

# ConBlock™ MIC

## Antimicrobial Concrete Admixture



## Microbial Induced Corrosion Defense for Concrete Sanitary Systems

### The ConBlock MIC Treatment

As a concrete admixture, ConBlock MIC is extremely effective against mold, fungi, algae and damaging bacteria. Unlike sacrificial or leaching chemistries, the technology of ConBlock MIC controls microorganisms with a chemistry that remains a permanent part of the concrete structure. The active ingredient in ConBlock MIC – *3-(trihydroxysilyl) propyldimethyloctadecyl ammonium chloride* - relies on a charged ion and a unique spiked molecular structure to create an uninhabitable environment for the microorganisms. These molecular spikes are undetectable to human touch, but overwhelm single-cell organisms. In nature, most microbes carry the opposite ionic charge so they are physically and irresistibly drawn into contact with ConBlock MIC, which punctures the cell walls of the offending microbes.

### ConBlock MIC vs. Thiobacillus Bacteria

The species of bacteria responsible for the biological corrosion of concrete caused by Microbial Induced Corrosion is Thiobacillus. In the proper conditions, several strains of Thiobacillus exist. As the Thiobacillus thrives, it lowers the pH of the concrete surface, creating an optimum environment for the next, more damaging Thiobacillus strain to inhabit the concrete. When tested against the damaging Thiobacillus bacteria, ConBlock MIC shows great success (*See Back for Test Results*). Without the bacteria that generate the damaging sulfuric acid, the concrete is protected from Microbial Induced Corrosion.

### In the Mix

- Antimicrobial treatment permeates the entire concrete when added in the mix, protecting inside and out.
- The treatment cures into a cross-linked polymer, bonding with the aggregate and cement to impart durable protection.
- The antimicrobial polymer that is formed causes the microbe cell walls to break upon contact, keeping the surface free of excess bacteria and mold buildup.
- The treatment does not migrate out of the concrete.
- ConBlock MIC is EPA registered and labeled for concrete and stone applications.
  - This antimicrobial product has provided safe and effective treatment for over 30 years.

### Physical Properties

- Color: Clear
- Odor: None
- Density: 8.3 lbs/gal
- pH: 3.8
- Actives Content: 3.6%
- Volatile Content: <1.0%
- EPA Registration No.: 87907-1

### Directions for Use

- Add with the batch water and mix as usual or add as the final product and mix for an additional 5 minutes.
- The total volume of ConBlock MIC dosed will count as water when calculating the water to cement ratio.
- Dosage: 12 – 24 ounces per CWT (hundred weight of cement)

*Don't Just Seal It, ConSeal It!*

© 2018 Concrete Sealants, Inc.

**Concrete Sealants, Inc.** 9325 State Route 201 ■ Tipp City, OH 45371 ■ **Toll Free** 800.332.7325

**P.** 937.845.8776 **F.** 937.845.3587 ■ **www.conseal.com**



Concrete Sealants, Inc.  
ISO 9001:2015 Registered

# ConBlock™ MIC

Antimicrobial Concrete  
Admixture



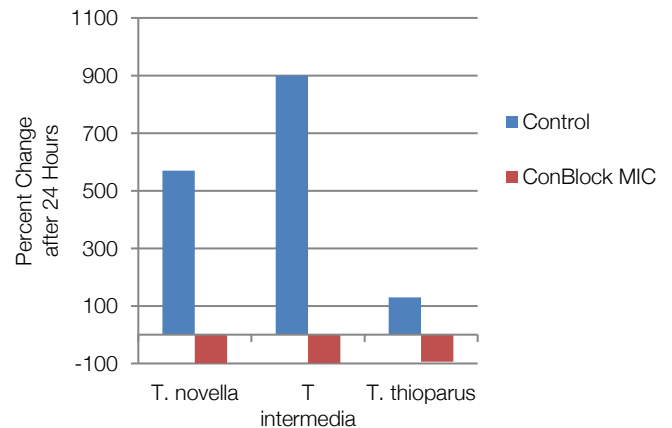
## Microbial Induced Corrosion Defense for Concrete Sanitary Systems

### Independent Laboratory Testing

ASTM D4783 Adapted for determination of antibacterial resistance of concrete to Thiobacillus sp.  
Reduction of Bacteria growth in 24 hours, pH ~9.0:

Thiobacillus novella	99.9%
Thiobacillus intermedia	99.9%
Thiobacillus thioparus	99.9%

ISO 22196 Modified Method for Concrete, pH ~6.8



### Limited Warranty

This information is presented in good faith, but we cannot anticipate all conditions under which this information and our products, or the products of other manufactures in combination with our products, may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combinations for their own purposes. It is the users' responsibility to satisfy himself as to the suitability and completeness of such information for this own particular use. We sell this product without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of this product, whether used alone or in combination with other products.

*Don't Just Seal It, ConSeal It!*

© 2018 Concrete Sealants, Inc.

Concrete Sealants, Inc. 9325 State Route 201 ■ Tipp City, OH 45371 ■ Toll Free 800.332.7325

P. 937.845.8776 F. 937.845.3587 ■ [www.conseal.com](http://www.conseal.com)



Concrete Sealants, Inc.  
ISO 9001:2015 Registered