

PU WATERSTOP 1.PT

SINGLE COMPONENT HIGH PERFORMANCE CLOSED-CELL GROUT

DESCRIPTION

A single component low viscosity hydrophobic polyurethane grouting material. When comes in contact with water, the grout expands quickly and cures to form a tough, rigid, closed-cell polyurethane foam that is generally unaffected by corrosive environments. This closed-cell polyurethane foam is designed for cutting off water leaks with high flow rate and/or high pressure. It may also be used to fill large voids such as rock fissures, crushed faults, gravel layers, joints cracks and honeycombs in concrete that are not subject to settlement or movement.

USES

- Civil Engineering Construction etc
- For Soil stabilization and anchoring in gravel etc
- Blocking of water seepage in diaphragm wall and piled wall etc
- Screen injection behind porous structures when high velocity water streams are present.

ADVANTAGES

- New generation resin with improved waterproofing properties.
- Forms a tough durable, high-strength closed cell foam in cracks or joints.
- One component, simple to use.
- Resistant to organic solvents, acids, alkali and micro-organisms

SUBSTRATE PREPARATION

Remove surface contaminants and debris to establish the pattern of the crack or joint. Large active leaking cracks more than 3 mm need to be sealed prior application.

Drill holes of the correct diameter for the selected packer. **Drill at an angle of 45°**. Preferably the holes should be drilled staggered around the crack to insure good coverage of the crack in case it is not perpendicular to the concrete surface. The depth of the bore should be approximately half of the thickness of the concrete. The recommended distance of the drill point from the crack is half the wall thickness.

Distance between holes can vary by **150 to 1000mm**, depending on the actual situation. Insert the correct sized packer into the hole up to 2/3 of its length. Tighten with a wrench or spanner by turning clockwise until sufficient tension has been reached to keep the packer in place during injection.

Flush the crack with water before injecting with resin. This will flush out dust, debris and prime the crack for the injection resin and improve penetration of the product into the crack. Water in the crack will activate the resin

TECHNICAL DATA

Properties:	Typical Value
Density (g/ cm³)	≥ 1.05
Viscosity (mPa.s)	≤ 200
Solidification time (s)	≤ 800
Non-volatile content(%)	≥ 78
Swelling capacity(%)	≥1000
Compressive strength (Mpa)	≥ 6
Slant shear bond strength (Mpa)	≥ 9.0
Shrinkage(%)	0.0

Specifications are subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation and site conditions.







PU WATERSTOP 1. PT

APPLICATION

Prepare the resin with the predetermined amount required. No reaction with the resin will occur until the resin comes into contact with water. Protect the resin from water, since this will trigger a reaction in the container used and might cause the resin to harden or foam prematurely within the injection equipment.

It is highly recommended to use separate pumps for the water and the resin injection to prevent cross contamination and blockages.

The pumps should be thoroughly primed with washing agent to lubricate and dry the system before injection. We recommend the use of pneumatic or electric one component pumps.

During the injection, water will first flow from the crack, followed by foaming resin. After this, pure resin will flow from the crack.

Stop pumping when the pure resin reaches the next packer. Move to the next packer and repeat the procedure. After injecting through a few of the packers, go back to the first one and re-inject with resin. After the resin injection, water can be re-injected into the ports to cure resin left behind. Let the resin cure thoroughly before removing packers. The resulting holes can be filled with hydraulic cement.

When the injection is finished, clean all tools 1 and equipment which have been in contact with the resin with washing agent. This should be done within 30 minutes. Do not use solvents or other cleaning products since they give less positive results and can create hazardous situations. Products should be disposed off according to local legislation.

PACKAGING

20 kg pail

SHELF LIFE

Shelf life up to 12 months in unopened containers. When stored in a cool place.

PU Waterstop 1.PT is sensitive to moisture and should be stored in original containers in a dry area. Storage temperature must be between 5°C and 35°C. Once the packaging has been opened, the useful life of the material is greatly reduced and should be used as soon as possible.

HEALTH & SAFETY

Protective gloves and goggles should be used when handling this product. In cases of eyes splashes on excessive skin contact, thoroughly flush with water. If any ill effects should occur, seek medical attention promptly. Refer to safety data sheet.

Disclaimer

The use of this product is beyond the manufacturer's control and liability is restricted to the replacement of material proven faulty. The manufacturer is not responsible for any loss or damage arising from incorrect usage. Specifications are subjected to changes without prior notice. Before application, customers and users are requested to check that they have the latest version of this document from our website www.sika.com.sg

Sika (Singapore) Pte Ltd.

28 Tuas South Avenue 8 Singapore 637648 Tel: [65] 6861 0632 • Fax: [65] 6862 1172

Email: sales@sg.sika.com Website: www.sika.com.sg Online Store: davco-online.com.sg







Certificate SG95/06111



Certificate SG09/50075







