

Technical Data Sheet

CP-500 PREMIUM™ Water Repellent Product Data and Test Information

PRODUCT NAME

CP-500 PREMIUM™

Clear penetrating, heavy-duty siloxane water repellent for horizontal applications

MANUFACTURER

Chemical Products Industries, Inc.
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PRODUCT DESCRIPTION

CP-500 PREMIUM™ protects masonry and other building materials against damage due to penetration by water and waterborne chemicals. CP-500 PREMIUM™ is not a surface coating. It penetrates up to ¼ inch or ore into treated surfaces and bonds with the substrate to provide long lasting, protection, even at hairline cracks.

APPLICATIONS

Recommended surfaces include: architectural precast or cast in place, concrete, brick, mortars, natural stones, limestone, granite, sandstone, terra cotta, ceramic tile and grout, adobe, exposed aggregate products, Portland cement stuccos, plaster and concrete masonry units.

Protects horizontal surfaces such as pavements, sidewalks and plazas. It should also be used on vertical surfaces with leaks and or where extra protection is desired.

Also protects bridges, parking decks, airport taxiways and aprons, piers and marine structures, and other surfaces requiring outstanding corrosion resistance and protection from chloride penetration.

For use on brick masonry to protect against the entrance of wind-driven rain.

To reduce the effects of mildew, efflorescence, and stains from concrete and masonry.



Integris Baptist Hospital – Oklahoma City, OK

ADVANTAGES

Effective on most vertical or horizontal exterior, above-grade masonry surfaces.

Natural substrate color and surface textures are unaffected, with little to no gloss created.

Benefits of this product are:

- Excellent resistance to water intrusion
- Deep penetration into the substrate
- Exhibits good beading effects
- 100% water vapor permeable
- Mildew and fungus resistant
- Efflorescence protection
- High resistance to alkali attack
- Freeze thaw protection
- Can be reapplied to treated surfaces

Chemical Products' state-of-the-art protective treatments have developed a reputation by architects and building professionals as the premier solution for water repellents and sealers. Chemical Products' is dedicated to solving the destructive influence water intrusion and other elements have on building materials.

APPEARANCE

CP-500 PREMIUM™ is clear, non-yellowing and does not change the color or appearance of typical surfaces to which they are applied. Buildings and structures stay cleaner because conditions which contribute to staining are reduced and dirt rinses away more readily.

PRETREATMENT FOR PAINT

Water can penetrate through most paints and coatings. This leads to damp substrates and blistering and peeling of paint. Pretreating concrete, masonry, or stucco with CP-500 PREMIUM™ prior to painting keeps walls drier and extends the life of the paint. CP-500 PREMIUM™ is compatible with most latex and other paints. But to assure compatibility between paint and pretreatment, a small test application is recommended. Note: Do not use a pretreatment or allow overspray on metal or other nonporous surfaces to be painted.

TECHNICAL DATA

Color	clear
Active substance	polysiloxane
Active content	8%
Ph	4.5
Density	6#/gal.
VOC	>600 g/l

TEST DATA

NCHRP #244

SeriesII >80% Reduction in Water Absorption

SeriesIV >90% Reduction in Water Gain

SeriesIV 98% Reduction in Chloride Absorption

ASTM C 67 % Reduction in Water Absorption on Brick During Immersion in Water for 24 hrs.
Results – 96.6%

ASTM C 140 % Reduction in Water Absorption on 3000 psi Concrete During Immersion in Water for 24 hrs.
Results – 91.29%

ASTM C672 “Deicer Scaling”
100 cycles (deicer freezing and thawing using air-entrained concrete specimens)
Results - Little to No Change

ASTM E303 “Skid Resistance”
Dry surface - No Change
Wet surface - No Change

ASTM E 514 “Water Permeance of Masonry”
Reduction in Leakage 99.9%

ASTM D 1653 Water Vapor Transmission
100% Breathable

LIMITATIONS

Not intended for below-grade waterproofing. CP-500 PREMIUM™ will leave a residue on non-porous substrates such as glass windows, metal frames and painted surfaces. Caution should be taken with specialty coated glass or plastic windows. Check compatibility before application. Protect materials which can be damaged by solvents. Do not apply when following conditions are present:

- Ambient or surface temperature less than 40° F or predicted to fall below 40° F within 24 hours following application.
- Rain within 72 hours prior to application or predicted within four hours after application.
- Wet or frozen substrates.
- High winds which could cause excessive overspray.

Application should be completed by qualified applicator with experience applying water repellents. Application equipment should be clean and free of foreign materials which could be dissolved by solvent and deposited on surfaces to be treated. Contact CPI for additional precautions and information on compatibility with specific materials.

INSTALLATION

Best results are obtained by applying CP-500 PREMIUM™ on clean and dry substrates. As a standard procedure, fresh concrete should be allowed to dry for 28 days before application. All repointing must be completed and allowed to cure at least 3 days. Concrete repair and replacement must be completed prior to application. Patching materials, caulking, sealing materials, traffic paint must be fully cured before applying CP-500 PREMIUM™. In addition, the actual amount of material that is used for each application is dependent on the absorptive capacity of the substrate.

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 contaminants. Acceptable surface cleaning methods include shotblasting, sandblasting, waterblasting and chemical cleaners. Check with your Chemical Products Industries, Inc. representative to verify suitable cleaning methods, products and that the surface preparation is adequate.

Before applying, it is recommended that preliminary tests be carried out to determine usage and to test the effectiveness of the treatment.

Joint Sealants: Install sealants before applying water repellents except when using asphaltic sealants and other products which are susceptible to solvent attack. If water repellent is applied before sealants, verify adhesion of sealant to treated substrate and mask joints if required to assure adhesion. While CPI water repellents are compatible with most sealants, specific products should be investigated prior to use.

Application: Apply water repellents as early as practical to protect substrates during construction, but not before wall cap, flashings, and roof are in place and water trapped in structure has been drained.

Spray apply CP-500 PREMIUM™ by low-pressure (150 psi maximum) pumping equipment with a wet fan type spray nozzle. Alternate methods include nap roller (1") or by brush. Required application rate varies from 70 to 175 sq. ft. per gallon depending on surface texture and absorbency.

Vertical Surfaces: apply in a flooding application, from the bottom up so the material runs down 6 to 8 inches below the spray pattern. On horizontal surfaces the liquid material should pond on the surface at least 5 seconds before being absorbed. For best results two applications are recommended with the second application applied using a wet on wet technique, i.e., the surface is wet from the first application but not glossy. During application, precautions should be taken to protect the surrounding area from overspray and run off.

Horizontal Surfaces: Apply enough material so that solution stands for 60 seconds before completely penetrating the surface.

Clean spillage and overspray immediately, before evaporation of solvent. Wipe dry with clean, dry cloth.

As soon as all solvent is evaporated, CP-500 PREMIUM™ has set and can be exposed to traffic. On cool or humid days, evaporation of solvents may be retarded and could result in longer setting time.

Precautions: CP-500 PREMIUM™ is a flammable liquid and should be kept away from heat, sparks, and other sources of ignition. CP-500 PREMIUM™ should be kept closed when not in use and should be stored at temperatures between 0° F and 120° F. Care should be taken to prevent moisture condensation in the container. Please refer to the Material Safety Data Sheet for more detailed information.

AVAILABILITY

CP-500 PREMIUM™ is available in 5 and 55 gallon drums to approved applicators throughout the United States. Contact Chemical Products Industries, Inc. at 800-624-4356 for a sales representative in your area.

TECHNICAL SERVICE

Technical service engineers and chemists are available to answer questions on product performance, application methods and chemical composition.

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