



MPSEAL I301pu

Flexible Low Viscosity Polyurethane Injection Resin 液態聚胺脂膨脹式注射劑 (俗稱三合土防水注射劑)

1.0 Description

MPSEAL-I301pu is single component polyurethane Injection Resin that reacts when it comes in contact with water and expands during curing to form flexible polyurethane foam. The system performs an immediate and effective barrier for water penetration through crack, joints and other leaks in all structure.

2.0 Technical Data

Base Polymer:	Hydrophilic Polyurethane Prepolymer Liquid		
Viscosity:	400(mPa.S.)		
Specific Gravity:	1.1 at 20° C		
Gel Time/Form/Ratio at Temperature :			<u>Foaming Ratio</u>
	10° C	60 Sec - Tacky Foam	3
	20° C	30 Sec - Highly Resistant foam	5
	30° C	20 Sec - Highly Resistant foam	6
Colour:	Brownish		
Storage Condition:	Unopened Pack and keep dry between 5° C - 23° C		
Shelf life:	6 month @23° C/50%/RH		

3.0 Typical Application

MPSEAL-I301pu can be injected directly into a leaking crack, fracture, joint to fill the void forming a tight, impermeable, elastomeric seal instantly stopping the water flow.

4.0 Application Details

Preparation

Step 1: Clean the surface

Clean away debris or old sealants and examine the crack to see where it goes. Then lay out the drilling pattern for the injection holes.

Step 2: Set injectors in drilled holes

Drill next to the crack at 45 degree angle to the surface (ref diagram overleaf). Aim the bit so that the hole hits the crack near the centre of the wall; this will make the depth of the hole about 1/2 the thickness of the concrete. (MPNozzel A903 should be used in conjunction with either a manual or mechanical injectors)

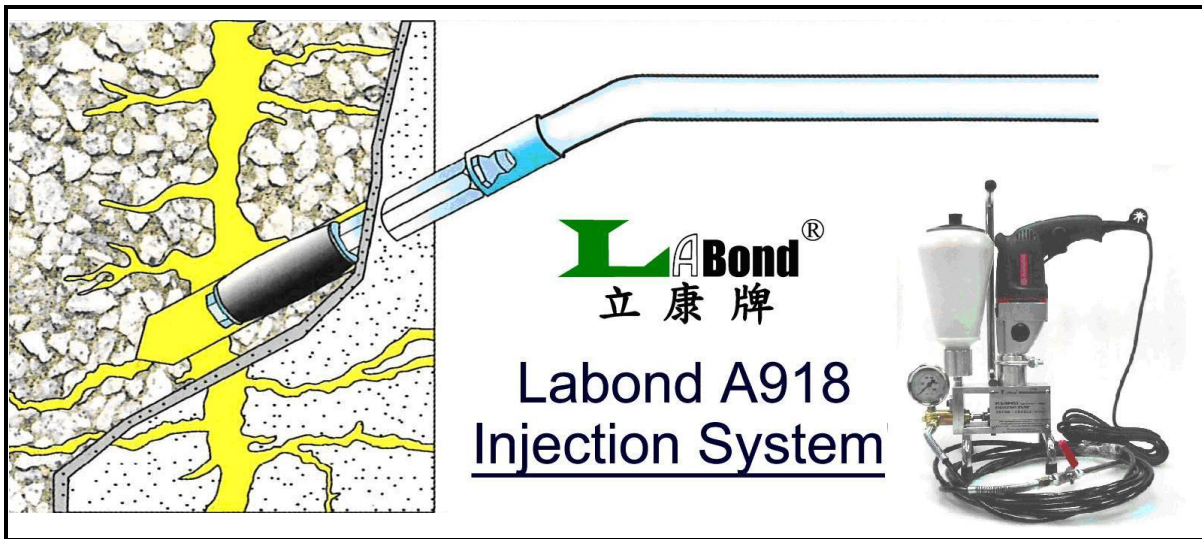
Step 3: Flush the crack

Start flushing at the lowest point on a vertical crack or at the narrowest end of a horizontal crack. As proceed from one injector to the next, flush water should flow from the crack face. If flush water does not flow into an injector, assume that the hole is blind. Remove the injector and plug the blind hole with quick-set cement.



5.0 Application Details

Job Diagram



6.0 Application

Load the pump with resin and charge the hose and gun.

Begin injection when ready. As grout begins to flow, observe the crack for resin escaping watch the hose for pulses dictating resin flow, and watch the gauge pressure in the crack.

Hold one hand on the grout house while pumping to feel how material is flowing. If resin flows out of the crack, stop for a few minutes. Resin will usually react with the flush water and provide a seal. In a few minutes, start to pump again. If too much resin still flows out of the crack, cover the crack surface with quick-set cement, allow it to set and pump again. Resin may still leak from pinholes in the cement, but most will be contained. A little leakage is relevant to shows the extent of resin travels.

Under normal conditions, water should be firstly displaced from the crack, by the resin, follow by foamy resin. Soon after that, pure resin will flow from the crack. Stop pumping when pure resin flows from the crack injector; move up, and begin pumping again. Continue from one injector to the next until the crack is completely filled.

7.0 Health and Safety

When handling the raw material and components, care should be taken to prevent the liquids from coming into contact with skin and the eyes. Avoid inhalation of their vapours.

8.0 Packaging

5kg/Drum, 25kg/Drum