

Protectosil® CHEM-TRETE®

WEATHERPROOFING

Application & Mixing Instructions for

Protectosil®CHEM-TRETE® 40 VOC, Protectosil®CHEM-TRETE® BSM 400,

Protectosil® CHEM-TRETE® PB VOC, Protectosil®CHEM-TRETE® PB 100

Protectosil® 40H & Protectosil® CHEM-TRETE® 40 D

PRODUCTS

The **Protectosil CHEM-TRETE** family of water repellents consists of neat or solvent-based products for use on a wide variety of substrates. A brief description of each product is given below. For more detailed information, read the Product Data and Test Information Sheet for the particular **Protectosil CHEM-TRETE** product.

Protectosil CHEM-TRETE 40 VOC is suitable for both concrete and brick masonry substrates.

Protectosil CHEM-TRETE BSM 400 utilizes pure silane technology and is suitable for concrete and brick masonry substrates.

Protectosil CHEM-TRETE 40D is designed for limestone and marble. It imparts both water-repellent and consolidation properties.

Protectosil CHEM-TRETE PB VOC is excellent on porous substrates such as split-face block and other CMU and brick masonry substrates.

Protectosil CHEM-TRETE PB 100 is a pure silane and is excellent on porous substrates such as split-face block and concrete masonry units.

Protectosil 40H is suitable for concrete structures such as parking and bridge decks.

PRE-INSPECTION

New concrete must be allowed to cure for a minimum of 28 days. All repointing must be complete and allowed to cure for at least 3 days.

Concrete repair and replacement must be completed prior to application of **Protectosil CHEM-TRETE**. Concrete patches must be allowed to cure for at least 28 days.

Structural cracks that exceed 5 mils must use materials and application techniques acceptable to the specifying engineer.

All in-place caulking and sealing materials must have been cured.

PRE-TESTING

Prior to treatment, Evonik Degussa Corporation requires application of **Protectosil CHEM-TRETE** to a representative test area. The area should then be evaluated according to Evonik Degussa Corporation's standard procedures to verify that the product will effectively protect the structure and will not have any adverse effect on related construction materials, such as plastic windows and asphaltic products.

SURFACE PREPARATION

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.

The purpose of cleaning is to remove the contaminants and leave the pores open to allow penetration of **Protectosil CHEM-TRETE**.

Surface cleaning should be closely monitored by the contractor and must not cause any unnecessary surface damage. Surface preparation shall be subject to final approval by the specifying engineer.

Proper surface preparation will depend on the type of substrate (concrete, masonry, stone, etc.) as well as the type of surface contamination. To ensure proper performance of **Protectosil CHEM-TRETE**, the same cleaning technique that will be used on the project should also be used to prepare the test area. The following are acceptable cleaning techniques.

1. *Horizontal concrete surfaces* may be cleaned using shot-blasting equipment according to the ICRI surface prep guide so that the concrete profile is between CSP1 and CSP3. The deck surface next to curbs, columns, etc., that is not cleaned by the shotblasting equipment, as well as 3 inches up the walls directly adjacent to the deck surfaces should be cleaned by sandblasting.
2. *Vertical Surfaces* may be cleaned using either hot or cold high-pressure water (minimum 3000 psi) or high-pressure steam.

(Continued)

3. *All Surfaces* may be cleaned using chemical cleaners if these are required to remove certain types of surface contamination. The cleaner must be used in accordance with the manufacturer's instructions. The surface should be thoroughly rinsed to remove all cleaning material, using a minimum of 3000 psi water pressure.

Wet or dry sandblasting may be used on concrete surfaces.

Allow 24 to 48 hours of drying time before application of **CHEM-TRETE**.

DELIVERY, STORAGE AND HANDLING

Protectosil CHEM-TRETE shall be delivered to the job site in the original sealed (with numbered seals intact) containers, clearly marked with Evonik Degussa Corporation's identification that includes type of material and lot number.

Store **Protectosil CHEM-TRETE** in a covered area that is protected from rain or standing water, where temperatures are not less than 0°F (-18°C) or more than 120°F (50°C), with adequate ventilation and away from any sources of ignition such as sparks and open flames. If **Protectosil CHEM-TRETE** is in storage for more than one year, a sample should be sent to Evonik Degussa Corporation for analysis prior to use, and the container must be properly resealed.

JOB CONDITIONS

The contractor shall not proceed with the application if:

- A. The ambient temperature is below 20°F (-7°C) (unless authorized in writing by Evonik Degussa Corporation).
- B. The ambient or surface temperature is above 100°F (-38°C).
- C. Rain is expected within 4 hours following the application.
- D. Precipitation has occurred within 24 hours prior to application.
- E. High winds or other conditions prevent proper application and create overspray that may have an adverse effect on surrounding materials.
- F. Frost or ice is on the substrate.
- G. Do not apply to a wet or damp surface.

APPLICATION

Protectosil CHEM-TRETE shall be applied using low-pressure (15-25 psi) pumping equipment with fan type spray nozzles.

Protectosil CHEM-TRETE shall be applied as supplied without any alteration or dilution.

ONLY PROTECTOSIL CHEM-TRETE 40 VOC AND PROTECTOSIL CHEM-TRETE BSM 400 WILL NOT LEAVE A RESIDUE ON GLASS, METAL AND OTHER NONPOROUS SURFACES.

The applicator shall provide, install and maintain suitable traps, tarps and/or drop cloths to protect against damage caused by spillage or heavy overspray. Protect all plants and vegetation from overspray. Protect all materials containing asphalt from overspray. Protect all coated glass materials, including plexiglass.

A flood application of the material is required. On horizontal surfaces, the liquid material shall pond on the surface for at least 5 seconds before being absorbed. On vertical surfaces, the liquid material shall run down 6-8 inches below the spray pattern.

On horizontal surfaces, traffic must be kept off the treated surfaces until the solution has completely dried.

The contractor shall provide adequate ventilation during the application and shall follow all safety precautions.

IMPORTANT: THE PROTECTOSIL CHEM-TRETE CONTAINER IS LABELED WITH IMPORTANT SAFETY INSTRUCTIONS; READ THEM CAREFULLY BEFORE USING. MATERIAL SAFETY DATA SHEETS ARE PROVIDED BY EVONIK DEGUSSA CORPORATION AND MUST BE CAREFULLY REVIEWED PRIOR TO APPLICATION OF CHEM-TRETE.

For more information, MSDS and the most updated product information, and to find your local representative, go to www.protectosil.com.

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