

Cemprotec MCI® 2020

Surface Applied Corrosion Inhibitor

Product Overview

Clear water-based surface applied corrosion inhibitor.

Uses

To protect embedded steel reinforcement in concrete structures. It should be used as part of the Flexcrete Concrete Repair and Protection System where additional protection is required, particularly from the effects of chloride attack.

Advantages

- Water-based organic compound which migrates through the pore structure of hardened concrete by both capillary suction of the liquid and diffusion of the vapour phase. Does not need direct contact with steel.
- Migrates into even the hardest concrete towards steel reinforcement, where it forms a monomolecular protective layer which helps to reduce corrosion at both the anode and cathode.
- Helps to extend the life of reinforced concrete structures in aggressive environments.
- Easily applied by spray, roller or brush. No cure time required.
- Water-based product, free from hazardous solvents.

Description

CEMPROTEC MCI® 2020 is a clear, water-based, organic surface treatment for existing concrete structures. Based on time proven, corrosion inhibiting technology, it has been specially formulated to migrate into concrete, by liquid and vapour diffusion, to form a protective monomolecular layer on steel reinforcement, which helps to reduce corrosion.

The penetrative action of **CEMPROTEC MCI® 2020** ensures that it does not inhibit the free passage of water vapour and it has a minimal effect on surface appearance. It is most effective when used in conjunction with the Flexcrete Concrete Repair and Protection System in protecting steel in aggressive environments subject to high levels of chlorides, such as marine and highway structures. With corrosion inhibiting technology which was developed over 20 years ago, it has a proven track record of protecting and enhancing the durability of structures worldwide.

Technical Data

Property	Standard
Specific Gravity	1.03 - 1.05
Colour	Clear amber liquid
Flashpoint	N/A (Water-based)
Min Application Temp	4°C.

Application Instructions

Preparation

The areas to be treated must be dry and free from all unsound material, i.e. dust, oil, grease, corrosion by-products, sealers, coatings, membranes and organic growth. Surface laitance and any soft, sandy or flaking concrete should be removed back to a sound surface, suitable for treatment. Use techniques capable of achieving the required degree of preparation, such as wet grit or water blasting or equivalent approved methods.

NOTE: CEMPROTEC MCI® 2020 will not penetrate film-forming sealers, coatings, paints, membranes or asphalt.

Placing

Apply **CEMPROTEC MCI® 2020** over the clean, dry surface by spray, roller or brush, at a coverage rate of 3.68 m²/litre. Dense substrates may require two coats at a coverage rate of 7.36m²/litre with a minimum of 7½ hours between coats. Rinse with water to remove any residue prior to the application of a repair material or coating.



Cleaning and Storage

Clean all tools with water immediately after use.
 Material can be stored for 2 years in unopened containers in dry, frost free conditions.

Packaging

CEMPROTEC MCI® 2020 is supplied in 25 litre containers.

Coverage and Yield

Approximately 3.68m²/litre on prepared substrates.

Health and Safety

Safety Data Sheets are available on request.

Application Top Tips

1. Do not use if temperature is expected to fall below 0°C within 12 hours of application.
2. If structures are being submerged after application apply a Flexcrete cementitious coating to waterproof the surface prior to immersion. (See separate Guide).
3. The maximum chloride content at the reinforcement depth in structures being treated with **CEMPROTEC MCI® 2020** is 3.5kg/m³. (For higher concentrations consult Flexcrete for technical advice).
4. **CEMPROTEC MCI® 2020** will not penetrate film-forming sealers, coatings, paints, membranes or asphalt which must be removed before application.
5. Where necessary treated surfaces may be open to traffic as soon as the surface is touch dry. (Under normal conditions within minutes of treatment)
6. Can be overcoated with Flexcrete membranes to give a coloured finish.
7. Store in air tight containers in frost free conditions away from heat. **Do not exceed 60°C.**
8. Cold Weather Working (See separate Guide)
 - Minimum application temperature 4°C.
 - Do not use any product which has been frozen.
9. Hot Weather Working (See separate Guide)
 - Do not apply at temperatures >50°C.

The information herein is correct to the best of our knowledge, but it does not necessarily refer to the particular requirements of the customer. If the customer has any particular requirements it should make them known in writing to Flexcrete Technologies Limited, and obtain further advice accordingly.



FM 41091	Quality
EMS 597350	Environmental
OHS 597351	Health & Safety