



# **Deeply Penetrating Water and Salt Barrier for Concrete**

# **DESCRIPTION**

C² Salt Safe™ is a ready-to-use water-based, VOC compliant silane/siloxane water repellent and "chloride screen" for the protection of concrete and masonry. This easy to apply treatment penetrates more deeply than conventional water or solvent-based water repellents.

C² Salt Safe™ protects horizontal and vertical surfaces from moisture intrusion and chemical attack of chloride salts. C² Salt Safe™ shields horizontal surfaces such as driveways, sidewalks, and tile or brick pavers. This product also provides excellent protection for retaining walls, bridge pilings and other vertical areas exposed to deicing salts.

In coastal areas, C² Salt Safe™ protects against salt air by screening chlorides from penetrating through concrete to the reinforcing steel. C² Salt Safe™ reduces rebar corrosion and surface spilling caused by watercarried salts.

C² Salt Safe™ is also an effective alternative to conventional solvent-based silanes and siloxanes. It penetrates and chemically bonds deep within the concrete or masonry substrate to provide long-lasting protection against moisture intrusion and water related staining or deterioration. When properly applied, treated surfaces keep their natural breathing characteristics and natural appearance and no surface film is created.

# **BENEFITS**

### **Long Lasting Protection**

produced by deeper penetration on vertical and horizontal surfaces.

**Safe** and easier to apply. The waterbased formula minimizes explosion and fire hazards associated with alcohol or solvent-based water repellents.

## Easy to Use.

Soap and water cleanup on window glass, window frames and application equipment.

#### Alkaline Stable

It is suitable for new "green" concrete, 14-28 days old.

### Treated Surfaces "Breathe"

Does not trap moisture.

#### **Effective**

Provides protection against de-icing salts and salt air.

# **COMPLIANCE**

Complies with all known national, state and district AIM VOC regulations.

X	California Air Resources
	Board SCM Districts
X	South Coast Air Quality
	Management District
X	Maricopa County, Arizona
X	Northeast Ozone Transport
	Commission
X	US Environmental
	Protection Agency

## PERFORMANCE TESTS

Laboratory testing has shown this product to be a singularly effective general purpose water repellent and chloride screen. All tests were compared to untreated control.

### NCHRP 244 Series II

Reduction of Water Absorption - 79% Reduction in Chloride Ion Absorption -90%

### **NCHRP 244 SERIES IV**

Reduction in Chloride Ion Absorption Accelerated Weathering Test - 88%

## **ASTM E 514**

## WIND DRIVEN RAIN

Reduction in Water Absorption - 91%

# ASTM C 672 SCALING RESISTANCE EXPOSURE TO DE-ICING CHEMICALS AND FREEZE/THAW CYCLE (50 CYCLE)

Cumulative Mass Loss - no mass loss Scaling Resistance - no scaling

#### Resistance to:

Sunlight - Excellent Alkalinity - Excellent

### Surface Appearance:

(after application) - No change

FORM	Clear Liquid
SPECIFIC GRAVITY	0.997
ACTIVE CONTENT	10%
TOTAL SOLIDS	9%
pH	7-8
WT/GAL	8.24 lbs
FLASH POINT	100°C (212°F) ASTM D 3278
FREEZE POINT	0°C (32°F)
VOC CONTENT	<400g/L <120 g/L low solids
SHELF LIFE	1 year in unopened, factory sealed contained

### **Technical Data**

#### Limitations

All information provided is to the best of our knowledge accurate and is to be used strictly as a guide.

Handling conditions, installation and use are not in our control therefore we cannot guarantee the results.





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- Not suitable for application to synthetic resin paints, gypsum or other non-masonry surfaces. The product may not be suitable for surfaces to receive paints or coatings. Always test for compatibility.
- Not suitable for protecting surfaces subject to constant water spray (car washes).
- Not suitable for application to coated surfaces or surfaces previously treated with water repellents or liquid hardeners.
- Water repellency of treated surfaces will increase for up to 14 days after application.
- Will not prevent water penetration through structural cracks, defects or open joints.
- Not recommended for below grade applications.
- For additional testing information contact Crete Colors International at: support@cretecolors.com

# SURFACE PREPARATION

Please read: SAFETY INFORMATION on the label and SURFACE PREPARATION before use and application.

Specifier Note: The information provided below is intended to guide the Architect in developing specifications for products manufactured under contract for Crete Colors International, LLC and should not be viewed as a complete source of information about the product(s). The Architect should also refer to the MSDS document for additional recommendations and for safety information.

