

Specialty

MIGRATORY CORROSION INHIBITOR (MCI®) PRODUCTS FOR CONCRETE

# **MCI®** Coating for Rebar



#### PRODUCT DESCRIPTION

MCI Coating for Rebar provides excellent protection in outside storage as well as offering superior corrosion resistance for embedded rebars. This product is water based and environmentally friendly.

The recommended dry film thickness range is 1-2 mils (25-50 microns). As a soft film, MCI Coating for Rebar is an excellent choice for long-term indoor protection (up to 5 years\*) and short to medium-term (6-24 months\*) unsheltered outdoor protection. The product cures to a soft film and eventually hardens. MCI Coating for Rebar has been tested for adhesion to concrete in accordance with ASTM A 775/A 775 M and showed positive results, confirming that MCI Coating for Rebar does not have to be removed prior to embedding in concrete (see Table 2).

\*Depends on conditions and/or film thickness

### **FEATURES**

- Excellent outdoor protection
- Protects steel, aluminum, cast iron, and tin
- Safe and easy to use
- Environmentally friendly
- Does not affect concrete adhesion to rebar
- Dilutable with water
- Can be removed by using an alkaline cleaner such as MCI-2060 if needed
- Works in SO<sub>2</sub> and H<sub>2</sub>S environments

#### TYPICAL APPLICATIONS

- Protection of rebar partially embedded in concrete
- Jobsite/warehouse storage
- Processing protection
- Overseas shipping
- Maintenance repairs

### **PROPERTIES**

Film Type

Shelf Life

Appearance Off-white to beige

viscous liquid

Dry to Recoat Time 30-90 minutes@72°F(22°C),

55% RH

Dry to Tacky Time 10-60 minutes@72°F(22°C),

55% RH

Dry to Cure Time

Soft, tacky

Non-volatile Content 27-33%

12 months at 75°F (24°C) in a

1-3 hours@72°F(22°C), 55% RH

sealed drum

Theoretical Coverage 2

280-561 ft²/gal at 1-2 mil DFT

(7-14 m<sup>2</sup>/l at 25-50 microns) 0.29 lb/gal (34.3 g/l)

VOC (regulatory) VOC (actual)

0.22 lb/gal (25.84 g/l)

Density

8-8.3 lb/gal (0.95-1.01 kg/l)

pH 9-10 (neat)

# Table 1 Corrosion Protection Properties

Test Method	DFT*	SAE 1010 Carbon Steel
ASTM D1748 Humidity	1-mil (25 microns)	1000+ hr.
ASTM G 85-94 Prohesion	1-mil (25 microns)	600 hr.
ASTM B117 Salt Spray	1-mil (25 microns)	200 hr.
ASTM B117 Salt Spray	2-mils (50 microns)	600 hr.

\*Dry Film Thickness. Coverage at 1 mil is 280 ft²/gal Coverage at 2 mil is 561 ft²/gal



Table 2
Adhesion to concrete results
(ASTM A 775/A 775M)

Test No	Pounds of Force*	
	Coated with MCI® Coating for Rebar	Uncoated
1a	2,660 @ free-end	
1b	2,480 @ loaded-end	
1c	2,660 @ free-end	
2a		2,600 @ loaded-end
2b		2,670 @ loaded-end
2c		3,040 @ loaded-end

<sup>\*</sup>Data indicates the smaller of the pounds of force required to move the embedded rebar either 0.002" as measured at the free-end or 0.010" at the loaded-end.

## **PRODUCT CLEANUP**

Use soapy water to clean up tools and overspray.

### **APPLICATION CONSIDERATIONS**

MCI Coating for Rebar should be completely dry before placing the part into storage.

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

#### PACKAGING AND STORAGE

MCI Coating for Rebar is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) metal drums, liquid totes and bulk. Do not allow product to freeze.

### **APPLICATION**

Surface must be equivalent to ARS Low A-3 and higher or SSPCs 1, 2, 3, 5, 6, and 10 depending on the metal.

Mix MCI Coating for Rebar well prior to use. MCI Coating for Rebar can be used "as is" or diluted with water up to 50%, as long as a 1.0-2.0 mils (25-50 microns) dry film thickness is reached on surface to be protected. It can be applied by spray, brush, roll, or dip.

Airless Spray:

Pressure 2000 psi (140 bar)

Filter 60 mesh

Tip 0.015" (0.038 cm)

Dilution (0-50%)

Conventional:

Equipment Binks 18 gun or equivalent

Automatization pressure 40 psi (3 bar) Fluid pressure 20 psi (1 bar)

Cap/Tip 66/S Dilution (10-50%)

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