



MIGRATING CORROSION INHIBITORS
FROM GREY TO GREEN

03 30 00	Cast in Place Concrete
05 12 00	Structural Steel Framing
09 90 00	Paints and Coatings

CorrVerter® MCI® Rust Primer

DESCRIPTION

CorrVerter® MCI® is a single component, fast drying, water-based primer that converts rusted surfaces to a passive layer. It provides long term corrosion protection by itself or by top-coating for extended performance. CorrVerter® MCI® is recommended for application to rusty or poorly prepared steel surfaces where further corrosion protection is required and good surface preparation is difficult to achieve. CorrVerter® MCI® is formulated to penetrate and eliminate rust as well as to protect bare metal from further rusting.

PACKAGING & STORAGE

CorrVerter® MCI® is available in 1 gallon (3.8 liter) and 5 gallon (19 liter) plastic containers. Keep product from freezing.

To ensure best product performance, store in original packaging, indoors, and out of direct sunlight at 40-100 °F (4-38 °C).

Shelf life: 1 year



HOW IT WORKS

CorrVerter® MCI® contains a unique formulation of chelating agents combined with a high solids waterborne latex with extremely low water vapor permeability. The combination of these materials converts the surface rust into a hydrophobic passive layer, offering a unique formulation primer with excellent protection against re-rusting of metal surface.

ADVANTAGES

CorrVerter® MCI® offers engineers, owners, contractors, DOTs, and other government agencies a convenient, low-labor option when performing repairs on heavily corroded rebar and other metal surfaces.

- Coated rebar has equal or better bond strength to concrete
- Converts rust quickly and can be applied under varying weather conditions
- Can be topcoated with water- or solvent-based topcoats (tannic and phosphoric acid converters can only be top-coated with solvent-based topcoats)
- Better protection against re-rusting than tannic or phosphoric acid-based converters
- Works in HCl, H₂S, SO₂, and CO₂ vapor environments
- Water-based, non-flammable, and non-combustible

PHYSICAL PROPERTIES

Appearance	Viscous Liquid
Solids (Weight)	34.5%
Density	11.3-12.0 lb/gal (1.35-1.44 kg/L)
VOC (ASTM D3960)	0.1-0.2 lb/gal (12.0-24.0 g/L)
Viscosity	7,000-20,000 cPs
Dry to Touch	2-3 Hours
Dry to Handle	4-6 Hours
Force Dry	15-20 min @ 150 °F (65 °C)
Full Cure	3 to 7 Days

CorrVerter® MCI® Rust Primer

COVERAGE

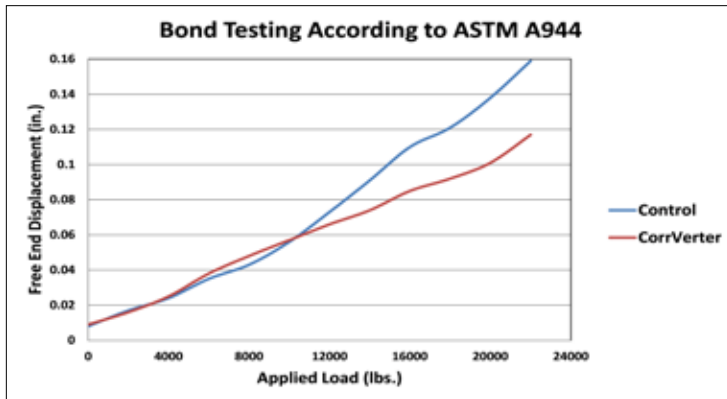
CorrVerter® MCI® is applied in a single coat at 110-185 ft²/gal (2.7-4.5 m²/L). For badly corroded surfaces, the application should be performed in two coats with the second coat applied within 20-30 minutes of the first coat.

STANDARD TEST METHODS AND PERFORMANCE DATA

Salt Spray (ASTM B117)	500 hours @ 3-5 mils DFT
Concrete Bond Strength (ASTM A944-05)	0.117" (3.00 mm) slip at 22,000 lb load (control: 0.159" [4.04 mm])
Humidity (ASTM D1748)	250 hours
Adhesion (ASTM D3359)	5B
Flexibility (ASTM D522)	½" mandrel
Gloss (ASTM D532)	15-25
Pencil Hardness (ASTM D3363)	F

SURFACE PREPARATION

Remove loose rust from the metal surface with a wire brush. Wash the metal surface with water to remove the excess salt contamination and dust before applying CorrVerter® MCI® Rust Primer.



APPLICATION

Apply CorrVerter® MCI® to metal surface at 3-5 mils (75-125 microns) dry film thickness (DFT) with no surface show-through. The coating can be applied to dry or damp surfaces. Brush application is preferred to other methods of application to ensure penetration of the product into the rusty surface. If applying to rebar, care must be taken to avoid overspray (if spraying) on interior concrete surface during a repair. This could affect the repair mortar's adhesion to the preexisting substrate.

CONSIDERATIONS

- For long-term outdoor exposure, overcoating with MCI® Architectural Coating is recommended.
- The temperature of the coating should be above 55 °F (12.8 °C) and below 100 °F (38 °C) when being applied.
- On certain types of rust, various degrees of darkening may be visible and may even be incomplete under certain drying conditions. The degree of darkening does not affect the coating. The primer will continue to convert rust.
- When used on exposed steel reinforcement that will then be covered with a concrete repair mortar, allow a minimum of 12 hours for CorrVerter® MCI® to achieve a full cure before placing the concrete patch.

LIMITED WARRANTY

All statements, technical information and recommendations contained herein are based on tests Cortec® Corporation believes to be reliable, but the accuracy or completeness thereof is not guaranteed.

Cortec® Corporation warrants Cortec® products will be free from defects when shipped to customer. Cortec® Corporation's obligation under this warranty shall be limited to replacement of product that proves to be defective. To obtain replacement product under this warranty, the customer must notify Cortec® Corporation of the claimed defect within six months after shipment of product to customer. All freight charges for replacement products shall be paid by customer.

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