**Specifier Note:** Paragraph below is for PART 1 GENERAL, Quality Assurance.

#### **Test Area**

- Refer to "Application Instructions" and always test each type of surface and each type of stain for suitability, dwell time and results.
- Test a minimum 1.5m x 1.5m (5ft. x 5ft.) area on each type of masonry. Let the test panel dry 3 to 7 days before inspection. Keep test panels available for comparison throughout the cleaning project.
- Follow Crete Colors International, LLC application instructions.

**Specifier Note:** Paragraphs below are for PART 2 PRODUCTS, Manufacturers and Products.

# Manufactured under contract for:

Crete Colors International, LLC, 112 South Kyrene Rd. Suite #2 Chandler, AZ 85226, USA. Tel: +1-480-426-0424

Fax: +1-480-499-5550

E-mail: <a href="mailto:support@cretecolors.com">support@cretecolors.com</a>

Specifier Note: Paragraphs below are for PART 3 EXECUTION, Installation.
Please read SAFETY INFORMATION on the label and SURFACE PREPARATION before use and application.

#### Surface

Protect people, property, vehicles and all surfaces not set for treatment from spray, wind drift and fumes.

Protect and/or divert pedestrian and auto traffic. Though C² Salt Safe™ has very little odor, avoid exposing building occupants to fumes. Maintain adequate ventilation when working on interior surfaces.

Thoroughly clean the surface using the C<sup>2</sup> Clean<sup>™</sup> product. Remove any curing compound or previous sealer whose surface contaminants may interfere with C<sup>2</sup> Salt Safe<sup>™</sup> ability to penetrate the surface.

Although C² Salt Safe™ may be applied to slightly damp surfaces, best performance is achieved on clean, visibly dry and absorbent surfaces. Excessive moisture inhibits penetration and reduces the service life and performance of the treatment. C² Salt Safe™ will not impair adhesion of most sealing and caulking compounds.

Protect window glass before using C<sup>2</sup> Salt Safe™. If protecting windows is impractical, follow these steps:

- Clean window glass thoroughly before applying C<sup>2</sup> Salt Safe™ to nearby concrete or masonry.
- Try to keep C<sup>2</sup> Salt Safe<sup>™</sup> off the glass.
- Do not use C<sup>2</sup> Salt Safe<sup>™</sup> in wind or when air or surface temperatures are hotter than 35°C (95°F).
- 4. After treated surfaces have been protected from water for 6 hours, if product is on window glass, clean as soon as possible with soap and warm water.





# **Deeply Penetrating Water and Salt Barrier for Concrete**

## **ALWAYS TEST**

each surface for suitability and desired results before application. For best results follow "Application Instructions". Let surface dry thoroughly before inspection and final approval.

## **Equipment**

Apply with a brush, roller or lowpressure spray. Fan tips are recommended for sprayers. Do not atomize.

# **Air and Surface Temperature**

Air and surface temperature should be 4°C to 32°C (40° F to 90° F) during application and for 8 hours following. On warm days, apply early in the day and to shaded areas. If freezing conditions exist before application, let masonry thaw thoroughly. Subfreezing temperatures will freeze/crystallize C² Salt Safe™, inhibiting penetration and significantly impairing results.

# **PACKAGING**

3.5L, 20L or 200L Containers

# **DILUTION**

Do not dilute or alter  $C^2$  Salt Safe<sup>TM</sup> or use for purposes other than specified. Stir or shake well before use.

# **COVERAGE RATES**

 $\begin{array}{c} 2.5 - 7.5 \; m^2/L \\ (100 - 300 \; ft^2/ \; US \; Gallon) \end{array}$ 

**PLEASE NOTE:** Coverage rates are offered for estimating purposes only. Variations in concrete quality,

porosity, job site conditions, temperature and relative humidity will affect coverage rates and drying times.

# **SOLUTIONS**

Remove all curing compounds and other surface contaminants using the appropriate C<sup>2</sup> surface preparation cleaner, as listed below:

C<sup>2</sup> Wash<sup>™</sup> – Concrete laitance and construction soiling from freshly placed and cured concrete

C<sup>2</sup> Maintenance <sup>™</sup> – General soiling and fine dust from ground/polished concrete

C<sup>2</sup> Remove <sup>™</sup> – Curing compounds, mastics, tire marks, wax remover

**C**<sup>2</sup> **Stain Clean** <sup>™</sup> – Oil and grease stain remover

**C**<sup>2</sup> **Clean** <sup>™</sup> – For cleaning and degreasing light-to-heavy soiled concrete.

# STORAGE AND HANDLING

Store in a cool, dry place away from potential ignition sources. Keep tightly sealed when not dispensing. Published shelf life assumes upright storage of factory-sealed containers in a dry place. Maintain a temperature of 7–38°C (45–100°F). Do not double stack pallets. Do not reuse container or remove labels.

