

Product Data and Test Information

PROTECTOSIL ANTIGRAFFITI-US®

PRODUCT DESCRIPTION

Protectosil ANTIGRAFFITI-US® is a waterborne, breathable, antigraffiti treatment for use on concrete, brick, concrete masonry units and natural stone. This product protects surfaces to allow easy removal of a wide variety of graffiti including spray paint, permanent marker, ink, bituminous paints, asphalt sealers and other solvent or waterborne paints. Due to its superior performance, standard nonhazardous cleaners and low-pressure waterblasting are sufficient removal methods for most graffiti. **Protectosil ANTIGRAFFITI-US®** is breathable and will not alter the natural appearance of the substrate. **Protectosil ANTIGRAFFITI-US®** is based on silane chemistry and will chemically bond to the substrate. This allows the material to undergo many cleaning cycles before retreatment is necessary.

APPROPRIATE APPLICATIONS

Materials such as cast-in-place concrete, brick and block masonry, and natural stone can be protected from graffiti. For use on buildings, walls, sound barriers, piers, columns, bridges and other areas prone to the negative effects of graffiti. Other substrates that can be protected include sandstone, terra-cotta, hand-molded bricks, limestone, granite and most natural stones.

ADVANTAGES

Protectosil ANTIGRAFFITI-US® is a patented siloxane mixture in water. It provides a clear, nearly invisible barrier against the most common graffiti products such as spray paints and markers. Depending on the severity and type of graffiti, as well as the cleaning method used, up to ten cleanings can be expected from each application. If needed, additional **Protectosil ANTIGRAFFITI-US®** can be applied to only the affected area without a visible difference on the substrate.

ADVANTAGES

The main benefits of this product are:

- Non-sacrificial antigraffiti properties
- Ultra-low VOC
- Breathable
- Clear
- Excellent UV stability
- Resistance to alkali attack
- Tack-free after drying
- No blushing, peeling or yellowing
- Easy application

LIMITATIONS

Will leave a residue on nonporous materials such as glass, metal and painted surfaces. Shrubbery and plant life should be protected from overspray. Should not be applied if the surface temperature is below 40°F (5°C) or above 85°F (30°C), if rain is expected within 2 hours following application, if wind speeds exceed 10 mph or other conditions prevent proper application. If rain has preceded the application, the surface should be allowed to dry for at least 24 hours.

TECHNICAL DATA

Protectosil ANTIGRAFFITI-US® is a patented siloxane mixture in water.

Color	light yellow
Active Substance	siloxane
Solvent	water
Flash Point	none
Density	8.84 lb/gal
VOC	<20g/l

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TEST DATA

ASTM 6578 "Graffiti Resistance"

Cleanability level of 3 after 25 cycles

ASTM G53 "Accelerated Weathering"

No change in graffiti resistance after 2000 hours

ASTM D6490 "Breathability"

>90% breathable

APPLICATION INSTRUCTIONS

Concrete must be allowed to cure for a minimum of 28 days. All repointing must be completed and allowed to cure for at least 3 days. Concrete repair and replacement must be completed before application of **Protectosil ANTIGRAFFITI-US®**. Patching materials, caulking, sealing materials and traffic paint must be fully cured before application.

All surfaces must be cleaned to remove all traces of graffiti, 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 local **Protectosil®** representative to verify that surface preparation is adequate. Any water absorbed by the surface during cleaning must be allowed to dry before applying **Protectosil ANTIGRAFFITI-US®**.

Adjoining surfaces which should not come into contact with the product (e.g. window frames, painted surfaces, glass, plants, soil) should be masked or covered (e.g. with plastic sheeting) before beginning. Substrate temperature should be less than 85°F during application. Applying this material when the substrate temperature is above 85°F can result in the water carrier flashing off before adequate penetration is achieved. Do not apply to a wet or damp substrate.

Protectosil ANTIGRAFFITI-US® should be applied with HVLP (< 100 psi) spray equipment. The first application should be either a **Protectosil® CHEM-TRETE®** or **Protectosil® AQUA-TRETE®** water repellent or a diluted coat of **Protectosil ANTIGRAFFITI-US®** of 9 parts water to 1 part of the product. Start from the bottom of the wall and work upwards to prevent premature impregnation by material running down the surface. The water-repellent effect appears within a few minutes. Two additional applications at full strength are required for permanent graffiti protection.

The prime coat must be fully dried before additional applications. A layer of liquid droplets forms on the surface which must be worked in with a brush.

Ensure that the liquid is distributed evenly (i.e. the surface is wetted evenly). Each coat must be applied in one operation to avoid overlapping. The next coat must not be applied before the previous coat has dried completely.

If the full strength coats are repelled by the primer coat, the addition of up to 1 cup (8 ounces) of isopropyl alcohol per gallon of **Protectosil ANTIGRAFFITI-US®** is permitted. The addition of alcohol will allow the antigraffiti to "wet out". Less alcohol can be utilized, as long as wetability of the product is not compromised. The VOC remains under 100 g/L after addition of the isopropyl alcohol.

Once the alcohol is added to the **Protectosil ANTIGRAFFITI-US®**, there is a pot life of 8 hours. Do not mix more product than is needed for 8 hours of work.

Application rates are dependent on porosity and surface roughness of the substrate. Apply a test patch to determine actual coverage rate and number of coats of **Protectosil ANTIGRAFFITI-US®** before starting the project. Usage is typically 125 to 250 ft²/gal in two to three coats. Porous substrates, such as Concrete Masonry Units may require more material. Your **Protectosil®** representative can give an exact coverage rate and application conditions after a test patch has been applied.

Some darkening of the surface may occur, depending on the amount of **Protectosil ANTIGRAFFITI-US®** applied and the color and texture of the substrate. A test patch must be applied in order to verify actual conditions on the substrate.

Precautions: Protectosil ANTIGRAFFITI-US® product containers should be kept closed when not in use and should be stored at temperatures between 40°F and 100°F (5°C and 40°C), away from rain and standing water. Do not allow material to freeze. Please read the material safety data sheet for more detailed information.

GRAFFITI REMOVAL

Protectosil ANTIGRAFFITI-US® is designed to allow easy removal of paint, markers and other materials used for graffiti from concrete, masonry and natural stone substrates.

Acceptable methods for removing graffiti include citrus or benzyl alcohol-based paint removers, high-pressure water, steam cleaning and proprietary cleaners. Contact your **Protectosil®** representative for approved products. If high-pressure water is used, care must be taken to not etch the substrate. Removing the substrate will also remove the **Protectosil ANTIGRAFFITI-US®**

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AVAILABILITY

Protectosil ANTIGRAFFITI-US® is available in 5-gallon pails and 50-gallon drums. Shipped F.O.B. throughout the United States and Canada. Contact your local Protectosil® representative or your regional manager for specific cost information.

You can obtain their contact information on our website, 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 silanes.evonik.com/en

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