

MCI®-2023

DESCRIPTION

MCI®-2023 is a two component system incorporating Migrating Corrosion Inhibitors (MCI®) that forms a cement slurry for the protection of reinforcing steel and metals. The resulting slurry has good adhesion to the substrate, high durability and abrasion resistance, stops corrosion and forms an effective barrier against penetration of water and water dissolved salts. MCI®-2023 powder formulation is based on hydraulic binders and complexing and osmotic agents, which all provide a high degree of passivation. The resin consists of a water-based emulsion of organic polymers.

PACKAGING & STORAGE

26.5 lb. (12 kg) bag of passivating grout powder with 11 lb. (5 kg) pail passivating grout resin. One kit of powder and resin yields approximately 2.5 gallons (9.4 liters).

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

Shelf life: Powder 6 months,
Liquid 1 year



WHERE TO USE

MCI®-2023 is recommended to protect steel reinforcing prior to restoration with MCI® or other repair mortars. It is especially useful in areas with little concrete coverage of the reinforcing steel, which are subject to deicing salts and carbonation attack.

ADVANTAGES

- Offers engineers, owners, contractors, DOTs and government agencies a time-proven corrosion inhibiting technology that will extend the life of reinforced concrete structures
- Applies quickly and easily by brush
- Has excellent adhesion to the substrate along with excellent durability
- Provides protection to the reinforcing steel from oxidizing agents
- Has the ability to migrate through concrete structures and seek out the steel reinforcing bars and other metal members embedded in the concrete
- Once cured, MCI®-2023 becomes water-repellent and forms an effective barrier against the penetration of water soluble salts

COVERAGE

Approximate coverage per 2.5 gal (9.4 L) kit is 60 ft² at a thickness of $\frac{1}{16}$ inch (5.6 m² at a thickness of 1.6 mm) or 120 ft² at a thickness of $\frac{1}{32}$ inch (11.1 m² at a thickness of 0.8 mm). When applied in thicknesses greater than $\frac{1}{32}$ - $\frac{1}{16}$ inches (0.8-1.6 mm), consumption increases, but there are no adverse effects as long as the subsequent coats are applied when the previous coat is thoroughly dry.

SURFACE PREPARATION

Remove all loose rust from rebar by sandblasting, water blasting or wire brush. The surface should be dry before applying the grout.

APPLICATION

Mix sufficient amounts of resin and powder together until smooth and free of lumps. Apply to rebar immediately after mixing (no later than 30 minutes). To protect cleaned reinforcing steel, brush on grout immediately before restoration with MCI® or other repair mortars. If more than one coat of grout is used, make sure first coat is thoroughly dry before applying second coat. If there is an interval between applying the initial protection and the structural restoration, apply another coat on top of the hardened grout immediately before applying the mortar.

LIMITATIONS AND STORAGE

- The emulsion polymers turn into a film at temperatures above 42-43 °F (5-6 °C). It is not advised to use the product in colder temperatures
- Do not let the resin for MCI®-2023 Passivating Grout freeze
- Keep powder in its original container and ensure that it is always well sealed
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TYPICAL PROPERTIES

Appearance	Concrete gray when mixed
Mixing Ratio	Plant-proportioned kit
Storage	Keep from freezing

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