Keep this and other chemicals out of the reach of children.

# APPLICATION INSTRUCTIONS

# Horizontal Application Instructions

- Apply in a single saturating coat. Use enough to keep the surface wet for 2-3 minutes before penetrating. Do not over apply.
- 2. Broom out all puddles thoroughly until they penetrate the surface. Wipe up all excess material.

# Vertical Application Instructions

For best results, apply "wet-on-wet" to a visibly dry and absorbent surface using the following application techniques:

### **SPRAY:**

Saturate from the bottom up. Apply enough for a 15–20 cm (4–8") rundown below the spray contact point. Let the first application penetrate for 5–10 minutes. Reapply as needed in the same saturating manner. Less material will be needed for the subsequent applications.

**PLEASE NOTE:** When spray application to fluted architectural block, spray in an overlapping X pattern for complete coverage of recessed surfaces.

#### **BRUSH OR ROLLER:**

Apply uniformly, saturate the surface and let product penetrate for 5-10 minutes. Brush out heavy runs and drips that do not penetrate.





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# **Dense Surface Application Instructions**

Test for application rate. Apply a single coat with sufficient product to completely wet the surface without creating drips, puddles or rundown.

Treated surfaces will dry to touch within 1 hour. Protect surfaces from rainfall for a minimum of 6 hours following treatment. Treated surfaces will be ready for pedestrian and vehicle traffic in 24 hours.

Many surfaces may require several days to achieve their full water repellency properties.

#### PAINT ADHESION

Surfaces being treated with C<sup>2</sup> Salt Safe<sup>™</sup> may be coated with silicone emulsion paints or many oil-based paints. Always test to assure adhesion.

Adhesion may be improved if surface is pressure-rinsed and allowed to dry before application. Adhesion of some cementitious coatings, plaster, stucco, etc. may be adversely affected. Such surface treatments should be installed and allowed to thoroughly cure before installation of C² Salt Safe™. Always test to verify compatibility between C² Salt Safe™ and other proposed surface treatments.

# Cleanup

Clean tools, equipment and surfaces affected by over spray with soap and warm water.

# SAFETY INFORMATION

Your safety is our priority. Crete Colors International, LLC is a member of INFOTRAC'S MSDS Partnership Program. In case of any chemical emergency related to our C<sup>2</sup> products; spill, leak, fire or accident, please contact INFOTRAC free of charge for immediate first aid information.

C² Salt Safe™ is a water-based product. Use appropriate safety equipment and job site controls during application and handling. Read the full label and MSDS for precautionary instructions before use.

Online access 24/7 at:
www.infotrac.net
Phone access 24/7 at:
+1- 352-323-3500

#### FIRST AID

### **Ingestion:**

Get medical assistance.

#### **Eye Contact:**

Rinse thoroughly for 15 minutes. Get immediate medical assistance.

#### **Skin Contact:**

Remove contaminated clothing and rinse thoroughly for 15 minutes. Seek medical assistance if persistent irritation develops.

#### Inhalation:

Seek medical assistance if persistent irritation develops.

# WARRANTY

The information and recommendations made are based on our own research and the research of others, and are believed to be accurate. However, no guarantee of their accuracy is made because we cannot cover every possible application of our products, and anticipate every variation encountered in masonry

surfaces, job conditions and methods used. The purchasers shall make their own tests to determine the suitability of such products for a particular purpose. Crete Colors International warrants this product to be free from defects. Where permitted by law, Crete Colors International makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of merchantability or fitness for particular purpose. Crete Colors liability shall be limited

in all events to supplying sufficient product to re-treat the specific areas to which defective product have been applied. Acceptance and use of this product absolves Crete Colors from any other liability, from whatever source, including liability for incidental, consequential or resultant damages whether due to breach of warranty, negligence or strict liability. This warranty may not be modified or extended by representatives of Crete Colors International, its distributors or dealers

# **CUSTOMER SERVICE:**

For technical assistance and product information visit our web site at <a href="www.cretecolors.com">www.cretecolors.com</a> or email at <a href="support@cretecolors.com">support@cretecolors.com</a>

