

### TWO COMPONENT EPOXY COATING SYSTEM FOR POTABLE WATER RETAINING STRUCTURE

#### Description

EP COAT FG 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. (Approved by CFTRI).

#### Uses

EP COAT FG 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 reservoirs
- 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.

#### Advantages

- Non-toxic & non-tainting: safe for drinking water
- High build application
- Solvent free - suitable for use in confined areas
- Can be applied directly to prepared mild steel and concrete
- Smooth, satin, easy to clean surface
- Corrosion, chemical and abrasion resistant
- Can be applied to damp SSD surfaces
- Resistant to mould growth & abrasion

#### Technical Data

Colour of mixed product	Cream
Solid	100%
Pot life:	30 Minutes at 25°C 20 Minutes at 30°C
Touch dry:	4 Hours at 30°C
Re coatable:	12 -18 Hours at 30°C
WFT	Approx 125 Micron
DFT	Approx 125 Micron
Coverage	250 Micron for 2 coats
Application temp	10° C to 35° C Humidity should be below 70%

#### Standards & approvals

Food grade certified from CFTRI, Mysore



#### Application Instruction

##### Surface Preparation:

##### Concrete surface

All surfaces must be smooth, sound and free from any unsound material and any contaminations such as oil, grease, dust, loose particles and organic growth. Concrete surfaces must be fully cured, laitance free and free from any traces of shuttering, release oils and curing compounds. For old structures, existing paints should be removed thoroughly and all the honey combs, pinholes, bug holes should be filled with Repcon range Mortars.

##### Steel Surface

All surfaces should be grit blasted to meet the requirements of AS1627.4 Class 2.5. The lining work should be programmed so that newly cleaned steel is coated as soon as possible before the reformation of rust or scale.

##### For mixing:

EP COAT FG Consists of two components, supplied in prepacked quantities. First, the base component is mixed thoroughly and then the hardener is added. Both components are mixed together thoroughly and homogeneously for at least 3 minutes. Slowly rotating mixers with paddle (max.300 rpm) are suitable for mixing. Care should be taken to keep entrainment of air to a minimum while mixing.

##### Application:

EP COAT FG can be applied by Nylon bristle brush or Roller Depending upon substrate. If the surface temperature is more than 35°C then application of EP COAT FG should immediately stopped.

Minimum Two coats of EP COAT FG are recommended for achieving better waterproofing properties. During the application of 1st coat the coating should be done in "X" Direction, ensuring continuation of coating throughout the surface need to be waterproofed. 2nd coat should be applied after the 1st coat will be completely dry on the "Y" Direction, Ensuring Continuation of Coating throughout the surface. The Minimum WFT should be maintained 125µ per coat.

##### Airless Spray:

For application by airless spray, use a pump with 45:1 or higher ratio, minimum 9 mm dia hoses and a nozzle tip of size 0.48 mm to 0.58 mm.

#### Specification Clause

The non-toxic, high build epoxy coating shall be EP COAT FG, solvent-less, taint free potable grade, protective coating. The product shall exhibit excellent bond strength with the substrate at least exceeding 1.5 MPa, when tested as per ASTM D4541. The product shall be formulated to have high build thickness exceeding 200 microns per coat on average and shall be applied to achieve overall thickness of 400 microns in two coats. The product must be approved by reputed institute such as CFTRI for use in contact with potable water.

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#### Consumption

Each 4 kg composite pack yields 2.9 Liter on mixing and is sufficient to coat approximately 7.25 m<sup>2</sup> in 2 coats of 125 microns each, on a fair faced concrete surface. Actual coverage depends on the numbers of coats, surface profile, loss and wastage.

#### Packaging

EP COAT FG is supplied in 4 kg packs consisting of Base and Hardener.

#### Packaging

EP COAT FG is resistant to intermittent spillages of the following typically encountered chemicals:

- Sodium Hydroxide, 30% solution
- Sulphuric Acid, 30% solution
- Hydrochloric Acid 5% solution
- Diesel oil
- Lactic Acid, 50% solution
- Nitric Acid, 10% solution
- Wine
- Sea and brackish water
- Formaldehyde, 40% solution
- Aviation hydraulic fuels (Skydrol)
- Vegetable oils

#### Note:

Higher concentration of mineral acids may cause matting of the surface and colour changes.

#### Cleaning

EP COAT FG should be removed from tools and equipment with Xylene immediately after use. Cured material can only be removed mechanically.

#### Storage and Shelf life

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment. Shelf life is 12 months..

#### Safety Precautions

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data..

#### Disclaimer

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.