

PLASTCONE BPO

Bi-Polar corrosion inhibiting admixture



Description:

PLASTCONE BPO is a concrete admixture which will increase the passivation of reinforcement and other embedded steels in concrete. The function of this type of admixture is to enhance the long term durability of reinforced concrete by enhancing passivation to the cathodic and anodic areas of embedded steel.

$$Fe^{++} + 2OH \longrightarrow Fe_2(OH)_3$$

$$Fe^{++} + Cl \rightarrow [Fecl]^{+} + (OH)$$

Fe². $(OH)^2 + CI^-Fe^{++} + 2(OH)^- + 2(NO)^{-2} \longrightarrow 2NO + Fe_2O_3 + H_2O$

Uses:

- Prevent corrosion of steel bar in RCC by Nitrite molecule coating
- Prevent free chlorine penetration

Advantages:

- Reduces maintenance cost for reinforcement in structure
- Improvement in durability of RCC structure
- RCC roads, cannel, tunnel will get greater working life

Product Standard Compliance:

IS 9103:1999 (Certificate No. :- CM/L-7600149811)

Company Standard Compliance:















Technical Information:

Properties	Specification
Appearance	Free flowing thin liquid
Sp. Gravity	1.15 to 1.20 @25°C
pH Value	8 to 10
Chloride Content	Nil

Application Procedure:

PLASTCONE BPO can be added into the mixing water or directly into the concrete mixture after 50-70% of the mixing water has been added. The addition of PLASTCONE BPO to dry aggregates or cement is not recommended. To achieve optimum performance a minimum wet mixing time, which is depending on the mixing conditions and the mixer performance, of 60 seconds is recommended.

Dosage Range::

Actual dosage of PLASTCONE BPO will be decided by trial and mix. As a guide, a dosage range of 0.5 to 1 % volume by weight of cement is normally recommended.

Benefits:

- **Compatibility:** PLASTCONE BPO is compatible with other types of admixture when added separately to the mix. Site trials should be carried out to optimize dosages.
- Corrosivity: It does not contain chlorine which

inhibit the corrosion.

Cost: Due to less risk of corrosion in reinforcement the maintenance cost will be reduced.

Limitation:

- Excessive water addition or overdosing may cause bleeding or segregation.
- If frozen / separation of the product has occurred, Redwop PLASTCONE BPO may be used after thawing slowly at room temperature and intensive mixing. Before application, suitability tests must be performed.

Basis of Product Data:

All technical data stated in this product data sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Packaging:

PLASTCONE BPO is supplied in 50 & 250 Kg drum.

Storage & Shelf-Life:

Minimum of 12 months shelf-life if kept under room temperature (i.e. 27°C).

Health & Safety:

PLASTCONE BPO does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come into contact with skin and eyes.

Suitable protective gloves and goggles should be worn. Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

For further information refer the Safety Data sheet available for this product.

PRODUCT FOR PROFESSIONAL USE.

Fire

PLASTCONE BPO is water based & non-flammable.

Legal Notice:

The information, and, in particular, the recommendations relating to the application and end-use of Redwop products, are given in good faith based on Redwop's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Redwop's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Redwop reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.



It is the practice of increasing efficiency with which buildings use resources- energy, water and materials-while reducing building impacts on human health and the environment.



ISO 45001 is the world's international standard for occupational health and safety, issued to protect employees and visitors from work-related accidents and diseases.



ISO 9001:2015 is a globally recognized standard for quality management systems (QMS). It helps organizations of all sizes and sectors to: Improve performance, Meet customer expectations, Demonstrate commitment to quality, and Identify and improve processes that lack consistency.



ISO 14001 is the internationally recognized standard for environmental management systems (EMS). It provides a framework for organizations to design and implement an EMS, and continually improve their environmental performance



This symbol is used to identify Redwop products which give off a low level of volatile organic compounds(VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.



Our Commitment To The Environment Redwop products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.



ISO/IEC 17025 enables laboratories to demonstrate that they operate competently and generate valid results, thereby promoting confidence in their work both nationally and around the world.

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