

Protection of TMT
from Corrosion

Inbuilt Water
Proofing



CORROSTOP-15

**4 IN 1 BIPOLAR CONCRETE
PENETRATING
CORROSION INHIBITING
ADMIXTURE**

Minimises hair line
cracks during RCC
Roofing or Flooring

Arrest of hair line
cracks during
Cement Wall
Plastering with M-
Sand



CORROSTOP-15



4 IN 1 BIPOLAR CONCRETE PENETRATING CORROSION INHIBITING ADMIXTURE

CORROSTOP-15 is a Bipolar Concrete Penetrating Corrosion Inhibiting admixture to protect the embedded steel reinforcement in concrete from corrosion as per the design specified by RDSO (RESEARCH DESIGNS & STANDARDS ORGANISATION MANAK NAGAR , LUCKNOW – 226 011) SPECIFICATION No. M&C/PCN/126/2020. It can be used in all Reinforced Cement Concrete structures but not limited to

- Below ground structure such as Pile, pile cap, mat foundation where chloride threshold value is more in the soil.
- Bridges and flyovers
- Structures in coastal areas and submerged conditions
- Power plants
- Steel plants
- High rise buildings
- Structures in sea water
- Pre-cast Elements
- Tunnels and underground structures

Standards compliance :

CORROSTOP-15 has been tested at IIT-Madras & CSIR-CECRI-Karaikudi in accordance with below standards

- Initial & Final setting time of Concrete - BIS 4031
- 28 Days Compression Strength - BIS 10262-2009 & BIS 2770
- Tensile Strength of Concrete - BIS 5816-2004
- Rapid Chloride Penetration Test (RCPT) - ASTM - C1202
- Corrosion resistance behavior by Electrochemical impedance spectroscopy (EIS) ASTM G106-89 (2015)
- Corrosion resistance behavior by Linear polarization resistance (LPR) study: (ASTM G59-97 (2003))

- Corrosion resistance behavior by Gravimetric study in simulated concrete environment (ASTM G1)
- RDSO (Research Designs & Standard Organisation, Manak Nagar, Lucknow -226011 - SPECIFICATION NO. M&C/PCN/126/2020

Advantages:

- Nitrites or Nitrates Free
- Bipolar 100% steel protection against corrosion inside RCC (Reinforced Cement Concrete) Structures
- Chemically inhibits the corrosive action of chlorides on reinforcing steel inside the concrete
- Increases the life of Reinforced Cement Concrete (RCC) structures by 40% to 80% depending upon the atmospheric corrosion (Durability factor of RCC 1.40 - 1.80 as per CECRI Test reports)
- Completely seals the invisible pores inside the concrete and leaves a dense layer there by completely arresting the water permeability and hence water proofing is taken care.
- Minimises the formation of air line cracks while laying concrete over RCC Roofing or Flooring
- Avoids formation of air cracks during Interior or Exterior cement wall plastering especially using Manufacturing Sand (M-Sand)
- Increases slightly the compression strength without impacting the tensile strength of Concrete

Action Mechanism :

CORROSTOP-15 when mixed while laying concrete, the chemical ions present in CORROSTOP-15 gets attracted by the Iron rebar & forms an invisible ,strong & durable protective film around the TMT inside RCC structures there by protecting the iron rebar against rust and corrosion.

CORROSTOP-15

4 IN 1 BIPOLAR CONCRETE PENETRATING
CORROSION INHIBITING ADMIXTURE



Technical Information:

Item	Description
Color	Pale Lemon Yellow
Odour	Odourless
ph	12.0 as per test method IS 9103 : 1999
Solubility in Water	Very Easily Soluble in Water
Density	1.05 - 1.06
Chloride Ion Content	Less than 0.2%
Viscosity	12 Seconds (Ford Cup No.4)
Dosage Range	1.5 Kg per cubic meter of Concrete (Do not exceed beyond 2.0 kg / Cum)
Compatability	Compatible with all types of Cements
Flash Point	Above 100 degrees Celsius
Combustible	No

Tested @



CORROSTOP-15

4 IN 1 BIPOLAR CONCRETE PENETRATING CORROSION INHIBITING ADMIXTURE



Item	Description
Mixing	Mechanical Mixing
Impact	No impact when mixed with any water proofing chemical or super plasticizers
Effects on Concrete	Refer CECRI , IIT - Madras & ICOMAT - Test Reports
Banned Chemicals	Nil
Toxic Chemicals	Nil
Packing	Available in 25 Ltrs and 210 Ltr HDPE Barrels
Shelf Life	36 Months from the date of manufacturing
Storage	Store in a normal shelter
First Aid	Strong and saturated solution. It slightly irritates soft sensitive skin. Hence use hand gloves while handling. In case of any spillage on skins, wash the area with plenty of water & seek doctor's advice if required.

Areas of Application:



Retrofitting Projects

CORROSTOP-15

4 IN 1 BIPOLAR CONCRETE PENETRATING
CORROSION INHIBITING ADMIXTURE



CORROSTOP-15

4 IN 1 BIPOLAR CONCRETE PENETRATING
CORROSION INHIBITING ADMIXTURE



**WITHOUT
CORROSTOP-15**



**WITH
CORROSTOP-15**

**Laal
Chemicals**



INNOVATORS OF CONSTRUCTION CHEMICALS

**Plot No 20, Sri Suyambulingam
Nagar, Annex II, Vadaperumbakkam,
Madhavaram ,Chennai - 600060**

**Ph: +91-9952960458
+91-6369377109**

Email

laalconstructionchemicals2014@gmail.com

Visit us @ www.laalchemicals.com