces such as polished marble may have higher coverage rates. For warranty qualification, your Protectosil representative can give an exact coverage rate for your particular project. Please refer to the "**Protectosil Stone Sealer** Application Instructions" for more detailed information.

**Precautions: Protectosil Stone Sealer** containers should be kept closed when not in use and should be stored at temperatures between 40°F (5°C) and 120°F (50°C), away from rain and standing water. When working in an enclosed area, an air respirator should be used. Please refer to the material safety data sheet for more detailed information.

## AVAILABILITY

**Protectosil Stone Sealer** is available in 5-gallon pails and 55-gallon drums. Shipped F.O.B. throughout the United States. Contact your local Protectosil representative or your regional manager for specific cost information and samples. You can obtain their contact information on our website, [www.protectosil.com](http://www.protectosil.com), or by calling us at 1 (800) 828-0919.

## TECHNICAL SERVICE

Technical service engineers and scientists are available to answer questions about product performance, application methods and compatibility with other building materials. You can speak to one of our engineers or scientists directly by calling our toll-free number, 1 (800) 828-0919, and selecting option 1.

## MANUFACTURER

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PROTECTOSIL PRODUCTS ARE MANUFACTURED AT THE EVONIK CORPORATION THEODORE, ALABAMA, PLANT UNDER A QUALITY SYSTEM CERTIFIED TO ISO-9001 AND ISO-14001 REQUIREMENTS.

**For more information, SDS and the most updated product information, and to find your local representative, go to [www.protectosil.com](http://www.protectosil.com)**

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