CHEM-CRETE SofiX® CCC700

"Hygroscopic and Hydrophilic Moisture and Vapor Blocker"

MANUFACTURER

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PRODUCT DESCRIPTION

Chem-Crete SofiX CCC700 is a unique one of a kind water-based crystallization product specifically designed to permanently block moisture and vapor transmission in concrete or masonry structures up to 16 lb./1000 ft²/24 Hours. Application of the SofiX CCC700 system blocks moisture and vapor movement through concrete and masonry substrates within 24 hours. The Chem-Crete SofiX CCC700 can be easily applied by spraying or rolling. Chem-Crete SofiX CCC700 is designed to be applied to concrete substrates that are 7 days or older. The Chem-Crete SofiX CCC700 is formulated to enhance deep penetration into the concrete substrate through capillary action. The product components migrate deep into the concrete substrate while reacting to form a hygroscopic and hydrophilic crystalline material which permanently blocks the concrete and masonry substrate pores. Even under the influence of constant hydrostatic pressure, the crystallization continues to fill and block the migration of moisture through the concrete substrate. The crystallization activity of the SofiX CCC700 system is continuous while moisture is present. The product becomes inactive during dry conditions and is fully reactivated when moisture or moisture vapor are present. The unique "reactivation" is the key in providing permanent waterproofing protection for any concrete or masonry substrate.

Chem-Crete SofiX CCC700 is an odorless, colorless, clear liquid with very low viscosity that allows it to penetrate deeply into a concrete substrate or other masonry products. The product protects, preserves and waterproofs without any surface film formation or color change.

USES

- Concrete Floors.
- Foundations and Slabs.
- Reservoirs.
- Industrial Plants.
- Swimming Pools.
- Subway Tunnels.
- Elevator Pits.
- Walls and flooring in parking garages.

FEATURES

- High moisture, vapor-blocking performance.
- Single component.
- Easy application.
- Penetrates concrete and seals capillary tracts and hairline cracks.
- Multiple functions: Blocking of moisture, vapor; sealing and bonding which increase adhesive properties for products such as: epoxy coatings, polyurethane coatings, asphalt coatings, and paints.
- Cost effective.
- Non-toxic.
- Resists hydrostatic pressure.
- Exterior and interior applications.
- Permanent capillary blocking system for concrete.

Treatable Materials:
Concrete, concrete block, mortar, plaster, stucco, terrazzo, exposed aggregate and any sand, aggregate cement combination.

APPLICATION

Methods of Application: Spray, roll or brush.
Tools Needed: Spray equipment, roller, brush, bristle broom or squeegee.
Surface Preparation: Surface must be clean, and free of paint, sealer, oil, adhesive, curing compound, form release agent and/or anything that will not allow Chem-Crete SofiX CCC700 to penetrate the substrate. All areas to be treated must be cleaned by scrubbing, or pressure washing to remove any surface dust, dirt or other contaminants. Chem-Crete SofiX CCC700 may be applied to damp surfaces as long as no standing water or puddles are present. Heavy contaminated areas must be cleaned using Chem-Crete CONCLEAN CCC 060 biodegradable concrete cleaner and a pressure washer to help remove deeply penetrated areas.

1. **Test the moisture content of the substrate using the Quantitative Calcium Chloride test method (ASTM F1869-98).**
2. If the moisture content is below 9 lb./1000 ft²/24 hours, wet the surface slightly with clean water, then apply the first coat of Chem-Crete SofiX CCC700.
3. Apply the first coat of Chem-Crete SofiX CCC700 at a rate of 200 sq. ft. per gallon. The concrete or masonry substrate must remain wet with Chem-Crete SofiX CCC700 for at least 30 minutes.
4. After the concrete or masonry substrate is dry, normally 1 to 2 hours at 70°F (21.1°C), apply a second coat of Chem-Crete SofiX CCC700 at a rate of 200 sq. ft. per gallon making sure to keep the substrate wet with Chem-Crete SofiX CCC700 for at least 30 minutes.
5. Allow the surface to completely dry for at least 24 hours. During the drying stage, good circulation of air is needed and the room temperature should be kept close to operating conditions.
6. **Re-test the moisture transmission rate after 24 hours of application, as described above. If the moisture transmission rate remained higher than required, a third coat at a rate of 200 sq. ft. per gallon of Chem-Crete SofiX CCC700 is required.**

7. Once the moisture content drops to a reading within the limits specified by the end user or the floor covering manufacturer, the substrate must be cleaned to remove any surface crystals or efflorescence materials that might be pushed to the surface as a result of the treatment. Cleaning can be done by any method you may find convenient such as mopping, flushing with water, etc.

Coverage: 2 coats, 200 sq. ft. per gallon each coat. Coverage depends on the temperature and porosity of the concrete.

TECHNICAL DATA

• Specific Gravity	1.09
• Freeze Temp	24°F. (-4°C.)
• Freeze Harm	Complete
• Boiling Point	215°F. (105°C.)
• For Clean-Up	Water
• Color	Clear
• Toxicity	None
• Odor	None
• Flammability	None
• Environmental Hazards	None
• Thinners	None Required
• Drying Time @77°F. (25°C.)	1-2 Hours

STANDARDS

Meets or exceeds:

ASTM C-666 Freeze Thaw Testing

NCHP #244 "Soak Test" Rev.

Bonding ASTM C-3359: 28% increase in epoxy adhesion or surface coating.

Hardening ASTM C-42: 40% increase in compressive strength at 14 days over untreated samples. 35% increase at 28 days over untreated samples.

Weathering ASTM G-23: Ultraviolet exposure has no adverse effect on samples treated with Chem-Crete SofiX CCC700.

ASTM C-309 Curing, Type 1, Class A.

Curing Temperatures:

ATEC 25-01831

PACKAGING

Chem-Crete SofiX CCC700 is available in 5 and 55 gallon containers.

TECHNICAL SERVICES

Please contact International Chem-Crete Corporation for Technical Personnel.

LIMITATIONS

Do not apply Chem-Crete SofiX CCC700 in the following cases:

- When temperatures fall below 40°F. (5°C.)
- To areas previously treated with curing or sealing agents unless these coatings have been removed by chemical or mechanical means.
- When quantitative calcium chloride levels are above 16 lb/1000 ft^2/24 Hours.

Shelf Life: One year. Agitate bucket or drum before using.

WARRANTY

LIMITED WARRANTY: "International Chem-Crete Corporation warrants that, at the time and place we make shipment, our material will be of good quality and will conform to our published specifications in force on the date of the acceptance of the order."

DISCLAIMER: The information contained herein is included for illustrative purposes only and, to the best of our knowledge, is accurate and reliable. International Chem-Crete Corporation is not under any circumstances liable in connection with the use of this information. As International Chem-Crete Corporation has no control over the use to which others may put its products, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine suitability of products for specific application and assume all responsibilities in connection therewith.

Chem-Crete SofiX CCC700 Hygroscopic and Hydrophilic Moisture and Vapor Blocker is manufactured by:

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