

### DESCRIPTION

**CLEVER PU INJECTION;** is one component low viscosity, closed cell, polyurethane injection which gives a blowing reaction with water. It is a polyurethane waterproofing material which is specially designed to seal off the flow of pressurized or non-pressurized water leaking from the cracks on the concrete surfaces.

### FEATURES

- Resistance to weak acids, micro organisms, alkali and water.
- Easy to adjust the curing time.
- Easy to apply.
- Hydrophobic.
- With its low viscosity it can penetrate in the substrate perfectly.
- Solvent free.
- Gives a blowing reaction with water and stops the leaking.

### TYPICAL APPLICATIONS

- Foundations,
- Retaining walls,
- Crack walls,
- Tunnels and underpasses,
- Sewage systems,
- Tanks,
- Waterways and dams,
- Storage tanks,
- Below grade structures,

### SURFACE PREPARATION

All surfaces of leaks and joints must be free of oil, grease and moisture before the application. Fill the leaks bigger than 3mm with suitable repair mortar. The locations of the pakers are determined according to the region where the leak has occurred and its situation. Pakers (injectors) are placed at a 45 degree angle. Pakers should be struck halfway through the reinforced concrete thickness. The distance between the pakers may be between 15 cm and 90 cm. The holes should be free from dust.

### MIXING - THINNING

**CLEVER PU INJECTION;** First mix the product with CLEVER PU INJ CATALYST. The ratio of the catalyst should be %2 - %10. Stir it properly until it gets homogeneously mixed. Catalyst ratio should be determined at the application area according to crack and water flowing rate and weather conditions.

### APPLICATION

**CLEVER PU INJECTION;** After pakers are prepared, the application will be with Single Component Injection Pump. The application pressure varies between 14 and 200 bar. The application should be started with the first peak. After starting with low pressure, the pressure is increased until resin overflow. After overflow of resin, the other pakers must be passed. After injection application, resin will be overflowed from the concrete cracks after this process, the application will be completed. In the case of CLEVER PU INJECTION, the amount of consumption is only to fill the cracks and holes completely.

### PACKAGING AND SHELF LIFE

#### 25 Kg - 2,5 Kg

Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25 °C. Once opened, use as soon as possible.

### PRECAUTION

Apply in well-ventilated, no smoking areas, away from naked flames. In closed spaces use ventilators and carbon active masks. Hands and eyes must be protected with gloves and protective glasses. Case of eye contact, rinse eyes with plenty of water for the material and consult a doctor immediately. Keep in mind that solvents are heavier than air so they creep on the floor. The MSDS (Material Safety Data Sheet) is available on request.

### NOTE

This is not a specification and all information is given in good faith. Since conditions of use are beyond the manufacturer's control, information contained herein is without warranty, implied or otherwise, and final determination of the suitability of any information or material for the use contemplated, the manner of use and whether there is any infringement of patents is the sole responsibility of the user. Manufacturer does not assume any liability in connection with the use of the product relative to coverage, performance or injury. For application in special conditions, consult Clever Polymers for detailed recommendations. The new edition of the technical data sheet supersedes the previous technical information and renders it invalid.

### SPECIFICATION DATA

<b>Color</b>	Yellowish
<b>Density (20°C)</b>	1,1 kg/lt. ±0.03
<b>Viscosity ASTM D 2196/EN ISO 3219(25°)</b>	~ 200 cp
<b>Packaging</b>	25 Kg.
<b>Volume Solid (ASTM D 2697)</b>	%100
<b>Flash Point</b>	145 °C
<b>Shelf Life</b>	12 Months

### CLEVER PU INJ CATALYST

<b>Color</b>	Yellowish
<b>Density (20°C)</b>	0,95 kg/lt. ±0.01
<b>Viscosity ASTM D 2196/EN ISO 3219(25°)</b>	~ 15 cp
<b>Packaging</b>	2,5 Kg.
<b>Flash Point</b>	70°C
<b>Shelf Life</b>	12 Months

