# MCI®-2007 Liquid Super Corr® MCI®-2007 Powder Super Corr® Patented Corrosion Inhibiting Superplasticizer for Concrete



# **PRODUCT DESCRIPTION**

MCI-2007 Liquid and MCI-2007 Powder are admixtures with Cortec's exclusive Migratory Corrosion Inhibitor technology. They are recommended for use in all concrete, especially reinforced, prestressed, and post-tensioned concrete. MCI-2007 Liquid and MCI-2007 Powder are water reducing compounds. They reduce mixing water by 20-30% depending on cement type and protect reinforcing such as carbon steel, galvanized steel, and other metals embedded in concrete from corrosion induced by carbonation, chloride and atmospheric attack. When incorporated into the concrete mix, MCI-2007 Liquid and MCI-2007 Powder seek out and form a corrosion inhibiting, protective layer on embeded metals. When used with repair mortars and grouts, MCI-2007 Liquid and MCI-2007 Powder will migrate to undisturbed concrete, providing effective corrosion protection to rebar already in place.

# WHERE TO USE

MCI-2007 Liquid and MCI-2007 Powder are recommended for:

- All reinforced, precast, prestressed, and post-tensioned concrete structures
- Steel-reinforced concrete bridges, highways, roads, and buildings exposed to corrosive environments (carbonation, deicing salts, and atmospheric attack)
- Parking garages
- All reinforced marine concrete structures
- Concrete piers, piles, pillars, pipes, and utility poles
- Restoration and repair of all reinforced concrete

# **ADVANTAGES**

MCI-2007 Liquid and MCI-2007 Powder offer 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 even in the densest concrete
- Significantly improves the concrete's plastic and hardened properties
- Ideal to produce flowing concrete where rapid placing is required or in very congested zones
- Increases compressive strength 20-40%, depending on overall mix design
- Increases flexural strength 10-20%, depending on overall mix design
- Significantly reduces gas permeability
- Does not effect air entrainment
- Dosages are not effected by chloride concentration



- Reduces the water content while keeping good workability properties
- Does not contain any nitrite-based compounds
- Organic-based; safe and environmentally friendly
- MCI technology is thoroughly lab and field tested worldwide
- Protects both anodic and cathodic areas
- Migrates to adjacent areas to protect surrounding metals
- MCI-2007 Liquid Super Corr meets ASTM C 494 Type G high range water reducing/retarding admixture requirements
- MCI-2007 Powder Super Corr meets ASTM C 494 Type F high range water reducing admixture

## **TYPICAL PROPERTIES**

Appearance pH (1% aqueous)

MCI-2007
Liquid Powder

Powder

Yellowish Powder

11.5-12.5

Non-volatile

Content 47-55% 95-100%

WPG 10.2-10.3 lb/gal

(1.22-1.23 kg/l)

Chemical Melamine Polycarboxylate
Base +Amine +Amine

Carboxylate Carboxylate

# 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

## **DOSAGE**

Excellent results are obtained using 11-14 oz./100 lb (7-10 mL/kg) of MCI-2007 Liquid Super Corr™ based on cement in concrete mix (3-4 pints per cubic yard or 1.5-2.0 l/m³ of concrete).

MCI-2007 Powder Super Corr should be used at 3.5-6 oz/100 lb (2.2-3.7g/kg) based on cement in concrete mix (16-27 oz per cubic yard or 0.6-1.0 kg/m³ of concrete).

## **PACKAGING**

MCI-2007 Liquid Super Corr is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk.

MCI-2007 Powder Super Corr is available in 5 lbs (2.3 kg), 50 lbs (23 kg), and 100 lbs (45 kg) packages.

## ASTM C 494 Water Reducttion Results

Admix	Dosage Rate (oz/100lbs)	Non Air Entrained (% water content relative to control)	Air Entrained (% water content relative to control)	Required % water control relative to control
MCI - 2007 Liquid	11.9	86	88	≤ 88
MCI - 2007 Powder	3.5	87	86	≤88

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