

# POLY FLOOR EP HC

Highly Chemical Resistant, Epoxy Resin Coating for Tanks Be Surface Lining

## Product Description

**POLY FLOOR EP HC** is a two component, solvent free, high build, thyratrophic epoxy resin coating, which is formulated for horizon natal and vertical surfaces.

The cured film is highly chemical resistive to most chemical agents.

It can be used on conjunction with glass fibers to improve impact resistance, tensile strength and to bridge hair cracks.

## Typical Applications

**POLY FLOOR EP HC** is used for coating concrete, masonry and metal surfaces as:

- Concrete pulp vats used in paper mills.
- Sewage treatment plants.
- Chemical processing plants.
- Oil tanks and pipe lines.
- Bridges and dams.
- Floor topping in nuclear power stations.
- Chemical plants.

## Product Features

- Easy to mix and to apply.
- Excellent adhesion to concrete, masonry and metal surfaces.
- Excellent chemical resistance.
- Abrasion resistance.
- Thyratrophic, high -build providing excellent protection.
- Glossy, smooth film with less maintenance.
- Formulated to be suitable for the Middle East conditions.

## Properties

### **Coulers**

White, green, red and clear.

### **Specific Gravity**

1.4

### **Pot Life**

90 minutes @20°C 40 minutes @35°C

### **Dry to handle**

12 hours @20°C

### **Full Cure**

7 days @20°C

5 days @35°C

### **Working Temperature**

+ 5° C (minimum)

### **Time between two coats**

12 - 24 hours @ 20°C

6 - 12 hours @ 35°C

### **Recommended Dry Film Thick.**

200 - 250 microns

### **Chemical Resistance**

Cured film is resistant to the following chemicals:

Sulphoric Acid 30%	Excellent
Sulphoric Acid,70%	Very Good
Hydrochloric Acid,10%	Excellent
Hydrochloric Acid	Cone Good
Nitric Acid, 10%	Excellent
Lactic Acid ,10%	Excellent
Tall Oil Fatty Acids,	Excellent
Water, de-ionized,	Excellent
Caustic Soada, 30%	Excellent
Paraffin Oil,	Excellent
Kerosene,	Excellent
Ethanol,20%	Excellent
Isopeopan,	Excellent
Dibutyl Phthalate,	Excellent
Tricresyl Phosphate,	Excellent
Acetic Acid,50%	Excellent
Linoleic Acid	Excellent
Sea Water	Excellent
Ammonia Cone,	Excellent
Formaldehyde, 40%	Excellent
Petroleum,	Excellent
Gasoline (prtrol),	Excellent
Benzene	Excellent
Glycerin	Excellent
Pine Oil	Excellent
Hydrogen Peroxide 30%	Good

For more details about the chemical resistance, consult EAMIC Technical Support.

## Guide for Application

### **Surface Preparation**

All surfaces should be clean, dry, free from rust, oil & grease and any loosely adhering particles.

Grit blasting is recommended.

The age of the concrete should be 28 days at least, with a moisture content less than 5 %.

Steel surface should be blast cleaned in accordance with DIN 55928 Part 4 and Swedish standard Sa2 1/2

### **Priming**

The prepared concrete surface should be primed using POLYPRIME EP (See separate data sheet).

Pour component B (Curing Agents) contents into the container of component A (Resin) and mix till uniform colour and consistency is achieved. Apply the mixed materials with suitable brush.

The primer should not be allowed to dry before over coating.

Prepared steel surfaces shall be primed using POLYCOAT EP ZR (See separate data sheet).

### **Mixing**

Stir well both component A (Resin) and Component B (Curing Agent) before use, add Component B to Component A while mixing.

Mix until homogenous colour and consistency is achieved.

Slow speed electric drill (400-500 rpm) fitted with a mixing paddle is recommended.

Partial mixing is not recommended

### **Application**

Apply **POLY FLOOR EP HC** onto the prepared substrate using suitable brush, roller, ensuring uniform coverage is achieved. Allow the first coat to dry ( this will tack about 12 hours @20°C ) before applying the second coat.

In case of using glass fibers, the fabric should be laid directly onto the first coat while it is still wet, pressed and smoothed out with a stiff brush or split washer roller.

Second coat will be applied as the first coat (time between recoating is 12 hours @25 °C).

Glass fiber of 110 g 1m2 open weaves glass cloth is recommended.

### **Cleaning**

Clean all tools and equipment immediately after use with POLYSOLVENT EP20

### **Packaging**

**POLY FLOOR EP HC** is supplied in 5kg pack size.

### **Coverage**

Depend upon the substrate conditions, about 3m<sup>2</sup> / I kg for a ( D.F.T.) of 250 microns.

### **Storage**

**POLY FLOOR EP HC** should be kept in dry place away from extreme temperatures.

Shelf Life One year when stored correctly in unopened containers.

### **Health and Safety**

- Epoxy Resins contain irritants, especially to the skin, eyes and the respiratory system.
- Persons handling these materials shall use appropriate protective clothing, including rubber or plastic gloves.
- If the epoxy resin came in contact with the skin, it should be removed immediately and the areas of contact washed thoroughly with soap and water.

### **Guarantee / Warranty**

We warrant our products to be of good quality and manufactured to rigid standards. This warranty is in lieu of any and all other warranties expressed or implied.

This data sheet is published for information only. It is believed to be correct but no liability is accepted for it or the suitability of the product for any particular purpose.

**POLYCOO** services is free and the company dose not accept liability for any loss arising from it.

### **Technical Services**

For any further technical advice and recommendation for the use of all **POLYCOO** products, please consult the nearest **POLYCOO** technical office.



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