



CORROSION INHIBITING ADMIXTURE

Description:

CORROSION INHIBITOR is a corrosion inhibitor designed to protect embedded reinforcing steel in concrete against chloride-induced corrosion. The product is added directly to fresh concrete during batching and provides long-term protection by forming a stable passive oxide layer on steel reinforcement.

Technical Properties:

Chemical Content	Clacium nitrite
Appearance	Liquid
Color	Light yellow
pH	8±1
Density (20 °C)	1.20 ± 0,02 g/cm ³
Chloride Content (%)	< 0.1
Alkaline Content (%)	< 5
Freezing	-5 °C

Advantage:

- Extends service life of reinforced concrete structures.
- Protects steel reinforcement against chloride-induced corrosion.
- Increases critical chloride threshold level.
- Reduces maintenance and repair costs.
- Improves durability in marine and de-icing salt environments.
- Compatible with most concrete admixtures.
- Easy to dose and apply at batching plant.
- Enhances early-age strength development.
- Does not negatively affect workability when properly dosed.
- Suitable for severe exposure classes.

Area of Use:

- Marine structures.
- Bridges and viaducts.
- Parking structures.
- Tunnels.
- Industrial floors.
- Chloride exposed environments.

Dosage: Recommended dosage depends on chloride exposure level:

<u>Exposure Level</u>	<u>Dosage</u>
Moderate	10 – 15 L/m ³
Severe	15 – 25 L/m ³
Marine / High Chloride	25 – 30 L/m ³

Laboratory trial mixes are strongly recommended.

When required, the Polystar Co. Technical Support Unit should be consulted.

Compatibility: corrosion inhibitor admixture is compatible with other POLYSTAR plasticizer admixtures used in the same concrete mix.

Method of Application:

- Add to mixing water or directly into concrete mixer during batching.
- Do not add onto dry aggregates alone.
- Ensure minimum 60–90 seconds mixing time after addition.
- Since CORRSION INHIBITOR contains water and the addition of admixture will increase the total concrete water / cement ratio, the concrete mixture water should be reduced in the ready-mixed concrete plant and the mixture design should be done accordingly.
- Compatible with most plasticizers and superplasticizers (trial required).

Precautions in Application:

- Do not exceed recommended dosage limits.
- Always perform laboratory trial mixes before field application.
- Add the product to mixing water or directly into the mixer — do not pour onto dry aggregates alone.
- Ensure minimum 60–90 seconds additional mixing after addition.
- Maintain uniform distribution within the concrete mix.
- Adjust water/cement ratio if high dosages are used.
- Monitor slump and setting time during initial production batches.
- Compatibility with other admixtures must be verified before combined use.
- Do not use together with chloride-containing admixtures.
- Protect product from extreme temperatures during application.
- Concrete curing procedures must be properly applied.



Cleaning: waterproofing admixture can be washed with fresh cold water and should not be allowed enter sewers or open bodies of water.

Packing:

- 30 kg plastic drum - 250 kg drum - 1000 kg container - Bulk

Storage and Shelf Life: Must be stored at temperatures between +5°C and +45°C. Under proper storing conditions, the product's shelf life is 12 months from production date if kept in original packaging unopened and undamaged. Packaged products must be shaken before use.

Security Information: Use protective clothes, gloves, glasses and mask compatible with Health and Safety regulations during the application. It should not contact skin and eyes. In case it contacts to skin and eyes, rinse it with water and if swallowed ask for medical help. Food and beverage should not be allowed in the application area. It should be stored at the reach out of the children. The Material Safety Data Sheet (MSDS) should be read for detailed information.

