

MIGRATORY CORROSION INHIBITOR (MCI®) PRODUCTS FOR CONCRETE



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

MCI® - 2007 Superplasticizer



With MCI® - 2007

Without

PRODUCT DESCRIPTION

MCI-2007 Liquid and MCI-2007 Powder are water reducing admixtures with Cortec's exclusive Migratory Corrosion Inhibitor technology. MCI-2007 Liquid is melamine based and meets the Type G admixture requirements of ASTM C494. MCI-2007 Powder is polycarboxylate based and meets the Type F admixtures requirements of ASTM C494. 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. They are recommended for use in all concretes, especially reinforced, prestressed and post-tensioned concrete.

When incorporated into the concrete mix, MCI-2007 Liquid and MCI-2007 Powder seek out and form a corrosion inhibiting protective layer on 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 decks, ramps and 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.

- Protect against the harmful effects of corrosion even in the densest concrete
- Significantly improve the concrete's plastic and hardened properties
- Are ideal to produce flowing concrete where rapid placing is required or in very congested zones
- Increase compressive strength 20-40%, depending on overall mix design
- Increase flexural strength 10-20%, depending on overall mix design
- Significantly increase water resisting properties of



concrete

- Significantly reduce gas permeability
- Do not effect air entrainment
- Dosages are not effected by chloride concentration
- Reduces the water content while keeping good workability properties
- Do not contain any nitrite-based compounds
- Are organic-based, safe and environmentally friendly
- MCI technology is thoroughly lab and field tested worldwide
- Protect both anodic and cathodic areas
- Migrate 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/retarding admixture requirements

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 the concrete mix. This is 48-64 oz per cubic yard (1.5-2.0 l/m³ of concrete) in standard mix designs.

MCI-2007 Powder Super Corr should be used at a rate of 0.45-0.75 oz/100lb (28-47 g/kg) based on cement in mix. This is 16-27 oz per cubic yard (0.6 - 1.0 kg/m³ of concrete) in standard mix designs.

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.

TYPICAL PROPERTIES

	MCI-2007 Liquid	MCI-2007 Powder
Appearance	Dark Brown Liquid	Tan Powder
pH (1% aqueous)	8.5-9.5	11.5-12.5
Non-volatile Content	47-55%	95-100%
Density	10.2-10.3 lb/gal (1.22-1.23 kg/l)	5.2-5.8 lb/gal (0.62-0.70 kg/l)

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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