

ECMAGUARD 407

Two Component, High Build Coal Tar Epoxy Coating

Description

ECMAGUARD 407 is two component, cold cure, high build, Coal Tar Epoxy based protective coating. It is used as an anticorrosive & protective coating for concrete and steel structures because of its excellent chemical resistance properties in atmosphere or in contact with chemical solutions such as effluents, sewage, salty water and organic / inorganic acids & alkalis. It is most suitable for structures in marine exposure or in submerged conditions.

Areas of Application

- Steel Pipes and structures
- Concrete Structure
- Marine Piling
- Sewerage & Effluent Treatment Plants
- Chemical processing
- Sea-water tanks, channels and intakes
- Waste processing equipment setup etc.

Advantages

- Protect Steel & Concrete Structures in aggressive environment
- Excellent protection from Corrosion
- Easy Application by Spray or brush
- Abrasion - Resistance to abrasion makes it suitable for application over floors of tanks & concrete rafts before filling the soil.
- Chemical resistance – Resistant to wide range of acids, alkali & salt solutions, effluents & sewage
- Does not support bacterial growth.
- Economical and cost effective

Technical Specifications

Appearance & Physical State	Blackish Brown Liquid
Mixing Ratio	3:1
Sp. Gravity of Mix at 27°C	1.40±0.1
Solid Contents %	75 ± 5
Touch Dry/ Hard Dry @ 27°C	4 Hours/ 24 Hours
Recoat able Time @ 27°C	8-10 Hours
Pot Life @ 27°C (100 gm mix)	1-1.5 Hours
Curing Time @ 27°C	24 Hours
Full Cure	7 Days
No. of Coats Required	Min. 2
Total Dry Film Thickness	175±25 Microns
Theoretical Coverage Area (for 2 Coats)	3.0-4.0 m ² /kg
Hardness (Shore A) ASTM D2240	60±5
Adhesion Strength (Concrete/ Metal), MPa	3/ 5 ± 10%
Chemical resistance, immersion in diluted Acid, Alkali & Salt solutions – 7 days (ASTM: C 868)	Passes

Application Instructions

Surface Preparation

The substrate shall be sound, dry, clean, free from dust, loose particles, oil & contaminants for concrete structures and free from loose Rust/ Corrosion/ Scale for steel that could interfere with adhesion of the coating.

Primer: Although ECMAGUARD 407 is self-priming but primer ECMAPRIME EP can be used on porous surfaces for better protection and increased bonding.

Mixing

ECMAGUARD 407 is supplied as two pack system. Stir the base and hardener separately. If settling is observed in the base or hardener, loosen the settled material with the help of hand stirrer followed by power driven stirrer (at lower RPM) for quick homogenous mixing. Mix hardener gradually into the base using a variable speed drill mixer with a spiral type blade at the bottom of stirrer rod as per the mixing ratio. Once the unit has been mixed, it should be consumed within the working pot life. In case of part mixing (which should be avoided), close the lids of containers tightly to avoid contact with atmospheric moisture.

Application

Apply the mixed material by brush or spray over the prepared surface at the recommended coverage rates. Allow first coat to dry for 7-8 hrs, depending upon temperature & humidity and second coat should be applied in direction perpendicular to previous coat. Allow the coating to cure for 7 days for best performance

Coverage

ECMAGUARD 407 Coverage will be 3.0–4.0 m²/Kg approximately subjected to type of substrate, its condition and wastages.

Packaging

20 Kg

Shelf Life

12 months in original unopened sealed condition

Storage & Handling

Material should be stored in Cool (temperature range 5-30°C) and Dry shade away from flames and fire. Please avoid stacking of containers and handle carefully during transport.

Safety Precautions

Wear all PPE's during application like Safety boot, Safety Goggle, Hand Gloves, Mask and avoid contact with Skin and Eyes. Any direct skin contamination with the hardeners should be washed off immediately with soap and water.

Substrate temperature should be at least 3°C above dew point but not above 40°C. Relative humidity should be below 80%. Good ventilation is required in confined areas to ensure proper curing.

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

