

# SmartCare TechnoCor

## Bipolar Concrete Penetrating Corrosion Inhibiting Admixture.

**Smartcare TechnoCor** is a hi-tech corrosion inhibitor system that works on the Bipolar Inhibition Mechanism which prevents corrosion of steel in concrete at both the poles, cathodic & anodic simultaneously.

Smartcare TechnoCor by virtue of its high vapour pressure /migration ability & affinity for the embedded metal diffuses through densest concrete to reach the corroding steel. The migration of Smartcare TechnoCor takes place over a prolonged period and hence this molecular layer shall continue to protect rebar by its constant presence.

## AREA OF APPLICATIONS

Protection of concrete structures, RCC elements/structures exposed to corrosive environment, Marine structures, structures exposed to saline atmosphere, coastal structures, sewerage systems, etc. like bridges, jetties, docks, mooring berths, railway sleepers, chlorinating plants, swimming pools, chimney, cooling towers, power plants, pipelines, etc.

## PRODUCT BENEFITS

- Penetrates to rebar over a prolonged period and arrests corrosion of rusting steel.
- Non-toxic, eco-friendly.
- 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.

## APPLICATION PROCEDURE

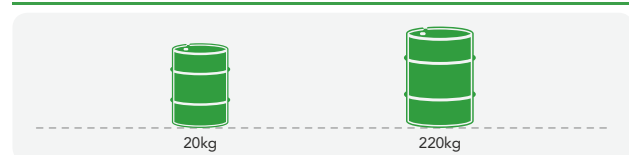
Smartcare TechnoCor be used as an admixture, by adding into wet concrete mix along with batch water during the mixing of cement, sand, aggregate before placement or pouring into transit mixer to impart corrosion protection to the embedded reinforcement.

### EFFECT ON CONCRETE PROPERTIES

No change in physical properties in fresh & hardened concrete in the absence of any other admixtures. However, it is essential to carry out trial mix with desired admixtures along with Smartcare TechnoCor.

## PRODUCT FEATURES

### AVAILABLE PACKS



Shelf life: Minimum shelf life of 12 months provided the temperature is kept within the range of 2°C to 50°C.

### COLOURS AVAILABLE

**Brownish**



## STANDARD COMPLIANCE

Conforms to ASTM-G-109. Rate of corrosion with Smartcare TechnoCor after 09 cycles is 0.50 coulombs max compared to control sample without Concrete penetrating Corrosion Inhibiting Admixture having a standard value of 25 coulombs.

PROPERTIES	
Base	Water based organic corrosion inhibitor.
Specific Gravity	1.04 – 1.06 at 25°C
Viscosity	10 -20 sec by Ford Cup B-4 at 25°C
PH	Minimum 9.0
Chlorides, Nitrates and Sulfates content	Negligible
Dosage	Minimum 2 kgs per cubic meter of concrete

## PRECAUTIONS

### Storage & Handling:

Store the material in a cool place away from direct sunlight or any source of ignition and fire. Keep away from the reach of children in a well-ventilated place.

### Health & Safety Precautions:

Wear protective gloves, goggles, and nose masks while handling and using the material. In case of splashes on the

skin and contact with eyes wash thoroughly with plenty of water. In case of ingestion and inhalation remove the personnel to fresh air. Seek medical advice in all the above cases. The disposal of excess or spilled material shall be carried out in accordance with local regulations.