

# MCI-2021

Surface applied migratory corrosion inhibitor



A Simpson Strong-Tie® Company

The information in this technical data sheet is valid for the S&P range of products, systems and solutions.  
Please note that the information in your country may vary. Visit [sp-reinforcement.eu](http://sp-reinforcement.eu) to find your local branch.

## DESCRIPTION

MCI-2021 is a migratory corrosion inhibitor that protects imbedded steel reinforcement within concrete structures. The one component product is applied onto the surface of the structure and seals the pores by penetrating into the concrete. As a result of the sealing, a water repellent surface is achieved, resulting in the prevention of carbonation and intrusion of chlorides, as well as protecting against acid and alkaline attack.

MCI-2021 is designed to migrate through the pores of the structure and search for the imbedded steel reinforcement within, ultimately forming a monomolecular protective layer on the steel rebars.

## WHERE TO USE

- Existing concrete surfaces in need of corrosion protection
- Following application of S&P repair mortars
- Can be used on a wide variety of concrete structures
- Marine structures
- Protection of surfaces subject to chemical and/or acid attack

## PERFORMANCE FEATURES

- Provides durable protection against corrosion of rebars
- Easy to apply via spraying
- Allows vapour transmission - not a water barrier
- Can be brush or spray applied
- Perfect solution in combination with S&P concrete repair mortars
- Excellent migratory and protection properties - even in dense concrete structures
- Increases abrasion resistance of the concrete

GENERAL FEATURES

## PRODUCT DATA

### Generic description

MCI-2021

### Size

25 l container

### Storage

Store in a dry and cool place

### Shelf life

24 months in original and unopened buckets



This product conforms to EN 1504-2:2005

MECHANICAL PROPERTIES

Property	Value
pH	11-12 (neat)
Density	1.08-1.09 kg/l
Total alkalinity	65000-68000 mg/l (neat)
Coverage (per coat)	7.4-12.2 m <sup>2</sup> /l

### Resistance of concrete to chloride ion penetration (AASHTO T-259)

Depth, inch	Depth, cm	Reduction, %
0.06-0.50	0.15-1.27	>47
0.50-1.00	1.27-2.54	63
1.00-2.00	2.54-5.08	50

### According to EN 1504-2:2005

Property	Test norm	Value
Drying test for hydrophobic impregnation	EN 13579	DRC - 56.1 %
Water absorption and resistance to alkali for hydrophobic impregnation	EN ISO 7783	AR - 6.6 % AR <sub>ALK</sub> - 7.9 %
Depth of penetration	EN 13579 + EN 14630	2.9 mm

SUBSTRATE PREPARATION

Ensure all loose parts, dust and contamination are removed from the substrate prior to application. The surface must be dry to touch and porous to allow the product to penetrate into the substrate. Concrete (or mortars) must be a minimum of 28 days old prior to the application of MCI-2021.

APPLICATION

Apply by spray (airless or hand pressure spray equipment) until the surface becomes saturated. A minimum of 2 coats must be applied and the second coat may only be applied when the first coat is dry to touch (10-30 minutes depending on temperature).

Apply only as much product as the surface is readily able to absorb and wait 10-30 minutes after the final coat before applying a light coat of water to assist penetration and remove any product left on the surface.

**Important:** Do not allow the product to pool on the substrate. Do not apply if rain is expected within 8 hours of application. Protect all surfaces near to the application from excess spray.

### CLEANING

#### Tools cleaning

Tools and application equipment must be washed immediately after use. If the product hardens, it can only be removed by mechanical means.

### TESTING

All technical data stated in this product data sheet are based on laboratory tests. Circumstances beyond our control may lead to deviations of actual values.

This product is manufactured by CORTEC® Corporation. All the technical information and recommendations contained in this Technical Data Sheet are based on tests conducted by CORTEC® Corporation.

### HEALTH & SAFETY

#### Important safety instructions

For detailed safety information, we recommend that you see the current safety data sheet which is available on [www.sp-reinforcement.eu](http://www.sp-reinforcement.eu) or you can contact us on +41 41 825 00 70.

S&P's range of products are for industrial use. They must be installed by specialised personnel and competent professionals with adequate training. The installation instructions must be followed and can be found in S&P application manuals and several "Guideline" documents / existing technical notes.

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The information and data in this technical data sheet serve to ensure the normal intended use and normal application suitability; the information and data are based on our knowledge and experience. They do not absolve the user from their own responsibility to check the suitability and application method.

The rights to make changes to product specifications are reserved. Furthermore, our general sales and delivery terms apply. The current, most recent product data sheet is valid, and should be requested from us.

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