



Surface Treatment

MIGRATORY CORROSION INHIBITOR (MCI®) PRODUCTS FOR CONCRETE



# MCI® POWR

## Penetrating, Oil and Water Repellant

### DESCRIPTION

MCI POWR is a penetrating, water-based, alkylalkoxy silane containing Cortec's migrating corrosion inhibitor technology. MCI POWR is specifically designed to protect new and existing concrete structures against the damaging effects of moisture intrusion, freeze/thaw scaling, chloride-ion (salt) intrusion, and oil and water staining.

### HOW IT WORKS

MCI POWR penetrates the concrete and provides water repellency by chemically reacting with the cementitious substrate under proper application. Treated substrates are hydrophobic and retain their original appearance.

Once applied, MCI POWR not only provides water repellency, but protects concrete from oil and water staining. Its Migratory Corrosion Inhibitor action allows this product to penetrate to embedded reinforcement where it forms a protective, monomolecular, corrosion inhibiting layer.

### WHERE TO USE

- Bridges
- Floors Exposed to Oils/Grease/Water (Automotive Service Centers, Commercial Kitchens, etc.)
- Highways
- Parking Decks

### ADVANTAGES

MCI POWR offers engineers, owners, contractors, DOTs, and government agencies a time proven, corrosion inhibiting technology that will extend the life of all reinforced concrete structures.

- Oil and water resistant within 24 hours
- Synergistic corrosion protection – seals surface and penetrates to embedded reinforcement
- MCI® molecules reduce further corrosion of rusted metals
- Easily applied by spray, brush, roller, or squeegee

- Non-toxic, contains no nitrites, phosphates, or chromates
- Small molecule size allows for deep penetration in concrete and other cementitious substrates
- Increases surface abrasion resistance
- Blocks carbonation and chloride ion intrusion
- Resistant to alkali attack
- Helps protect against acid and chemical attack
- Allows concrete to breathe; is not a vapor barrier
- No blushing, peeling, or yellowing

### PHYSICAL PROPERTIES

|            |                                 |
|------------|---------------------------------|
| Appearance | Milky White Liquid              |
| pH         | 9.9-10.1 (neat)                 |
| Density    | 7.8-8.1 lb/gal ( 0.93-.97 kg/l) |
| VOC        | <250 g/l                        |

### SURFACE PREPARATION

Surfaces should be free of standing water, surface dirt, dust, oils, cured materials, and other contaminants prior to application. MCI POWR should be applied to clean, dry surfaces. Surface, air, and material temperatures should be between 40-120°F (4-49°C) during application.

If a coating will be used over MCI POWR, a 7 day waiting period is recommended and compatibility testing should be performed.

### PACKAGING AND STORAGE

When stored in original, airtight containers at or below 77°F (25°C), MCI POWR has a shelf life of 12 months from the date of shipment. MCI POWR is available in 5 gallon (19 liter) pails and 55 gallon (208 liter) drums.



MIGRATING CORROSION INHIBITORS  
FROM GREY TO GREEN

## PERFORMANCE DATA

MCI POWR meets requirements for Alberta DOT Type 1B penetrating sealer. (Requirements for initial water repellency and repellency after abrasion are 70% and 86% respectively.)

| Effect of Oil on Concrete Treated with MCI POWR |             |                 |              |
|---|-------------|-----------------|--------------|
|   | MCI POWR    | Standard Sealer | Control      |
| 10W-30 Oil                                      | No Staining | Oil Staining    | Oil Staining |
| Water   | No Effect   | No Effect       | No Effect    |

## APPLICATION

A wet on wet application, using a coverage rate of 125 - 175 ft<sup>2</sup>/gal (3.0 - 4.3 m<sup>2</sup>/l) is recommended for horizontal surfaces. Allow to fully dry before opening to traffic. For application to vertical surfaces, apply MCI POWR to saturation starting from the bottom of substrate and working up.

## CONSIDERATIONS

MCI POWR should not be used on structures under hydrostatic pressure. DO NOT apply when temperature is at or below 0°C (32°F), or expected to fall below this temperature within 8 hours after application. DO NOT thin. It is recommended to keep away from moisture and to avoid rain for 4 hours after application. Stir thoroughly before use. MCI POWR performance is closely tied to the preparation of the substrate to be treated. See specification for full application instructions.

## FOR INDUSTRIAL USE ONLY

**KEEP OUT OF REACH OF CHILDREN**

**KEEP CONTAINER TIGHTLY CLOSED**

**NOT FOR INTERNAL CONSUMPTION**

**CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION**

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4119 White Bear Parkway, St. Paul, MN 55110 USA  
Phone (651) 429-1100, Fax (651) 429-1122  
Toll Free (800) 4-CORTEC, E-mail [info@cortecvci.com](mailto:info@cortecvci.com)  
Internet <http://www.CortecVCI.com>

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