

# MIGRATORY CORROSION INHIBITOR™ (MCI®) PRODUCTS FOR CONCRETE



## MCI®-2003



### PRODUCT DESCRIPTION

MCI®-2003 gel is a combination of MCI®-2000 admixture and MCI®-2020 surface treatment. It offers the time-proven Migrating Corrosion Inhibitor (MCI®) technology for corrosion protection of reinforcing steel and metals in concrete. MCI®-2003 Gel releases a vapor into the concrete that migrates, seeks out and coats reinforcing steel and metals, stopping further corrosion and extending the service life of the structure.

### WHERE TO USE

MCI®-2003 is recommended for:

- Steel-reinforced concrete bridges, exposed to corrosive environments (carbonation, deicing salts and atmospheric attack)
- Parking decks, ramps and garages
- All reinforced marine concrete structures and dams
- Concrete piers, piles, and pillars
- Balconies, decks, retaining walls, and lanais
- Concrete equipment bases
- Structural walls, below grade tunnels and structures
- All reinforced concrete commercial and civil engineered structures

### ADVANTAGES

- Offers engineers, owners, contractors, DOTs and government agencies a unique opportunity for corrosion protection that will extend the life of all reinforced concrete structures
- Protects against the harmful effects of corrosion even in the densest concrete
- Provides continuous corrosion protection for up to 36 months
- Required dosage is not affected by chloride concentration
- Economical to install and maintain
- Organic, safe and environmentally friendly
- Non-flammable, non-combustible
- Concentrated for cost effectiveness on all projects
- Protects both anodic and cathodic areas
- Will migrate to adjacent areas to protect surrounding metals
- Effective against corrosives such as salts, sulfur and nitrogen oxides
- Solves corrosion problems in areas where surface corrosion treatments cannot be used

### USAGE RATES

Equal to 2 pint/yd<sup>3</sup> (1.2 L/m<sup>3</sup>) of concrete.

For warm, humid, salty environments an initial reinjection rate of 6 months should be used. After the second year either a 1 or 2 year rate should be used, depending on the environment.

### ESTIMATED HOLES FILLED

	5 Gallons (19 liters)	55 Gallons (208 liters)	10 oz. Tubes (0.3 Liters)
3/4" x 3" (1.9 x 7.6 cm)	914 (3459)	10,055 (38,058)	14
3/4" x 5" (1.9 x 12.7 cm)	550 (2082)	30,250 (114,496)	10
3/4" x 8" (1.9 x 20.3 cm)	344 (1302)	18,920 (71,612)	6



**CORTEC**  
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Environmentally Safe VCI/MCI® Technologies

## APPLICATION CHART

Up to 4" (10 cm) thick concrete slabs:  
3/4" x 3" (1.9 x 7.6 cm) holes on 3' (0.91 m) center

Up to 6" (15 cm) thick concrete slabs:  
3/4" x 3" (1.9 x 7.6 cm) holes, 15-18" (38-46 cm) spacing

3/4" x 5" (1.9 x 12.7 cm) holes, 26-30" (66-76 cm) spacing

Up to 10" (25 cm) thick concrete slabs:  
3/4" x 3" (1.9 x 7.6 cm) holes, 15-18" (38-46 cm) spacing

3/4" x 5" (1.9 x 12.7 cm) holes, 36-40" (91-102 cm) spacing

Note: MCI® corrosion protection starts within a few weeks of installation. The integrity of the structure should be checked by a qualified structural engineer. Placement patterns should be verified by this engineer. Additional spalling of concrete may take place after installation of MCI® due to prior corrosion activity even though corrosion protection by the MCI® has started to work.

## APPLICATION

MCI®-2003 is injected into predrilled 3/4" (1.9 cm) diameter holes by a hand-held caulking gun or power inductor plate bulk pump.

## TYPICAL PROPERTIES

Appearance	Opaque yellow gel
Shelf Life	24 months in a sealed drum
pH	8.5-9.0 (10% water)
Non-volatile Content	22-24%
Density	8.6-9.1 lb/gal (1.03-1.09 kg/l)

## PACKAGING AND STORAGE

MCI®-2003 is available in 10 oz. (284 mL) caulking tubes, 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

Store in tightly closed containers.

## 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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