BEST CONSTRUCTION
CHEMICALS
Stick with Best

# BESTINJECT PU

## SOLVENT FREE, POLYURETHANE INJECTION RESIN

### PRODUCT SCOPE:

**Bestinject PU** is a solvent free polyurethane based injection resin. It can be injected into cracks in concrete, in dry and damp conditions to form a tough, slightly flexible resin. Due to its low viscosity it is best suited for crack sealing and to form impermeable barrier. It has good adhesion to concrete & it is suited to seal non-moving and moving cracks in concrete such as slabs, beams, and columns.

### Areas of Application

- Sealing of structural cracks.
- Sealing of hairline & wider cracks
- Suitable for injection in to dry & damp concrete structures.

### Features & Benefits

- Consistency – Very low viscosity benefits in high fluidity & penetration.
- Setting – It sets faster than cementitious injection grout.
- Stability – After curing, it withstands high hydrostatic pressures.
- Curing – Cures in ambient temperature in air as well as in presence of damp substrate.
- Toughness & flexibility – After curing it provides strong bonding & slightly flexible resin.

### Method of Application

#### 1 SURFACE PREPARATION

- Blow the cracks and treated surface with oil free compressed air to ensure complete removal of all dust and loose particles.
- Identify the area to be injected. Install injection packers of suitable diameter and length. Ensure injection packers are tightly installed to avoid packer failure during injection process. If required, seal packers using quick setting Dr. Fixit Leak plug cement based putty.

#### 2 MIXING

- Empty components A and B, which are provided according to the required mixing ratio of 1:1 (parts by volume).
- Mix with electrical mixer having 300 rpm until a get homogenous mixture.
- Only mix sufficient resin that can be used within the application life of the mixed material.

#### 3 APPLICATION – INJECTION PROCEDURE

- Bestinject PU can be injected using single component injection pump.
- The injection pressure should be at least 4 to 5 bar depends on the nature of the building and the hydrostatic conditions. Injection pressures shall be governed by the type of element, effective water head, packer spacing and other factors.
- In case of crack injections, the injection procedure must be continued until the crack is filled completely and the resin can be seen emerging from the adjacent packers.
- The pot life of the material may be reduced due to the residual heat of the injection pump. As soon as the material in the hopper of the pump heats up it must be either used immediately or removed from the pump to prevent choking

#### 4 FINAL WORK

- After the curing process of the injection resin (approx. 24 hours after the injection), remove the packers and close the drill-holes with suitable mineral building materials (quick-binding cement, swelling mortar)

## 5 CLEANING

- Clean the equipment & tools thoroughly with Thinners at a time when work is interrupted for a longer period of time & immediately after use. The cured material can be softened by using Thinners & removed by scrapping / pressure.

## Precautions & Limitations:

- Do not allow the material to enter drains or soil in an unmixed state.
- Avoid large volume injections in short period.
- Ensure that all spalled layers of plasters from the area of the injection and all joints and defective brickwork are properly patched and levelled with suitable repair mortar.

| TECHNICAL INFORMATION | | |
|---|---|---|
| **PROPERTIES** | **SPECIFICATION** | **RESULTS** |
| Appearance & Colour | | Clear liquid OR Dark brown liquid |
| Density.gm/cc | ASTIM D 3800:79 | 0.97 to 1.14 ± 0.01 |
| Solids (%) | ASTM D 1010 | 100 |
| Viscosity at 25°C, Noise Cure properties (Tropical grade) | ASTM D 1638:74 | Mix(1:1):1.5 ± 0.5 poise |
| Temperature | 25°C | 35°C |
| Pot life | 45 min | 25 min |
| Reaction time | 105 min | 65 min |
| | | |

## Theoretical Coverage:

1 litre of Bestinject PU will fill the cavities of approximately 1 litre volume.

## Packaging:

5 Litters

## Storage:

Shelf life is 6 months from the date of manufacturing. If store at +5 to 30°C in original sealed container protected from moisture.

## Health & Safety:

- Provide adequate ventilation in working area.
- Wear protective clothing, safety shoes and gloves during the application of the material and when cleaning the equipment.
- Some people are sensitive to resins so gloves and a barrier cream should be used when handling all resins.

## Disclaimer:

The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product is often used under conditions beyond our control, we cannot guarantee anything but the quality of the product itself. We reserve the right to change the given data without notice.