



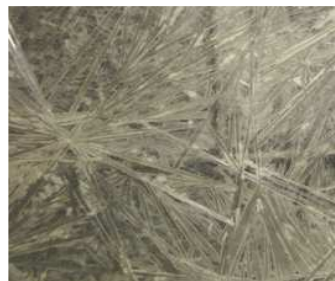
# CHEM-CRETE PAVIX®

**Concrete Water & Moisture Protection Used for treatment and protection against water and moisture associated problems for all concrete and cementitious structures**

## PRODUCT DESCRIPTION

Chem-Crete Pavix, is a patented dual crystalline penetrating concrete and masonry sealer that is 100% water-based compound (H<sub>2</sub>O) containing only natural ingredients. Designed to protect surfaces from the delaminating effects of water, moisture saturation, freeze/thaw, Alkali Silica Reaction (ASR), and chloride ion penetration.

The protective properties are a distinctive surface repellent and moisture blocker, offering hygroscopic and hydrophilic capacities. Pavix is ideal for exterior or interior concrete and masonry surfaces and can be applied in both positive or negative side applications. Pavix will dramatically reduce maintenance costs and positively affect the life cycle of concrete and masonry products.



## ADVANTAGES & BENEFITS

- Can be used on green & cured concrete.
- 100% green, environmentally safe, & non-toxic.
- Reduce damage caused by repeated freezing and thawing cycles.
- Prevents concrete scaling.
- Seals and protects cracks up to 1/16<sup>th</sup> inch (1.5 mm).
- Reduces alkali-silica damage and can reduce silicate dusting.
- Can help reduce calcium oxychloride reaction due to use of magnesium chlorides.
- Reduces and/or eliminates early joint deterioration.
- Prevents penetration of chloride ions from de-icing salts.
- Excellent repelling properties that help prevent water, jet fuel, and oil from saturating into the surface.
- Helps concrete stay whiter and brighter.
- Protects reinforcing steel bars against corrosion without any negative effects on existing steel cathodic protection.
- Maximizes joint sealant adhesion by reducing moisture.
- Can be applied vertically, horizontally, and overhead.
- Provides long-lasting internal waterproofing and moisture blocking from positive and negative sides.
- Eliminates fungal growth.

## FIELDS OF APPLICATION

Airports	Highways
Tunnels	Bridge structures
Ports authorities	Concrete structures
Parking surfaces & structures	Sidewalks & drives
Retaining walls	Precast/tilt concrete

## PACKAGING

Product	Packaging
CHEM-CRETE PAVIX CCC100	1 GAL (3.785 LITER) JUG
	5 GAL (18.925 LITER) PAIL
	55 GAL (208 LITER) DRUM

## TECHNICAL SPECIFICATIONS

### Physical Properties

Specific Gravity	1.1 – 1.2
Viscosity	2.4 centipoises
Freezing Point	25°F (-3.89°C)
Boiling Point	219°F (104°C)
Color	Clear
Environmental Hazards	None
Drying Time @ 77°F (25°C)	2 – 3 hours
Odor	None
Toxicity	None
Fumes	None
Flammability	None

**Product Performance:** PAVIX complies with the following test standards:

- ASTM C1202-91 Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration.
- AASHTO T260 Sampling and Testing for Chloride Ion in Concrete and Concrete Raw Materials.
- AASHTO T277 Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration.
- ASTM C-1567 Determining the Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar Bar Method).
- ASTM C1218 Water-Soluble Chloride in Mortar and Concrete.
- ASTM D6489-99 Determining the Water Absorption of Hardened Concrete Treated with a Water Repelling Coating.
- ASTM C642-97 Density, Absorption, and Voids in Hardened Concrete.
- ASTM C457-98 Microscopical Determination of Parameters of the Air-Void System in Hardened Concrete.
- ASTM D7234: Pull-Off Adhesion Strength of Coatings on Concrete.
- ASTM D4541-95 Pull-Off Strength of Coatings Using Portable Adhesion Testers.
- ASTM C1583: Bond Strength or Tensile Strength of Overlay Materials by Direct Tension.
- AASHTO T259-00 Resistance of Concrete to Chloride Ion Penetration.

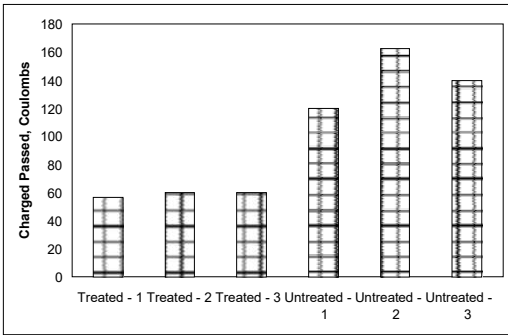


Fig. 1: ASTM C1202-91 & AASHTO T259: Chloride ion penetration tests on treated & untreated concrete samples

- ASTM C666-97 Resistance of Concrete to Rapid Freezing & Thawing.

