



MVX Hydro PU Grout is a single-component, pre-catalysed, hydrophobic, closed-cell polyurethane system specifically formulated for injection of joints or repairing leaks in concrete structures.

In contact with water, it rapidly expands and transforms into a semi-rigid polyurethane foam. An impressive compression strength is obtained in a brief period.

## TECHNICAL DATA

Properties	Test Method	Typical Value
Adhesion by Slant Shear Strength	BS EN 12618-3: 2004	≈ 2.15 N/mm <sup>2</sup>
Compression Strength (Plastics)	ASTM D1621: 2016 (R2023)	≈ 0.08 N/mm <sup>2</sup>
Dynamic Viscosity	ASTM D445: 2021E2	≈ 360.0 mPa.s



**Excellent  
Chemical  
Resistance**



**High  
Tensile  
Strength**



**Seals  
Water  
Seepage**



**Non  
Flammable  
Solution**

## AREA OF USE

- Basement / Water retaining structures with hydrostatic pressure
- Concrete and masonry structures
- Skin wall, CBP/SBP wall and diaphragm wall
- Underground tunnel

## ➤ Packaging

20kg Jerry Can

## ➤ Shelf Life & Storage

12 months in unopened condition. Store in a cool-dry covered place and avoid direct exposure to sunlight. Opened pails should be finished as soon as possible.

Keep container sealed whilst not being used. Moisture may be absorbed from the atmosphere causing MVX Hydro PU Grout to react.

## ➤ Preparation

Ensure the surface is free of any laitance, dirt, oil, wax or debris and establish the pattern of leakage.

## ➤ Application

Drill injection ports diagonally along the leak path, maintaining a distance of approximately 150 - 200mm c.c. between ports. The depth of the drilled holes should be about one-third to half the thickness of the concrete structure.

Insert MVX Injection Packers into the drilled ports, ensuring that 2/3 of the packer length is tightly inserted. Gradually inject MVX Hydro PU Grout into the packer using a high-pressure, single-component injection pump.

Conduct the pumping process slowly and progressively until the desired pressure is achieved, with no significant drop in pressure reading. Visually confirm a continuous flow of chemical from packer to packer. Once MVX Hydro PU Grout is observed travelling/seeping along the leak path, move on to the next packer to ensure complete injection along the entire leak path.

After injecting several packers, it is highly recommended to return to the first packer and perform a second pass for compaction. For vertical grouting, initiate from the bottom packer and work upwards.

Let grouted packers sit for 24 hours before removing, then patch up with non-shrink grout or waterplug.

To treat fast-flowing water, use MVX Hydro PU Grout with a foaming accelerator at a dosage rate between 10% to 30% by weight.

## ➤ Cleaning

All tools and equipment must be cleaned immediately with suitable cleaning solution within 30 minutes. Hardened material can only be removed by mechanical means.