



# CHEM-CRETE SOFIX<sup>®</sup> CCC700

## Hydrophilic and Hygroscopic Moisture and Vapor Blocker

### 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 Lbs / 1000ft<sup>2</sup> / 24 Hours\*. Application of the CHEM-CRETE 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 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 CHEM-CRETE 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.



Picture: microscopic image shows crystals of CHEM-CRETE SOFIX CCC700

\* ASTM F1869: Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.

### FIELDS OF APPLICATION

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

### PRODUCT FEATURES

- High Moisture, Vapor blocking performance.
- Single component
- Easy Application
- Penetrates concrete sealing voids, capillaries and cracks up to 1/16th inch.
- Multiple functions: blocking of moisture and increases the adhesion of coatings, and paints.
- Non-toxic
- Cost effective
- Resist hydrostatic pressure
- Internal and External application
- Treatable Materials: Concrete, concrete block, mortar, plaster, stucco, terrazzo, exposed aggregate and any sand, aggregate cement combination.

### PACKAGING

Product	Packaging
CHEM-CRETE SOFIX CCC700	1 GAL (3.785 LITER) JUG
	5 GAL (18.925 LITER) PAIL
	55 GAL (208 LITER) DRUM

### TECHNICAL DATA

Specific Gravity	1.09
Freeze Temperature	25°F (-4°C)
Boiling Point	221°F (105°C)
Freeze Harm	Complete
For Cleaning	Water
Color	Clear
Odor	None
Toxicity	None
Flammability	None
Fumes During Treatment	None
Environmental Hazards	None
Thinners Required	None
VOC (grams/Liter)	0.0
Number Of Coats Required	Two coats
Drying Time At 77°F (25°C)	2-3 hours

**Applicable Standards:** CHEM-CRETE SOFIX CCC700 meets or exceeds:

- ❑ ASTM C666 Freeze thaw testing
- ❑ NCHP#244 "Soak Test" Rev.
- ❑ ASTM D3359: 28% increase in epoxy adhesion or surface coating
- ❑ Hardening Test ASTM C-42: 40% increase in compressive strength at 14 days over untreated samples, 35% increase at 28 days over untreated samples.
- ❑ Weathering Test ASTM G23: Ultraviolet light and water spray exposure had no adverse effect on CHEM-CRETE SOFIX CCC700 treated samples.
- ❑ ASTM C-309 Curing type 1, class A
- ❑ Curing temperatures ATEC 25-01831

## APPLICATION DATA

**Methods of Application:** By spraying, rolling or brushing.

**Tools Needed:** CHEM-CRETE SOFIX CCC100 can be applied using one or more of the following:

- Low pressure or airless sprayer.
- Paint roller or paint brush.
- Bristle broom.
- 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. Areas which require cleaning must be cleaned by scrubbing, pressure washing or other methods 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.

**Coverage:** Two coats, approximately 200 ft<sup>2</sup> per gallon per coat (4.91 m<sup>2</sup> per liter per coat) of CHEM-CRETE SOFIX CCC700. Coverage depends on the temperature and porosity of the concrete.

**Limitations:** Do not apply CHEM-CRETE SOFIX CCC700 in the following cases:

- ❑ When temperature falls 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.
- ❑ Do not use or allow it to come into contact with aluminum or glass. Crystallization will occur on surface.

**If contact occurs, immediately wash off with water.**

- ❑ Do not use on glazed tiles or glazed bricks. Crystallization will occur on surface. **If contact occurs, immediately wash off with water.**

## CLEANING

Clean all equipment, tools with fresh clean water immediately after use.

## STORAGE

Two years shelf life when stored in cool, dry place in unopened drums. Always agitate or stir the bucket or drum before using. **DO NOT ALLOW PRODUCT TO FREEZE.** Repeated freezing & thawing might cause damage for the product.

## SAFETY PRECAUTIONS

As with all construction chemical products, adequate precautions and care must be taken during usage and storage. Avoid direct contact with foodstuff, eyes, skin, and mouth. Any direct contact with skin, eyes, etc. should be washed thoroughly with clean running water and soap.

Always wear protective goggles and gloves. In case of eye contact, flush for 15 minutes with clean water. **KEEP OUT OF REACH OF CHILDREN.**

## TECHNICAL ASSISTANCE

Please contact International Chem-Crete Corporation for Technical Personnel.

## WARRANTY

**LIMITED WARRANTY:** International Chem-Crete Inc. warrants that, at the time and place we make shipment, our materials will be of good quality and will conform to our published specifications in force on the date of 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 Inc. is not under any circumstances liable to connection with the use of information. As International Chem-Crete Inc. has no control over the use to which others may put its products, it is recommended that the products be tested to determine the suitability for specific applications and/or our information is valid in a particular circumstances. Responsibility remains with the architect or engineer, contractor and owner of the design, application and proper installation of each product. Specifier and user shall determine the suitability of the product for specific application and assume all responsibility in connection therewith. AM130611.

**Manufactured By:**



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