

# ECMAGUARD 409

## Two Component, Cold Applied, Modified Polyurea Coating

### Description

ECMAGUARD 409 is two component, cold cure, modified Polyurea based highly durable 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. It forms a UV resistant, impervious membrane against moisture and water.

### Areas of Application

- As a protective membrane for:
- Steel Pipes and structures
  - Concrete Structure
  - Sewerage & Effluent Treatment Plants
  - Chemical processing
  - Sea-water tanks, channels and intakes

### Advantages

- Protective coating free from blisters, bubbles and pin-holes
- Impervious - provide complete sealing to the metal surface, preventing water & moisture penetration.
- Protect Steel & Concrete Structures in aggressive environment
- Excellent protection from Corrosion
- UV Stable and excellent crack bridging abilities.
- Cold applied - Easy Application by Spray or brush
- Chemical resistance – Resistant to wide range of acids, alkali & salt solutions, effluents & sewage
- Does not support bacterial & fungal growth.

### Technical Specifications

Color	Grey/ White
Mixing Ratio A:B (v/v)	1:1.18
Solid Contents %	70 ± 3
Sp. Gravity of Mix at 27 °C	1.40±0.1
Touch Dry/ Hard Dry @ 27 °C	1 Hours/ 24 Hours
Recoat able Time @ 27 °C	6-8 Hours
Pot Life @ 27 °C	40±5 Minutes
Curing Time @ 27 °C	24 Hours
Full Cure	7 Days
No. of Coats Required	1 or 2
Total Dry Film Thickness	200 Microns
Coverage Area 100 Micron DFT	6.5–7.0 m <sup>2</sup> /Liter
Hardness (Shore D) ASTM D2240	65±5
Elongation ASTM D638	>450%
Tensile Strength, MPa (ASTM D 412)	4±0.05
Chemical resistance, immersion in diluted Acid, Alkali & Salt solutions – 7 days (ASTM: C 868)	Passes



## Application Instructions

### Surface Preparation

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All substrates shall be sound and dry, clean, free from dust, loose particles, oil & contaminants for concrete structures while free from loose Rust/ Corrosion/ Scale for steel surfaces that could interfere with adhesion of the coating. If applying on new concrete, it should be at least 28 days old and free from cracks. Moisture content of prepared surfaces should be <5%.

**Primer:** Use ECMAPRIME 404 or ECMAPRIME 405 Epoxy Primer for better protection and increased bonding.

### Mixing

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ECMAGUARD 409 is supplied as two pack system in pre-weighed quantities. Stir well both the components separately. Mix component B in component A gradually 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

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Apply the mixed material by brush or spray over the well prepared and already primed surface at the recommended coverage rates. Allow first coat to dry for 6-8 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

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ECMAGUARD 409 coverage will be 3.0–3.5 m<sup>2</sup>/Kg in 2 coats subjected to type of substrate, its condition and wastages.

### Packaging

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10 & 20 Kg

### Shelf Life

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12 Months in original unopened sealed condition.

### Storage & Handling

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Material should be stored in Cool and Dry shade. Please avoid stacking of containers and handle carefully during transport.

### Safety Precautions

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Wear all PPE's at the of Application like Safety boot, Safety Goggle, Hand Gloves, Mask and avoided with contact of Skin and Eyes. Any direct skin contamination with the coating, should be washed off immediately with soap and water and seek medical help. Good ventilation is required in confined areas to ensure proper curing

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