

---

# Waterbased Injection Polyurethane Grouting and Plugging Liquid

Sinomaco water based polyurethane grouting and plugging liquid or injection pu liquid material is a new type of chemical grouting and plugging anti seepage and crack fixing material with isocyanate groups at the end formed by the reaction of hydrophilic polyether polyol and isocyanate. It is widely used in urban building basements, subways, tunnels, hydroelectric dams, oil and coal mining projects, to strengthen and strengthen, prevent seepage and water blocking, especially for blocking water and water gushing projects.

## Product Feature

1. The product reacts quickly after encountering water, and at the same time it produces CO<sub>2</sub> gas, and gradually forms an impermeable consolidated body, so it can block strong water gushing and flowing water in the foundation.
2. With the help of the CO<sub>2</sub> gas generated by the reaction of the slurry in water, the slurry can be further pressed into the pores of the loose formation with the help of the pressure, so that the porous structure can be fully filled and compacted. Such as the pores of cement concrete.
3. The slurry is hydrophilic, and water is both a diluent and a curing agent. In a water-bearing formation, it has a large penetration radius, a large amount of water, good pourability, and strong foundation adhesion.

## Scope of Application

1. Waterproof plugging of deformation joints, construction joints and structural joints of buildings and underground concrete works.
2. Waterproof plugging and reinforcement of inner walls of tunnels excavated in subway and tunnel engineering, as well as reinforcement and stability of railway subgrades.
3. Anti-seepage and plugging of dam foundation cracks in hydropower and water conservancy projects.

## Construction method

1. The slurry can be high-pressure grouting or manual grouting, But the effect of high-pressure grouting is highly recommended.
2. Carefully check the leaking part, find the leaking point, and remove the dirt around the crack.
3. Drill holes on both sides of the leakage cracks with a spacing of 200-500mm. The leakage points can be denser, and the depth is generally more than 1/2 of the concrete.
4. Embed needles of suitable length in the hole, and then tighten the needles one by one to allow the rubber parts to expand and lock the wall body until the hand does not shake.
5. Inject grouting into the needle one by one from bottom to top to control the pressure, which is generally greater than the groundwater pressure and lower than the pressure of the concrete. When

---

you see pure grout from the adjacent cracks, replace with another needle to continue grouting.

6. After grouting, use a small hammer to gently knock out the needle protruding from the concrete to level the lower cement.

7. It is used to apply cement to wet parts in the past, and if there is any remaining leakage, further grouting is required to achieve a never wet situation.

#### Technical Data Sheet

S/N	Item	Value
1	Appearance	Light yellow to transparent liquid
2	Viscosity(23°C±2°C)	0.2-0.8pa.s
3	Water retention rate	≥ 1500 times
4	Expansion rate	200-400
5	Density	1.0-1.15
6	Curing time	10-1200s

Product link : <https://www.sinomaco.com/?p=1255>