

## JAZEGROUT - EPLV

### 2-Component, Solvent-free, 100 % Solid, Low Viscosity Epoxy Resin – based Crack Injection Grout

#### Product Description

JAZEGROUT – EPLV is 2-component, solvent-free (100 % solid) non-shrink, low viscosity, epoxy-resin-based crack injection grout. It is based on selected epoxy resin & curing agents that have low viscosity enabling for more penetration power with high chemical resistance, mechanical properties and can be applied on damp substrates.

It is formulated to be injected into cavities and cracks in concrete, as it cures providing an excellent tensile and slant shear strengths.

#### Uses

JAZEGROUT - EPLV is formulated to be used as non-shrink, high strength, excellent adhesion, low viscosity for structural strengthen, filling & sealing various types of concrete cracks in structural components. It will form an effective barrier against water infiltration and water-soluble salts and bonding concrete sections together and hence restoring the original structural strength:

- Floor slab
- Piers
- Culverts
- Sea water intakes
- Columns.
- Beams
- Tunnels.
- Bridges structural elements.
- Foundations
- Retained walls.
- Filling bolt horizontal pockets.
- Sealing and protecting cracks.

#### Advantages

- Easy to mix and to apply.
- Solvent-free, 100 % solid content.
- Low viscosity enabling good penetrating power at low pressure pumping.
- Can be applied on both dry and damp substrates
- Non-shrink curing.
- Chemical resistant.
- Rapid strength development.
- High strength and mechanical properties.
- Excellent adhesion to most substrates.
- Excellent resistance to water and water-soluble salts.
- Formulated for the Middle East Climates.

#### Standards

JAZEGROUT - EPLV is formulated to comply with all requirements of ASTM C-881: "Epoxy resin –based Bonding Systems for concrete" Type IV, Grade 1, Class B & C.

#### Technical Properties

<b>Appearance</b>	Amber clear liquid (mixed materials)
<b>Specific Gravity @20 °C</b>	1.01 ± 0.05 (mixed materials)
<b>Chemical Resistance</b>	It resists most of common reagents, sea water, inorganic and organic acids, alkalis, etc.
<b>Mix Ratio:</b>	Component A: Component B = 3:1 by weight,
<b>Compressive Strength (ASTM D-695)</b>	70 N / mm <sup>2</sup>
<b>Flexural Strength (ASTM D-)</b>	35 N / mm <sup>2</sup> .
<b>Tensile Strength (ASTM D-638)</b>	20 N / mm <sup>2</sup>
<b>Elongation at break (ASTM D- 638)</b>	2 %
<b>Bond Strength to Concrete (ASTM C- 882)</b>	3 N / mm <sup>2</sup> .



<b>Bond Strength to steel</b>	15 N / mm <sup>2</sup>
<b>Water Absorption (ASTM D-570)</b>	0.10 %
<b>Coefficient of thermal expansion (ASTM C-580)</b>	40 x 10 <sup>-6</sup> mm/mm per °C
<b>Pot-life @ 25 °C</b>	60 minutes

## Guide for Applications

### Surface Preparation

All surfaces around the cracks shall be sound, clean and free from dust, oil & grease or any contaminants that may affect the bond between the product and substrate. Metal surfaces shall be free from rust & scale. Injection nipple should be fixed at intervals 150 – 300 mm depending upon the crack width. The nipple should be well fixed along the crack faces using location pins and bonded in place with JAZEPOXY – 310 (see its data sheet) avoiding blocking nipple holes. The fixing epoxy resin mortar should be used to form a band of 40 – mm wide and 2-mm thickness above the crack between each of the fixed nipples. Allow the fixing mortar to harden before injection. Cracks occurred by corrosion of steel reinforced should be treated with the suitable methods, consult JCC Technical Support.

### Injection

#### 1. Pressure Injection Grouting of Extensive Cracks.

JAZEGROUT – EPLV is formulated to be easy applied by pressure injection equipment. The mixed grout should be inserted into the resin injection equipment that is capable of injection pressure of at least 4-bars. The injection gun shall be securely fixed by means of an access hose to the first nipple. Injection shall always commence from the lowest nipple in a vertical crack or from either end of horizontal crack.

It shall be injected till it flows from the adjacent nipple. The hose should be disconnected and the nipple sealed off. The injection should be continued in this way, injection progressing from one nipple to another, till the entire length of the crack has been filled.

#### 2. Crack injection by Hand

For small hand applications, the mixed materials can be fed by gravity into small cracks that have 0.2 mm width. Pour the epoxy mixed materials into the crack and fill into the top. Top off more epoxy materials and finish. Repeat if necessary.

#### Mixing

Pour all Component B into the container of Component A and mix well till homogenous clear colour is achieved. Avoid introducing air during mixing. The mixed materials shall be used immediately after mixing

### Cleaning

Clean all tools & equipment with water after finishing the work immediately with Solvent No. 2.

### Packaging

JAZEGROUT - EPLV is supplied as 2-component: 4-Kg kit.

### Storage & Shelf-life

JAZEGROUT - EPLV shall be stored in normal conditions away from any extreme temperatures, shelf – life is 24-months.

### Health & Safety

- JAZEGROUT - EPLV is non-toxic, non-hazardous during handling, storage and use.
- For Ecology: Do not dispose directly to water or soil, re-use it if possible or mix each component (A and B) and after hardening bury it in landfill.
- 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.

For Further Information Contact: [www.jcc-sa.com](http://www.jcc-sa.com)