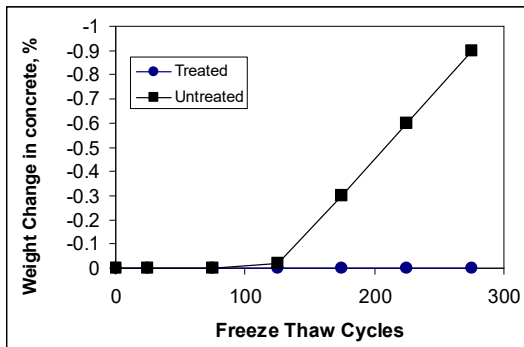


Fig. 2: ASTM C666-97: Freezing & thawing effect on treated & untreated concrete samples

- ASTM F609-96 Standard Test Method for Using a Horizontal Pull Slipmeter (HPS).
- ASTM E303-93 Measuring Surface Frictional Properties Using the British Pendulum Tester.

### Fresh Concrete

- ASTM C672-98 Scaling Resistance of Concrete Surfaces Exposed to Deicing Chemicals.

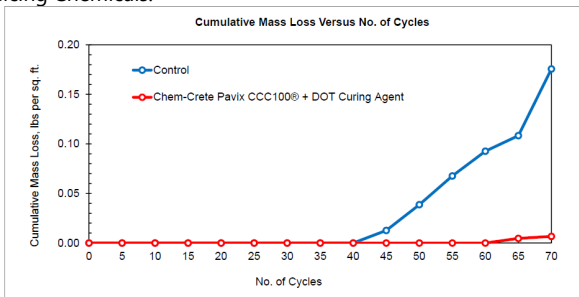


Fig. 3: ASTM C672-98 Scaling resistance of concrete surfaces exposed to deicing chemicals.

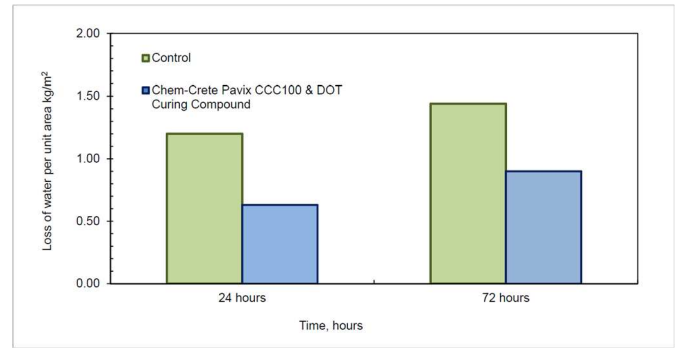


Control sample without Pavix and curing compound after 70 cycles of freezing and thawing



Sample with Pavix and curing compound after 70 cycles of freezing and thawing

- ASTM C156 Standard Test Method for Water Loss [from a Mortar Specimen] Through Liquid Membrane-Forming Curing Compounds for Concrete



**Fully cured or existing concrete:** Repair and seal joints, cracks, and voids greater than 1/16<sup>th</sup> inch prior to application. Concrete surfaces must be clean and sound prior to application of the product. Proper cleaning will open the surface pores and capillaries to enhance the penetration process. Compressed air can be used to remove dust and loose particles from the surface. Flushing the area to be treated with water can improve the cleaning process. However, for heavily contaminated areas special concrete cleaning agents such as Chem-Crete CONCLEAN CCC060 can be used to remove dirt, grease, and oil from those areas.

### Green/plastic application:

- 1) A test should always be performed for product absorption.
- 2) Only consider an application when concrete finishing is completed.
- 3) Concrete should not be in duress and should be curing normally.
- 4) Apply when all bleed water has dissipated from the surface.
- 5) Apply Pavix uniformly and at the manufacturer's recommended rate.
- 6) DO NOT allow the Pavix to puddle or pool. Should Pavix puddle or pool, remove this condition immediately by the best way possible. Additional movement of product with a broom, vacuum, or air blower is recommended.
- 7) Application of membrane forming curing compound should then immediately commence and not longer than 20 minutes from the initial Pavix application.
- 8) Apply the membrane curing compound at manufacturer's recommended coverage rate.

**Coverage:** Apply at an average coverage rate of 150-200 ft<sup>2</sup>/gal (3.7-4.9 m<sup>2</sup>/liter) in one coat. Do not attempt additional coatings.

### Limitations:

- Do not apply PAVIX in the following cases:
- If concrete surface temperature falls below 40°F (5°C).
  - If the area has been previously treated with sealing agents unless the sealers are removed by chemical or mechanical means.

## STORAGE

PAVIX must be stored under room temperature. Cold temperatures may cause the product to crystallize. Shelf life is two years in its original unopened packaging. **Do not allow product to freeze.**

## 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 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 warm water. If eye irritation persists, seek medical attention. In case of ingestion or swallowing, drink 2 glasses of clean water and seek medical attention. 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 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 Corp. is not under any circumstances liable for the use of this information, as International Chem-Crete Corp. 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 if our information is valid in particular circumstances. Responsibility remains with the architect, engineer, contractor, and owner of the application for 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. AM160818PR1-3.

**Manufactured By:**



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