Dr. Fixit PU Plain Injection

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 SURFACE PREPARATION

- Prior to injection procedure, check the nature of building structure, type of cracks, hydrostatic conditions & water quality. Clean the cracks & crack edges so that the source of water leakage can be detected.
- Remove all spalled layers of plasters from the area of the injection level and patch all joints and defective brickwork with quick-drying cement mortar.

2 FIXING OF NOZZLES

- Drill holes into the crack approximately 40 to 50 degree angle towards the crack and ensure the drill diameter higher than the grouting packers up to the depth of at least 1/3rd of structural member.
- Insert injection packers into the drill holes at the intervals along the length of each crack. The nozzle should space to each other between 150 to 500mm intervals depending upon the crack width, depth and pressure of water. ensure while tightening the packers, make sure that the injection hose rests comfortably on the zerk or button head fittings

3 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.

4 INJECTION PROCEDURE

- Dr. Fixit PU Plain Injection should be used with standard injection equipment having closed containers. The injection pressure should be at least 0.2 n/mm2 (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.

5 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).

6 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.

Precautions & Limitations

- Do not dilute the material with any solvent
- Do not allow the material to enter drains or soil in an unmixed state.
- 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		Comp A: Yellow/Clear liquid Comp B: Pale Yellow/Dark Brown
Density	ASTM D 3800: 79	Comp A - 1.04 ± 0.02 Comp B - 1.22 ± 0.02
Mixed viscosity @30°C, B4 ford cup seconds (2:1 by volume)	ASTM D 1200 - A	20 - 80 250 to 600 cps
Pot Life Mixed, Minutes (2:1 by volume) at 20°C		Minimum 45 70 to 90min
Bond adhesion on concrete	ASTM D 7234	>1.5MPa
Shore A	ASTM D 2240-15	> 50 (60 to 80)
Elongation at Break	ASTM D 638	60 to 80 %

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

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