



CL – PUJET

POLYURETHANE INJECTION RESIN

DESCRIPTION

CL-PUJet is a polyurethane injection resin designed to stop water leakage. It is injected into cracks in concrete, honeycombed concrete, soils, pipes and other voids by using high pressure pump. When the liquid polyurethane comes in contact with water or moisture, it will react and expand thereby creating a dense, closed cell foam that water cannot pass through. In an unconfined environment, the expansion rate is 20 times.

CL-PUJet comes in two forms: -

- **CL-PUJet Rigid** – formulated based on hydrophobic polyurethane, which on reacting with water, forms a rigid closed cell foam.
- **CL-PUJet Flex** – formulated based on MDI isocyanate, which on reacting with water, forms a flexible closed cell foam.

CL-PUJet Accelerator is the catalyst, to be introduced for CL-PUJet Rigid where appropriate to accelerate the reacting process.

USES

Typically used to stop water leaks through cracks or honeycombed concrete voids between wall and floor, wall and ceiling, expansion joints, clod joints and pipe intrusions. It is also used to repair concrete walls, ceiling, floors that are leaking as well as in tunnels including limestone, manholes, sewer lines and in concrete dams.

FEATURES

- Able to seal water leaked cracks in building and other structures
- Can be applied using suitable high or low pressure injection packers.
- Low viscosity that gives good injection properties

TECHNICAL INFORMATION

Properties	Rigid	Flex
Viscosity, cps @25°C	~ 85	~ 120
Density @25°C	1.13	1.1
Flash point, °C	~ 210	>210
Elongation after cured, %	N/A	~ 40
Cream Time, sec	~ 50	
Rise Time, sec	~ 110	

DIRECTION FOR USE

(1) Preparation

When repairing cracked concrete, drill 16mm diameter holes at 45 degree angle in order to intercept the crack at approximately half of its depth. However, in extremely thick concrete interception hole, usually need not be more than 300mm depth. Thereafter, insert and tighten the 16mm (OD) injection ports (packers).

(B) Application

Mix at the ratio of 25 parts liquid CL-PUJet Rigid with 0.6 part accelerator. The amount of accelerator may be adjusted as needed based on job site conditions. However, no accelerator is needed for CL-PUJet Flex and it can be used directly.

Apply CL-PUJet by injection method through the injection port. After the initial pumping of all ports, re-pump more material into each holes. This may need to be repeated for third times so as to ensure that all the cracks are being sealed.

For visual water leakage area, the completion of injection can be determined as water infiltration stopping. For dry cracks area, water may need to be introduced through the drilled holes by using a water gun to accelerate the reaction of the polyurethane. However, there will be enough moisture in the concrete to cause a full cure eventually.

PRECAUTION

The injection method would exert outward pressure of 5psi, and can lift up a concrete floor. Relief holes should be drilled at appropriate intervals to prevent this to happen.

STORAGE

CL-PUJet must be stored in air tight containers. Contact with atmospheric moisture can cause a reaction, which resulted in an increase of viscosity and gelling. Storage at high temperature also will increase the viscosity. Therefore, it is advisable to store in cool, dry place. However, it may form crystallization when temperature falls below 0°C.

SHELF LIFE

When stored in cool and dry place, sealed in unopened container, the shelf life is 6 months.

PACKING

CL-PUJet Flex : Available in 20 kg per pail.

CL-PUJet Rigid : Available in 25 kg per pail.

CL-PUJet Accelerator : Available in 1 litre per bottle.



Drilling hole into the substrate that has water leakage



CL-PUJet is pumping into the hole via packer

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Disclaimer: Specification are subject to change without notification.