

03 30 00	Cast in Place Concrete
03 40 00	Precast Concrete
03 70 00	Mass Concrete

MCI®-2020 Powder & MCI®-2020 V/O Powder

DESCRIPTION

MCI®-2020 Powder is a water-soluble migratory corrosion inhibitor for the treatment of existing concrete structures. It is designed to migrate through even the densest of structures and seek out embedded steel reinforcing bars. MCI®-2020 Powder also protects a multitude of other metals including carbon steel, galvanized steel and aluminum. The unique feature of Migrating Corrosion Inhibitors (MCI®) is that even if not in direct contact with metals, the inhibitor will migrate a considerable distance through concrete to provide protection. MCI®-2020 Powder will reduce corrosion of reinforcing metals and extend the service life of the structure. A special version of MCI®-2020 Powder - MCI®-2020 V/O Powder is designed for vertical and overhead applications.

PACKAGING & STORAGE

MCI®-2020 Powder and MCI®-2020 V/O Powder are available in 100 pound (45 kg) bags. One 100 lb drum (45 kg) will yield 55 gallons (208 liters) of ready-to-use MCI®-2020 liquid.



WHERE TO USE

MCI®-2020 Powder is recommended for:

- All reinforced, precast, prestressed, post-tensioned, or marine concrete structures
- Steel-reinforced concrete bridges, highways, and viaducts exposed to corrosive environments (carbonation, deicing salts, and atmospheric attack)
- Parking decks, ramps, and garages
- Preventive maintenance of all reinforced commercial and civil engineered concrete structures
- Concrete piers, dams, offshore platforms, piles, pillars, pipes, and utility poles
- Restoration and repair of all reinforced concrete commercial and civil engineered structures
- Plant floors subject to chemical and/or acid attack
- Buildings and foundations of all types
- Cooling towers and potable water tanks

ADVANTAGES

MCI®-2020 Powder offers engineers, owners, contractors, DOTs, and government agencies a time proven corrosion inhibiting technology that will extend the life of all reinforced concrete structures:

- Protects against the harmful effects of corrosion by migrating into even in the densest concrete
- Migratory inhibitors reduce further corrosion of rusted metals
- Once diluted, easily applied by spray, roller, squeegee, or paint brush to any concrete surface reducing the high cost of labor and equipment
- Does not contain any calcium nitrite
- Water-soluble and non-flammable for easy handling
- Does not require the removal of sound concrete
- Organic, safe, and environmentally friendly
- Enhances the durability of reinforced concrete
- Lab and field tested worldwide
- Allows concrete to breathe and vapor to diffuse, is not a vapor barrier

MCI®-2020 Powder & MCI®-2020 V/O Powder

- Protects both anodic and cathodic areas of reinforcing steel (or metal)
- Proven to migrate and protect reinforced concrete in adjacent areas
- No cure time is required - traffic may resume minutes after application if necessary
- Non-hazardous, 100% concentrated product, thus economical and convenient for all types of transportation
- UV tracers can be added to confirm application

PHYSICAL PROPERTIES

(for MCI®-2020 Powder & MCI®-2020 V/O Powder with and without UV tracer)

Appearance	White to Off White powder
pH	5.9-8.5 (1% aqueous)
Storage/Shelf Life	24 months in sealed drums
Alkalinity Test	600 mg/L

MIXED PROPERTIES

MCI®-2020 & MCI®-2020 V/O (with and without UV tracer)

pH	6-9.5
Density	8.6-8.8 lb/g (1.03-1.05 kg/l)
Non-Volatile	20-27%

SURFACE PREPARATION

Surface should be dry, sound, clean and free of all dirt, oil, grease efflorescence, sealers, coatings, membranes, and asphalt. Cleaning may be done by steam cleaning, water-blasting or sandblasting.

MIXING

Dissolve MCI®-2020 Powder in fresh tap water. Use 1 part MCI®-2020 Powder to 4 parts water by weight. MCI®-2020 V/O Powder requires a mixing time of 30-40 minutes to establish the correct viscosity.

APPLICATION

Apply the solution by spray (conventional airless or hand pressure spray equipment), roller, squeegee, or paint brush to any concrete surface at a rate of 150 ft²/gal (3.68 m²/L). Dense substrates may require two coats at the rate of 300 ft²/gal (5.52 m²/L) with a minimum of 8 hours between coats. The surface should be rinsed with water, pressure washed, or blast-cleaned to remove any residue prior to applying a sealer, coating, repair mortar, or concrete overlay.

LIMITATIONS

Once mixed into solution, MCI®-2020 Powder and MCI®-2020 V/O Powder should be kept above freezing and below 125°F (50°C). Do not apply if the temperature is expected to fall below freezing within 12 hours. MCI® will not penetrate film-forming sealers, coatings, paints, membranes, or asphalt. As a dry powder or as a properly diluted liquid solution, MCI®-2020 Powder and MCI®-2020 V/O Powder have shelf lives of 2 years in sealed drums.

4119 White Bear Parkway, St. Paul, MN 55110
Phone (651) 429-1100
Toll Free (800) 4-CORTEC
productinfo@cortecvci.com
www.cortecvci.com
www.cortecmci.com



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.

Cortec® Corporation shall have no liability for any injury, loss or damage arising out of the use of or the inability to use the products.

BEFORE USING, USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR ITS INTENDED USE, AND USER ASSUMES ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH. No representation or recommendation not contained herein shall have any force or effect unless in a written document signed by an officer of Cortec® Corporation.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. IN NO CASE SHALL CORTEC® CORPORATION BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Revised: 11/07/2025. Supersedes: 09/25/2017.

©2025 Cortec® Corporation.

All Rights Reserved. Unauthorized copying and/or manipulation of these materials, in any form, is strictly prohibited without the prior written authorization of Cortec® Corporation. ISO accreditation applies solely to Cortec's processes.