# MIGRATORY CORROSION INHIBITOR (MGI®) PRODUCTS FOR CONCRETE





# MCI® EcoCure, Patented



# PRODUCT DESCRIPTION

MCI EcoCure is a surface applied soy-based curing agent /sealer, containing Migrating Corrosion Inhibitors (MCI®). This product is based on natural soy oil and designed to:

- retain the hydration water in freshly worked concrete;
- repel water and help prevent scaling of the concrete surface brought on by freeze/thaw cycles and the ingress of deicing salts
- provide corrosion protection to embedded reinforcement

Incorporated inhibitors are designed to migrate through concrete and form a protective layer on embedded metal reinforcement. MCI EcoCure protects a multitude of metals including carbon steel, galvanized steel and aluminum.

# WHERE TO USE

MCI EcoCure is recommended for curing and sealing:

- 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
- Concrete piers, piles, pillars, pipes and utility poles
- Restoration and repair of all reinforced concrete commercial and civil engineered structures
- Buildings and foundations of all types
- Cooling towers and water tanks

# **ADVANTAGES**

- Enhances the durability of reinforced concrete
- MCI EcoCure 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 dense concrete
- Easily applied by spray, roller, squeegee or paint brush to concrete surfaces, reducing the high cost of labor and equipment
- Water-based and non-flammable for easy handling
- Organic, safe and environmentally friendly
- Does not require the removal of sound concrete
- Allows concrete to breathe and vapor to diffuse (is not a vapor barrier)
- Protects both anodic and cathodic areas
- Proven effective in the Strategic Highway Research Program (SHRP) funded by the federal government and state DOTs
- Proven to migrate to adjacent areas to protect surrounding metals
- Seals for 24 months

# SURFACE PREPARATION

Fresh concrete must reach final set before application of MCI EcoCure, which differs according to conditions, but is generally 8-24 hours after placement of the wet mix.

Surface should be sound, clean and free of all dirt, oil, grease, efflorescence, sealers, coatings, membranes and asphalt. Cleaning may be done by steam cleaning, waterblasting or sandblasting.



#### MIXING INSTRUCTIONS

MCI EcoCure should be mixed thoroughly prior to use due to a tendency to separate into two phases during storage.

# **APPLICATION**

MCI EcoCure should be applied to freshly worked concrete, after final set (generally 8-24 hours depending on concrete mixture used and application conditions), to reduce and even the loss of hydration water from the concrete. Do not apply while material or surface is below 40°F (4.5°C).

Apply at a rate of 100-300 square feet per gallon (2.45 - 7.36m²/l), depending on porosity of surface. Apply solution by spray (conventional airless or hand pressure spray equipment), roller, squeegee or paint brush to any concrete surface.

Limitation: MCI EcoCure will not prevent the penetration of motor oil or other heavier oils.

# **TYPICAL PROPERTIES**

Appearance Milky white to tan liquid

pH 9.5-11.0 (neat)

Non-volatile Content 50-60%

Storage DO NOT FREEZE

Minimum >32°F (>0°C) Maximum <212°F (<100°C)

Shelf life up to 24 months in a sealed

drum

Density/Specific gravity 7.7-8.1 lb/gal (0.92-0.97 kg/l)

ASTM C-309 Compliant VOC <50 g/L Actual

<70 g/L Regulatory

Viscosity  $\sim$  60 cps

# **PACKAGING**

MCI EcoCure is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.

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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