

k-Proof Inject PU

High Performance Polyurethane Injection Grout

DESCRIPTION

k-Proof Inject PU is a single component multi-purpose polyurethane injection resin used to seal leaking cracks, failed joints and to fill voids or fractures in concrete structures forming a closed cell flexible barrier. The single component system utilizes an accelerator to adjust the reaction profile as needed for job site conditions in certain severe cases.

TYPICAL USES

- Basements and Substructures
- Sewer lines and manholes
- Concrete dams
- Water concrete structures
- Tunnels
- Cracks and honeycombed concrete
- Voids between wall and floor
- Expansion joints & Cold joints

ADVANTAGES

- Set material is nontoxic / Approved by USDA. Extremely durable and environmental friendly
- Reacts rapidly with water
- Forms a flexible waterstop
- Expands with an outward pressure sealing smallest cracks
- Adheres tenaciously to practically all wet or dry substrates
- Does not shrink after total drying
- Permanent seal for cracks
- Expand up to 20 times its original size

TECHNICAL DATA

PROPERTY	TEST METHOD	VALUE
Density (Core)	ASTM D 1622	Free Rise 2.02 LB/ ft ³ Confined 4.04 LB/ft ³
Shrinkage	ASTM D 2126	1 day < 0%
		7 days < 0%
Water Absorption (Volume Confined)	ASTM D 2127	Less than 1.0 %

PROPERTY	TEST METHOD	VALUE
Shear Strength	ASTM D 2127	17.10 Psi
Tensile Strength	ASTM D 1623	29.30 Psi
Chemical Resistance		Resistance to most common chemicals
Viscosity	ASTM D 2196	@500 cps
Elongation	ASTM D 1623	44%
Specific Gravity	ASTM D 1475	1.15
Percentage Solid		100%
Flashpoint (closed cup)		200°F (93.3°C)
Color		Amber
Pot Life	ASTM D2471	15 min (30 °C)

APPLICATION

REPAIRING LEAKING CRACKED CONCRETE:

SURFACE PREPARATION

Remove all loose particles, dust traces of oil, paints dirt from surface of leaking cracks.

DRILLING INJECTING HOLES

- Locate rebar and conduit in concrete
- Drill a 0.8- 1.5 cm hole (depend on crack size) at a 45-degree angel every 40cm distance away from the crack to approximately one half the thickness of the concrete.
- Install the correct size packer into the drilled holes.
 - 1.0 - 1.5 cm packers with a male zero fitting and check value, with approx. 5.0-6.0 cm in length.
- Estimate the quantity of **k-Proof Inject PU** and pour it into a clean open top bucket.
- Mix it slowly for 3 minutes with catalyst at a ratio of 1.5 % by volume.

CONCRETE ADMIXTURES

- **k-Proof Inject PU** is being activated start putting it in the pump to start injection, after flushing the pump with solvent never flush the pump with water.
- At least 250 psi or use hand grease injecting pumps for small quantities.
- Stop injection when the grout is coming out of the crack
- Allow **k-Proof Inject PU** to cure then clean all material protruding out of the crack surface.

COVERAGE

It depends on the volume of the crack, as a general estimation 0.5 kg-1.0 kg for every 1-meter-long crack.

PACKAGING

20 liter- with accelerator (500 ml)

STORAGE AND SHELF LIFE

To maintain a shelf life of 12 months **k-Proof Inject PU** should be stored in non- humid shaded areas in 12°C to 48°C.

HEALTH AND SAFETY

- Any splashes on skin should be washed with water
- Seek medical assistance in case of contact with eyes after washing it with running water
- Ensure good ventilation and do not smoke during use

Refer to relevant MSDS for additional information.