

## WHITECHEM EP MORTAR 310

### 1 – PRODUCT DESCRIPTION

WHITECHEM EP MORTAR 310 epoxy repair mortar is an epoxy based, two component, solventless, high impact and compression resistance, high abrasion resistant repair and mounting mortar. It has excellent adhesion force to concrete and steel. Due to its special formulation, it has a thixotropic structure that does not flow on vertical floors.

### 2 – FEATURES

- Excellent adhesion force to concrete and steel
- Does not contain solvent.
- High abrasion and impact resistance.
- High mechanical and chemical resistance.
- Can be applied without primer

### 3 – APPLICATION AREAS

- Industrial floors
- Airport concrete runways
- Repair of highways joints
- Maintenance and repair marine structures
- To fill gaps between the bridge supports and concrete columns with steel reinforcement
- Surface repair before coating applications
- Filling and repair of concrete building elements

### 4 - SURFACE PREPARATION & APPLICATION PROCEDURE

#### Surface Preparation

The application surfaces should be dry, clean and strong. Dust, oil, grease, paint and all kinds of dirt that will reduce adherence must be completely cleaned before application. Under all circumstances, the surface adherence should be above 1.5 N/mm<sup>2</sup>. If required, the surface should be primed with a suitable epoxy primer. Mortar application should be done while the primer is not yet fully dried.

#### Mixing and Application

Before start mixing, make sure that the material temperatures are between 15° C - 25 ° C. Component B should be completely poured into Component A and make sure that there is no material left in Component B. Component A and B should be mixed under a low speed mixer for 3-4 minutes until a homogeneous mixture is obtained. The mixture is applied to the surface with a trowel, spatula or the like. The prepared mixture is applied with a trowel to form a maximum thickness of 5 cm (3 cm in large areas). Waiting time between coats varies between 10 and 48 hours depending on weather conditions. The final curing is completed in 7 days. Working and reaction times of epoxy based systems are affected by ambient and ground temperature and relative humidity in the air. The chemical reaction slows down at low temperatures, this increases the pot life. High temperatures accelerate the chemical reaction and decrease the pot life accordingly. For the material to complete its curing, the ambient and surface temperature must not fall below the minimum allowed value. It is not recommended to apply in rainy, windy, frost weather conditions. The surface should be protected from water within 24 hours after application.

### 5- CLEANING

The equipment used in the application should be cleaned with a suitable solvent immediately after the application. The dried material can only be removed by mechanical methods.

### 6- CONSUMPTION

1,7 kg/m<sup>2</sup>( 1 mm thickness)

### 7- PACKAGING

5 kg set

Component A (resin): 3,75 kg and Component B (hardener): 1,25 kg

### 8- SHELF LIFE & STORAGE CONDITIONS

12 months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +25°C.

### 9- SAFETY

For information and precautions on the safe handling, transportation storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety related data.

### 10- TECHNICAL FEATURES

	METHOD	DATAS
<b>Chemical Structure</b>		A : Epoxy resin B: Epoxy hardener
<b>Mix Ratio</b>	-	3:1 (A/B)
<b>Colour</b>	-	Grey
<b>Solid Ratio (%)</b>	ASTM D2697	100
<b>Density (Mixture) (g/cm<sup>3</sup>)</b>	EN ISO 2811-1	1,68 (25°C)
<b>Compression Strength (N/mm<sup>2</sup>)</b>		
1 day	EN 196-1	>40
7 day		>85
<b>Flexural Strength (N/mm<sup>2</sup>)</b>		
1 day	EN 196-1	>25
7 day		>30
<b>Adhesion Strength (N/mm<sup>2</sup>)</b>		
Concrete	ASTM D4541	>3
Steel		>3,5
<b>Pot Life(min.)</b>	INTERNAL	50 (23 °C 50% R.H.)
<b>Light Traffic Time(hr)</b>	INTERNAL	24 (23 °C 50% R.H.)
<b>Full Cure Time (day)</b>	INTERNAL	7 (23 °C 50% R.H.)
<b>Shore D Hardness</b>	ASTM D2240	80 ( After 7 days)
<b>UV Resistance</b>	ASTM G23	Color stable, no crack or blister (1000 hr)
<b>Application Thickness (mm)</b>	--	Min : 0,5 mm. Max: 50 mm
<b>Application Temperature</b>	-	10 °C- 35 °C