

# TWO COMPONET POLYURATHANE RESIN FOR CRACK SEALING AND GROUTING

## Description

**Dr. Fixit PU Plain Injection** is highly reactive two component polyurethane for cracks in concrete or masonry and serves as horizontal water stop against capillary rising moisture in brickwork, stone work, etc.

**Dr. Fixit PU Plain Injection** has high penetration, quick setting and forms tough & flexible polyurethane rubber after complete chemical reaction. which reacts to create a flexible water-resistant sea.

## **Typical Application**

- Injection grouting of drinking water reservoir.
- Permanent stopping of high-volume water ingress in underground structures, water leakage in dams & hydel power, water channels etc. Sewers, manholes & utility boxes.
- Waste water & chemical effluent tanks.
- Hairline & wide cracks by injection grouting.

## Features and benefits

- Consistency Very low viscosity and highly penetration in fine cracks and cavities.
- Durability Provides structural strength and rigidity.
- Compatibility It is not compatible with water hence injection grouting is possible in presence of water in the substrate.
- Curing It cures in presence of water like dampness, leakages, moist surface.
- Bonding Bonds strongly to brick, stone & cementitious substrate in air & to wet surfaces.
- Non-toxic It is approved by CFTRI for drinking water contact..

### Method of Application

#### 1 MIXING

• Mix full quantity of Dr. Fixit PU plain injection with mixing ratio of 2:1 part by volume, ensure that the material is used withing the period of its working pot life.

#### 2 INJECTION PROCEDURE

- Dr. Fixit PU Plain Injection should be injected through mechanical NRV packers with standard single component injection pump having closed containers. The injection pressure should be at least 0.2 n/mm<sup>2</sup> (2 bar).
- The injection pressure depends on the nature of the structure and the hydrostatic conditions. 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.
- Only mix sufficient resin that can be used within the pot life of the materials.
- After completion of the injection work, the injection system shall be allowed to cure for 24 hours and shall be left undisturbed for this time.

Note: In case the secondary injection is carried out much later then it may be necessary to install new packers in different position.

#### 3 FINISHING

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

#### 4 CLEANING

• Clean the equipment & tools thoroughly on completion of injection with solvent (xylene or toluene) at any time when work is interrupted for a longer period & immediately after use. The cured material can be softened by holding solvent in machine/hose & removed by scrapping / pressure.

ŏ



## Precautions & Limitations

- Do not dilute Dr. Fixit PU Plain injection with water or solvent.
- If environmental condition is below 15°C so, ensure to condition minimum 3 hours Dr. Fixit PU Plain injection at more than 30°C
- Do not allow the material to enter drains or soil in an unmixed state.
- Materials should be stored in unexposed to direct sun light and moisture.
- Post completion of work, ensure to clean the equipment immediately with thinner or solvents.

# **Technical Information**

PROPERTIES	SPECIFICATION	RESULTS
Appearance		Base: Yellow liquid Hardener: Yellow to brown liquid
Density of mixed	ASTM S 1475	< 1.25 gm/cc
Viscosity of mixed	ASTM D 2196	< 400 cP
pH of Base	IS 9103	8±2
pH of Hardener	IS 9103	8 ± 2
Bond strength	ASTM C 882	>2.5 N/mm²
Shore A hardness	ASTM D 2240	≥50
Shore 00 hardness	ASTM D 2240	≥80
Elongation at break	ASTM D 412	>80%
Tensile strength	ASTM D 412	>1 MPa
Pull off adhesion strength - Dry concrete	ASTM D 7234	>2 N/mm <sup>2</sup>
Pull off adhesion strength - Wet concrete	ASTM D 7234	>1.5 N/mm²
Acute Toxicity by using Zebra Fish	IS 6582 (Part 2)	Non Toxic

\* Note: All technical properties are recorded at temperature 28°C±2°C

## Theoretical Coverage

Coverage varies depending on porosity of the substrates.

# Packaging

5 KG

# Shelf Life

Shelf life is 24 months from the date of manufacturing. Store in a cool & dry place in unopened condition.

# Health and Safety

- Provide adequate ventilation in volume & pattern in working area.
- Wear protective clothing, safety shoes and gloves during the application of the material and when cleaning the equipment.
- The use of a suitable skin care cream is recommended. In case of contact with skin wash with soap and water.
- In case of contact with eyes rinse immediately with good volumes of clean water and seek medical advice immediately. Safety Goggles are a must with this product.



## Other Products Categories available

Dr. Fixit brings you the widest range of Construction Chemicals





Pidilite Industries Limited Construction Chemicals Division Ramkrishna Mandir Road, Post Box No. 17411 Andheri (E) Mumbai 400059 INDIA Tel +91-22-2835 7000 · Fax +91-22-2835 7008 www.drfixit.co.in · info@drfixit.co.in

Dr. Fixit Advice Centre (Toll Free No.) 1800 209 5504

DISCLAIMER The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.