

STRIZELO FerroDefender

 Concrete Admixture to
Inhibit Corrosion

DESCRIPTION

STRIZELO - FerroDefender represents an innovative concrete admixture infused with Bipolar corrosion inhibiting properties and rooted in STRIZELO - FerroDefender Technology. This solution has been specifically designed for application in both reinforced concrete and mortar structures. While it serves as a corrosion inhibitor, it also offers protection to the steel reinforcement within the constructed structure. By incorporating this solution one can not only enhance the longevity and robustness of the concrete structure but also extend its lifespan significantly.

FEATURES / BENEFITS

Through the application of STRIZELO - FerroDefender, a harmonious equilibrium is achieved wherein both the anodic and cathodic reactions in the electrochemical corrosion process diminish significantly. This remarkable product gracefully envelops the steel surface by weaving a protective film deferring the onset of corrosion and moderating its rate simultaneously.

Explore the distinct advantages inherent in STRIZELO - FerroDefender:

- 1. Guardian of Corroding steel:** This solution is especially adept at fending off chloride attack thereby providing robust corrosion protection for embedded reinforcing steel.
- 2. Combats reinforcement corrosion:** Shields structures against the corrosive impact of reinforcement corrosion while ensuring prolonged integrity of the structure at the same time.

- 3. Displays great compatibility with concrete without any compromise:** STRIZELO - FerroDefender is an innovative solution that integrates seamlessly with both fresh and hardened concrete without compromising on any essential properties of the concrete used.

- 4. Hydrogen Embrittlement Neutrality:** STRIZELO - FerroDefender remains neutral to hydrogen embrittlement thereby neither restricting nor intensifying its occurrence. Thus, we can say this solution maintains a balanced approach towards prestressed steel protection.

STRIZELO - FerroDefender is a one-of-a-kind solution that not only protects steels from corrosion but also enhances the resilience and robustness of the reinforced materials.

APPLICATIONS

STRIZELO - FerroDefender is meticulously crafted for safeguarding reinforced concrete structures that are vulnerable to corrosion, mainly commonly prevalent chloride induced corrosion. This solution is used in various scenarios as follows:

1. It is commonly employed in the construction of concrete roads.
2. The application of this solution also extends to the protection of bridges.
3. It is well suited for application in tunnels.
4. One of its salient features is that this solution can be used in retaining walls too.
5. Industrial plants can be protected with the help of STRIZELO - FerroDefender.
6. The application of this solution extends to construction of multi-storey car parks.

PRODUCT DETAILS

Base Composition:

Altered Amino Alcohol Blend

Container Size:

230 kilograms

Visual Characteristics:

A Mesmerizing Blue Liquid

Validity period:

Maintains quality for a year (12 months) from the production date provided it is stored appropriately in intact, unopened, and sealed original containers.

Storage Guidelines:

Preserve in dry environments within the temperature range of +10°C to +40°C shielding from both direct sunlight and frost.

Liquid Density:

1.04 kilograms per litre at 25°C

INFORMATION PERTAINING TO APPLICATION

Optimal Dosage: It is recommended to use 12 kilograms per cubic meter (M³) for all concrete types.

Proven Effectiveness: As per the IIT Madras test report, the recommended dosage is 1-3% by weight of the cementitious material, with a water-to-cement ratio (W/C) below 0.4.

GUIDE FOR APPLICATION

When applying STRIZELO - FerroDefender it is recommended to blend it with the gauging water or introduce it simultaneously into the concrete mixer. Alternatively, you can add it to the concrete within the transit mixer at the point of discharge. If the latter method is chosen, it is crucial to extend the mixing time by at least 1 minute per cubic meter of concrete.

One needs to confirm the uniform consistency of the mixture visually, before discharging the mixture. It is crucial to consider the quantity of STRIZELO - FerroDefender in your mix design when determining the water-to-cement (W/C) ratio for a specific blend. This ensures every drop of water is used and contributes to the perfect harmony between components.

It is extremely important to understand that STRIZELO - FerroDefender should not be mixed with dry cement as it is not recommended to do so. Following these application guidelines ensures optimal effectiveness and performance of the STRIZELO - FerroDefender in concrete applications.

Compatibility Assurance: STRIZELO - FerroDefender seamlessly integrates with various STRIZELO products and is suitable for use with all types of cements and cementitious materials.

Cautionary Note: Prior to incorporating products into specific mixes and combinations, it is imperative to conduct trials to ensure optimal results.

BASIS OF PRODUCT INFORMATION

The technical data presented in this Product Data Sheet is derived from meticulous laboratory examinations. Variations in actual measured data may occur due to factors beyond our control.

ADDITIONAL DOCUMENTATION

Should STRIZELO - FerroDefender freeze, it can be reused after a gradual thawing process at room temperature, coupled with thorough stirring.

ECOLOGICAL WELLNESS AND SAFETY

To obtain guidance on the secure management, storage, and proper disposal of chemical products, consulting the latest Material Safety Data Sheet is necessary for every individual. It is like a guidebook, with all the crucial information about the physical properties, ecological impact, toxicology, and other safety related data.

REGIONAL LIMITATIONS:

Kindly be aware that due to distinct local regulations, the specified information for this product may differ across various countries. For precise details of the products, we recommend referring to the relevant Product Data Sheet specific to your local area.

LEGAL DISCLAIMER:

The information provided, including recommendations regarding the application and utilization of Strizelo's products is offered in utmost good faith based on Strizelo's current knowledge and experience with the products. This advice assumes proper storage, handling, and application under standard conditions as per Strizelo's guidelines. In practical application, variations in materials, substrates, and on-site circumstances are inevitable. Consequently, no warranty concerning the merchantability or fitness for a specific purpose can be implied from this information. Furthermore, no liability arising from any legal relationship can be derived from this information, written recommendations, or any other advice provided.

It is imperative for the product user to conduct thorough testing to ascertain the product's suitability for the intended application and purpose as it is the user's responsibility to do so. Strizelo retains the right to modify its product properties, and users must respect the proprietary rights of third parties. All orders are accepted on the condition of adherence to our current terms of sale and delivery. Users are advised to consult the most recent edition of the local Product Data Sheet for the relevant product, available upon request.



No. 143, 1 Awfis, Uthamar Gandhi Rd., Opp. The Park Hotel,
Nungambakkam, Chennai, Tamil Nadu 600034. India.

Call.: +91 99893 43030 • Mail: m_nuvusetty@strizelo.com

www.strizelo.com