



CC BICI

Bipolar Concrete Penetrating Corrosion Inhibiting Admixture

DESCRIPTION

BICI is a water based organic hi-tech corrosion inhibitor system that works on the Bipolar Inhibition Mechanism (B.I.M). B.I.M. inhibits corrosion of steel in concrete at both the poles, cathodic and anodic simultaneously. BICI by virtue of its high vapor pressure & affinity for the embedded metal diffuses through densest concrete to reach the corroding steel. The migration of BICI takes place over a prolonged period of time and hence this molecular layer shall continue to protect rebar by its constant presence.

SCOPE OF USE

- Protection of concrete structures
- RCC elements/structures exposed to corrosive environment
- Infrastructures and sub-structures: high-ways, bridges, tunnels, pile foundation, etc....
- Structures exposed to saline atmosphere• Marine and coastal structures, splash zones
- Sewage systems

INSTRUCTIONS FOR USE

BICI is used as an admixture, by adding into wet concrete mix along with batch water during the mixing of cement, sand, aggregate before placement or pouring into transit mixer to impart corrosion protection to the embedded reinforcement.

DOSAGE

BICI is recommended for use at a dosage rate of 2 Kg/m³ of concrete for all applications and corrosion environments. For specific applications, a lower dosage ranging between 1.6 kg/m³ to 2 kg/m³ is applicable but will be strictly depending on the proposed Concrete Mix design and W/C ratio. Therefore prior concrete trials and testing are required.

PACKAGING

BICI is supplied in 200 liter ,20 liter pail

ADVANTAGES

- Penetrates to rebar over a prolonged period and arrest corrosion of rusting steel
- Nitrite and chromate free.
- Non-deleterious unlike conventional rust converters.
- Effective even in the presence of high amount of chlorides.
- Does not affect bond strength of new concrete to reinforcement bars.
- Does not entrain air.
- Does not affect mechanical strength characteristics of concrete/mortar.



APPLICABLE STANDARDS

Conforms to ASTM G 109
Bipolar Concrete Penetrating
Corrosion Inhibiting Admixture

CHARACTERISTICS

Appearance Clear Liquid
Specific Gravity 1.04 ± 1.06 at 25oC

STORAGE

Can be stored up to 12 months from manufacturing date under cover, out of direct sunlight and protected from extreme temperatures.

HEALTH & SAFETY

In case of frost, the product recovers its properties after progressive thawing and homogenizing by agitation. In case of contact with skin or eyes, rinse thoroughly with water. If irritation persists, seek medical attention. If swallowed, do not induce vomiting and seek medical attention

FIRE

CC BICI is nonflammable