# **ECMAGUARD 403**

## Two component, Epoxy Zinc Rich Primer

## **Description**

ECMAGUARD 403 is a two component, grey colored, metallic zinc and epoxy resins-based primer cum protective coating for protection of exposed/ confined steel reinforcement bars to be used with ECMAREP concrete repair mortars. It provides an active galvanic protection to steel bars and protects steel and reinforcement bars against corrosion/ rusting, chloride induced attacks. ECMAGUARD 403 having excellent adhesion & chemical resistance properties.

### **Areas of Application**

Suitable for application as a protective cum priming coat on exposed steel reinforcement bars in concrete repair, steel pipelines, tanks exteriors, etc. in refineries, power plants, fertilizer industries, etc. This can be top coated with suitable epoxy coatings, polyurethane paints as per specific applications.

### **Advantages**

- Excellent corrosion resistance Active 'Zinc-rich' system combats corrosion by electro chemical means.
- · Easy to mix and easy application by Brush or Roller
- Excellent adhesion with steel during cementitious repairs.

## **Technical Specifications**

Appearance & Physical State	Grey Liquid
Mixing Ratio	Pack A: Pack B- 4:1
Specific Gravity at 27°C	1.50±0.02
Pot Life at 27°C	3-4 hours
Touch Dry at 27°C	30 – 40 Minutes
Re-coat Time at 27°C	3-4 Hours
Coverage	5-7 Sqm/ Liter
Application thickness	125 Microns WFT Per coat
Dry Film thickness (DFT/coat)	35- 40 Microns

#### **Surface Preparation**

Corroded Steel surfaces/ exposed steel bars should be fully exposed & cleaned by removing all loose scale and corrosion deposits using grit blasting or wire brushes, taking special care at the back of exposed steel bars. If corrosion has caused due to the presence of chlorides, the steel should be washed with high-pressure jet using clean water immediately after grit-blasting. Surface should be dry prior to application of ECMAGUARD 403.

## Mixing



Stir each component of ECMAGUARD 403, add Hardener (Pack B) to Base (Pack A) as per pre weighted ratio of 4:1 and mix slowly at 200–300 RPM to obtain uniform consistency & color. Do not mix for more than 2 minutes.

## **Application**

The application of ECMAGUARD 403 must take place as soon as possible but within 3-4 hours to the cleaned & dry steel surfaces to avoid further corrosion. Apply one full coat of ECMAGUARD 403 using suitable brush ensuring uniform and full coverage, particularly on the back face of steel reinforcement. A small brush is generally suitable for this purpose. If in doubt of having achieved an unbroken coating, a second application should be made as soon as the first coat is fully dry. The primed surfaces should not be left exposed to environment for longer than necessary before over-coating or application of repair material. ECMAGUARD 403 is not designed as a finish coat, overcoating should be carried out as soon as possible.

## Coverage

ECMAGUARD 403 coverage will be approximately 5-7m<sup>2</sup> per liter, subjected to substrate condition and wastages.

#### **Precautions**

- Mix only sufficient quantity of material which can be consumed in 30-40 minutes at temperatures range around 20-30°C
- Do not apply if rain is expected within 24hours
- Tools should be cleaned with solvent immediately after use.

## **Packaging**

5 Kg (4 Kg + 1 Kg) and 15 Kg (12 Kg + 3 Kg)

#### **Shelf Life**

12 Months in original unopened sealed condition.

## Storage & Handling

Material should be stored in Cool and Dry shade. Also protect it from Direct sunlight and keep away from flames/ fire. Please avoid stacking of containers and handle carefully during transport.

#### **Safety Precautions**

Wear all PPE's at the time of application like Safety boot, Safety Goggle, Hand Gloves, Mask, etc. ECMAGURAD 403 should not come in contact with the skin and eyes, or be swallowed. Adequate ventilation should be ensured and inhalation of vapors should be avoided. In case of contact with skin, it shall be rinsed with plenty of water, then cleansed with soap and water. In case of contact with eyes, it shall be rinsed immediately with plenty of clean water and medical advice shall be sought immediately.



#### **ECMAS CONSTRUCTION CHEMICALS PVT. LTD**

7-4-124 Gaganpahad, International Airport Road Hyderabad, India - 500 052

phone: +91-40-24360014, 16, 17

email: ecmas@ecmas.co.in