



MIGRATORY CORROSION INHIBITOR (MCI®) PRODUCTS FOR CONCRETE

MCI®-309

Corrosion Inhibiting MCI Powder for Ferrous Metals

PRODUCT DESCRIPTION

MCI-309 is a Vapor phase Corrosion Inhibitor powder for corrosion protection of ferrous metals in recessed areas, interior cavities, and voids.

MCI-309 provides an extremely efficient dry method to protect metals within an enclosed space. The MCI vaporizes and adsorbs on the metal surfaces, reaching all exposed areas, including recessed sections and interior cavities. It is a mixed inhibitor that provides protection to both the cathodic and anodic sites of metal.

FEATURES

- Does not affect physical properties of concrete or grout (set time, strengths, etc)
- Is safe for high tensile strength steel (will not cause hydrogen embrittlement)
- Does not contain silicates, phosphates, nitrites, or heavy metals
- Provides up to 24 months of continuous protection
- Provides monomolecular inhibiting layer
- Vapor phase inhibiting action protects inaccessible and recessed surfaces
- Protected surfaces do not have to be cleaned prior to concrete or grout placement
- If MCI layer is disturbed by moisture or opening the enclosed space, the layer is replenished by continuous vapor redeposition
- Little or no surface preparation is required
- Prevents further corrosion of pre-coated and painted surfaces
- Easy to apply
- MCI layer does not need to be removed prior to processing or use
- Powder can be removed by air gun or water
- Provides protection to ferrous metals only
- Conforms to MIL I-22110C
- LD50 ORAL: 2100mg/kg

APPLICATIONS

- Segmental concrete bridges tendons
- Post tensioned Box Girder Bridges
- Tubular structures, pipes, and vessels
- Equipment protection after hydrostatic testing
- Parts, components, and completed assemblies during shipping and storage

METHOD OF APPLICATION

Apply powder by dusting, fogging, or sprinkling. After application simply cover, close or seal the interior cavity or void.

Fogging is easily achieved with a low pressure air hose and sandblast cup. Large, conventional sandblasting systems can also be used.

MCI-309 can be removed by using a low pressure air gun or water rinse.

DOSAGE

0.5 oz/ft³ (500 g/m³)

METALS PROTECTED

- Carbon steel
- Stainless steel
- Aluminum

TYPICAL PROPERTIES

MCI-309	
Appearance	White to off-white powder
pH	6.5-8.0 (1% aqueous)
Density	38-39 lb/ft ³ (0.61-0.63 kg/L)

PACKAGING AND STORAGE

MCI-309 is available in 5 pound (2.3 kg), 50 pound (23 kg) and 100 pound (45 kg) lined drums. Store in a sealed container in a dry warehouse avoiding direct exposure to sunlight, with temperature not exceeding 150°F (65°C). Shelf life is up to 24 months.



MIGRATING CORROSION INHIBITORS
FROM GREY TO GREEN

FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
KEEP CONTAINER TIGHTLY CLOSED
NOT FOR INTERNAL CONSUMPTION
CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION

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