

# MCI®-2006 NS



## PRODUCT DESCRIPTION

MCI-2006 NS (normal set) is a powder concrete admixture that protects steel reinforcing, carbon steel, galvanized steel, and other metals embedded in concrete from corrosion induced by carbonation, chloride, and atmospheric attack without changing the set time of most concrete mixes. MCI-2006 NS protects using a time proven migratory corrosion inhibitor function. In addition, it contains a proven contact inhibitor. When incorporated into the concrete mix, Migrating Corrosion Inhibitors (MCI) seek out and form a corrosion inhibiting, protective layer on metals. When used with repair mortars and grouts, MCI-2006 NS will migrate to undisturbed concrete providing effective corrosion protection to rebar already in place.

## FEATURES

MCI-2006 NS offers 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
- Dosage rate is independent of expected chloride concentration
- Does not contain any nitrites

- Non-hazardous and non-toxic
- Safe and environmentally friendly
- Technology is lab and field tested worldwide
- Concentrated for cost effectiveness on all projects
- Protects both anodic and cathodic areas
- Will migrate to adjacent areas to protect surrounding metals
- NSF Standard 61 approved for potable water applications (certified by Underwriters Laboratories)

## TYPICAL USES

MCI-2006 NS is recommended for:

- All reinforced, precast, prestressed, post-tensioned, or marine concrete structures
- Steel-reinforced concrete bridges, highways, and streets 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 commercial and civil engineered structures
- Can be added either to the water or powder on-site for shotcreting applications
- Can be added into a manufacturer's repair mortar formulation to enhance its corrosion protection ability

## DOSAGE

Add MCI-2006 NS to the concrete mix at a rate of 1 lb/yd<sup>3</sup> (0.6 kg/m<sup>3</sup>).

## APPLICATION

MCI-2006 NS can be added to concrete powder at the ready-mix plant, directly into in a ready-mix truck drum or portable mixers. Concrete should be mixed thoroughly.



## TYPICAL PROPERTIES

Appearance	Off-white powder
pH	11.5-13.0 (1% solution)
Non-volatile Content	99.5-100%

## PACKAGING AND STORAGE

MCI-2006 NS is available in 5 lb (2.3 kg), 50 lb (22.7 kg), and 100 lb (45.4 kg) packages. The shelf life of the product is 24 months in a sealed drum.

## ASTM C494 Data For MCI-2006 NS

	Control	MCI 2006 NS
Initial Set (Minutes)	304	365
Final Set (Minutes)	394	457
Length Change (%)	-0.022	-0.023
Freeze/Thaw Durability (%)	98.3	98.8

## Compressive Strength (Pounds per Square Inch)

	Control	MCI 2006 NS
3 Day	3263	3357
7 Day	4027	4173
28 Day	5057	5163
6 Month	5813	6177
1 Year	6430	6767

## 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**

## Flexural Strength (Pounds per Square Inch)

	Control	MCI 2006 NS
3 Day	607	586
7 Day	663	651
28 Day	768	734

Based on ASTM C 494 data within report #09145 from Tourney Consulting Group.

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