CWC®SMART EPOCRETE 41

Epoxy Based Solvent Free Food Grade Coating

Description

CWC®SMART EPOCRETE 41 is a two-component solvent free epoxy resin system, comprising pigmented base and a hardener, specifically formulated to protect concrete and steel. On mixing of the two components, it yields a high build, chemical resistant protective coating, which cures to a semi glossy, ultra-dense surface that is easily cleaned, hygienic and safe for contact with foodstuff and potable water, water canals etc.

Pack –A: Resin, Pack –B: Hardener

Advantages:

- It can be applied to damp concrete without any loss of adhesion.
- Becomes an Ideal as a body coat in protective coating systems.
- Suited to quick repair situations like maintenance work.
- It's Cured film is very hard and abrasion resistant.
- Excellent bond on freshly prepared concrete surfaces.
- It can be applied by brush or roller or airless spray machine
- Very good moisture barrier property Contains no VOC, hence GREEN Technology.

Domains of application

CWC®SMART EPOCRETE 41 is recommended as a protective coating for the inside surfaces of tanks, sumps and walls and as a pore free surface sealer resistant to the growth of bacteria.

Applications include :

- Coating drink water réservoirs
- Chemicals storage tanks.
- Dairies & grain silos, Fruit Juice, Holding Tanks.
- Pulp and paper plants.
- Meat processing, food industries & breweries.
- Clean rooms in pharmaceutical facilities
- As a protective coating in oil refineries, paper mills, Power stations, garages, hospitals, hangars, etc

Technical Characteristics

Appearance of cured film	Greyish or off white
Specific Gravity at 27°C	1.3 ±0.1
Solid content, % (w/w)	>98
Mixing Ratio, Pack –A: B (by wt.)	4:1
Pot life, minutes at 27°C, 100 g mass	30-45
Application Temperature, °C	5 to 40
Coverage (Theoretical)	6-8 m^2 /kg/ per coat (100-130 microns per coat)
Initial cure at 27°C, for pedestrian traffic	After 24hours
Recoating time	After 12- 18 hours
Pull out Bond Strength, at 7 days, N/mm^2	2 (minimum) or concrete failure
Full cure, days	7
Recommended No of coats	2 (minimum)
Open to Food Traffic	After 24hours

Note: The typical physical properties given above are derived from testing in a controlled laboratory environment. Results derived from testing fi eld-applied samples may vary, dependent on actual site conditions

Application instructions

Surface Preparation - Part-I

It is most important to ensure that thorough surface preparation is undertaken prior to application of the **CWC®SMART EPOCRETE 41** coating.

Temperature Requirements

- Substrate temperatures: 15ºC – 35ºC
- Material temperatures: 15ºC – 30ºC

Very low or very hot temperatures will make application more difficult and careful consideration should be given to storage of materials. In the cold weather conditions, precondition materials by keeping it in a heated room. In hot weather conditions, some form of air-conditioned storage is required. Pre-conditioned materials at 20-25°C will reduce the possibilities of flash/slow setting and other defects.

Concrete:

Ensure concrete is at least 28 days old and sound. Oil, grease, mould release agent, curing membrane, and such other contaminants must be removed by mild detergent and water, and by thoroughly scrubbing with a soft brush. If the wall surface is damp or water is seeping out, it is necessary to stop the leakage before coating. For advice on the appropriate method for the site situation, contact CWC Technical experts. It is important to note that the final finish obtained is entirely dependent on the surface finish of the substrate. Where a hygienic surface is critical such as in potable water tanks and food industries even out all unevenness such as blowholes, pin holes and other surface defects with Epoxy putty before application of coating.

MIXING

CWC®SMART EPOCRETE 41 is supplied in two pre-weighed components, Base and Hardener. Properly stir each component separately before mixing together to ensure uniform consistency. Combine Hardener and Base component in a suitably sized container. Ensure to scrap the sides of the containers to ensure a complete reaction. Mix properly for 3 minutes with a slow-speed drill and wing style mixing paddle at 300-400 rpm until a homogeneous colour is achieved. Keep the paddle below the surface to avoid entrapping air. Do not mix by hand.

APPLICATION

CWC®SMART EPOCRETE 41 can be applied using short nap/nylon roller, shorthaired brushes or by airless spray. Apply in two coats preferably in contrasting colors, each at a W.F.T. of 100 to 130 microns, the second coat applied after the first coat has dried (12-18 hours at 30°C)

Packaging

CWC®SMART EPOCRETE 41 is supplied in 5 kg kit (Pack-A: 4kg, Pack-B 1kg).

Shelf Life: If stored in unopened containers at normal ambient temperatures range from +5°C to 40°C, a shelf-life of approximately 12 months.

Precautions

- Store the material in shaded cool place and keep it away from fire and any heated body. Clean all tools with MEK or any standard solvent before polymerization starts.
- Mix only sufficient materials for immediate requirements. Leave the mixed material to stand for 2-3 minutes to enable entrapped air, if any, to escape from the mix and then use as quickly as possible.

Should not be mixed multiples packs at a time. This may result drastic reduction of pot life and material may gel quickly before application.

Safety

- Wear hand gloves, safety shoes and safety goggles while using and handling the product.
- In case eyes or mouth are affected wash with plenty of clean water and seek medical treatment immediately.

Before use, refer to the Material Safety Data Sheet.
The MSDS is available on www.cwcchemical.in