

## JAZEPAIR – EPH

### 3-Component, Solvent-free, Thixotropic, Non-sag, Epoxy Resin-based Durable Repair & Patching Mortar

#### Product Description

JAZEPAIR – EPH is 3-component, solvent-free, non-sag, high strength, impervious, abrasion resistant, chemical & water resistant epoxy resin-base repair & patching mortar. It is based on a combination of selected epoxy resins, curing agents and well graded hard aggregates. After mixing it produces smooth, trowelable, durable non-sag mortar that has an excellent adhesion to concrete & cement-based substrates enabling successfully in repair and patch works. It can be used applied easily upon vertical & overhead and horizontal substrates.

#### Uses

JAZEPAIR – EPH is formulated to be used as a durable waterproofing, high strength chemical resistance, non-sag, abrasion resistance epoxy resin repair & patching mortar in:

- Formation of bridges bearing levelling pads.
- Joint in concrete high ways.
- Repairing mortar for the damaged concrete.
- Filling of cavities in horizontal, vertical & overhead substrates (concrete and masonry).
- As a chemical resistant, durable, waterproofing protective layer.
- Emergency repair works to concrete structures in sewage and processing plants.
- As structural bonding agent on concrete and masonry surfaces.
- Machinery service areas.

#### Advantages

- Easy to apply.
- Chemical resistance to acid, alkalis
- Abrasion & impact resistant.
- Excellent adhesion to concrete and masonry surfaces.
- Non-shrink.
- Durable, waterproofing and resist the ingress of chlorides and other water-born salts.
- Can be applied upon horizontal, vertical & overhead substrates.
- High strength permanent bond between two structurally sounded materials.
- Can be applied on dry or damp surfaces.
- Formulated for the Middle East Climates.

#### Standards

JAZEPAIR – EPH is formulated to comply with all requirements of ASTM C-881 "Epoxy Resin - Base Bonding Systems for Concrete" Type III, Grade 3, Class B & C

#### Technical Properties

<b>Appearance (mixed materials)</b>	Natural, smooth, non-sag consistency.
<b>Specific Gravity @20 °C</b>	2.00 (mixed materials)
<b>Pot-life @ 20 °C</b>	60-minutes
<b>Open Time @ 20 °C</b>	120-minutes
<b>Water Absorption (ASTM D-570)</b>	0.30 % (by weight)
<b>Compressive Strength (ASTM C-597)</b>	90 N / mm <sup>2</sup> .
<b>Flexural Strength (ASTM D-790)</b>	35 N / mm <sup>2</sup> .
<b>Tensile Strength (ASTM D-638)</b>	20 N / mm <sup>2</sup> .
<b>Bond Strength (ASTM C-882)</b>	2 N / mm <sup>2</sup> Concrete failure)
<b>Linear Coefficient of Shrinkage on Cure (ASTM C-844)</b>	0.005 cm / cm



**Mix Ratio**

Component A: 3 Parts by weight  
Component B: 1 Part by weight  
Component C: 4 Parts by weight

**Chemical Resistance**

JAZEPAIR – EPH 100 has been tested for chemical resistance to a comprehensive range of industrial & domestic chemicals. After constant immersion for 90-days @ 35 °C in accordance with ASTM D-2240 (Shore D hardness), the results are:

Acids

Hydrochloric	25 %	Excellent
Sulfuric	25 %	Excellent
Nitric	25 %	Good
Acetic	10 %	Excellent
Lactic	10 %	Excellent
Citric	10 %	Excellent

Alkalis

Sodium hydroxide	25 %	Excellent
Sodium Carbonate	25 %	excellent
Ammonia	10 %	Excellent
Potassium Hydroxide	25 %	Excellent
Sodium Hypochlorite	15 %	Excellent

Solvents & Oils

Ethanol	Excellent	Soya Bean Oil	Excellent
Ethyl Glycol	Excellent	Vegetable Oil	Excellent
White spirit	Excellent	Detergent	Excellent
Petrol & Diesel Oil	Excellent	Fat	Excellent
Cotton Seed Oil	Excellent	Pine Oil	Excellent
Soya Bean Oil	Excellent	Linseed Oil	Excellent
Silicates	Excellent	Water	Excellent

For Specific Chemical reagent, please ask for technical support.

**Guide for Applications**

**Surface Preparation**

All surfaces shall be sound, clean free from dust, grease & oils or other materials may make any de-bonding. Priming is not necessary.

**Mixing**

Stir well both components A and B well before use.

Pour all Component B: curing agent into component A: resin and mix well until homogenous consistency is achieved, then gradually add Component C while mixing. Continue mixing till homogenous consistency free from lumps is achieved. Electric drill of low speed (300- 400 rpm) can be used for proper mixing.

**Application**

The mixed material shall be applied onto the prepared substrate by trowel. Spread the mixed materials and trowel firmly into the prepared substrate.

**Cleaning**

Clean any spillages with normal water and soap

**Packaging**

JAZEPAIR – EPH is supplied in 3-component having pack size: 10-Kg.

**Storage & Shelf-life**

JAZEPAIR EPH shall be stored in normal conditions away from any extreme temperatures; Shelf-life is 24-monthes if stored properly in well-closed containers.

**Health & Safety**

- JAZEPAIR EPH is non-toxic, non-hazardous during handling, storage and use.
- For Ecology: Do not dispose directly to water or soil. Mix with plenty amount of sand before this to comply with the local regulations.
- Splashes on skin will be washed with water and soap.

**JCC CONSTRUCTION CHEMICALS**

The information herein is general information to assist our customers in determining whether our products are suitable for their specific applications. Our products are intended for sale to commercial and industrial customers. We require that customers should inspect and test our products before use to satisfy themselves as to the content and suitability for the application they intend to use our products for.

JCC endeavors to ensure that any advice, recommendation, specification of information in accurate and correct manner.