

IPAPUR

One-component, low-viscosity polyurethane foam injection resin Foaming injection resin for sealing cracks and cavities with water ingress

Material Description:

Highly reactive modified one-component polyisocyanate - prepolymer that cures to a solid, elastic polyurethane foam when water is added. IPAPUR is a solvent-free, brown liquid.

Areas of application:

IPAPUR is used as an injection and grouting material, especially for sealing water-bearing cracks in structural and civil engineering, e.g. water ingress, in civil engineering, for displacing water in water-bearing cracks and cavities.

Features:

IPAPUR as a 1-component product has the following advantages over the common 2-component based waterproofing resins:

- " 1. Due to a prolonged curing time, the material flows slowly into cavities and thus has an optimum water displacing effect.
- "2. contact with moisture from the environment leads to subsequent curing. The reaction is still very fast even at temperatures around 0°C. The semi-hard foam adheres firmly to the substrate and is still flexible at temperatures of -20°C. The cured IPAPUR is resistant to acids and alkalis and does not attack bitumen, joint tapes or concrete.

TECHNICAL DATA

Viscosity at 23°C mPas	300
Density at 20°C g/cm ³	1,2
Flash point °C	> 200
Volume increase*	10 - 20 tray

*The values are valid for room temperature after good mixing with approx. 5 % water, with free expansion of the material. Foam quantity and properties depend on the water quantity and its distribution in the IPAPUR.

SETTINGS

	fast	normal
Start time s	6	approx. 30
Climb time min	2	approx. 4
Setting time (tack-free) min	5	approx. 10

FOAMING INJECTION RESIN FOR SEALING CRACKS AND CAVITIES WITH WATER INGRESS

Sealing cracks/fissures under pressurized water loads and water intrusion:

"Determine and mark the course of the crack. Alternate drilling of the crack by means of 12 mm drill holes, oblique to the crack (approx. 45°), at a distance of 15-20 cm (depending on the crack width), the drill hole should penetrate the crack in the middle of the wall.

"Dam cracks over 0.5 mm wide. This is done with PL® mortar.

"Mounting and clamping of the 12 mm screw packers.

"After the insulation has cured, screw the non-return nipple onto the lowest valve and start pressing.

"First, the foaming Pu resin IPAPUR, which reacts to water, is injected by means of a high-pressure injection device.

"After foaming, a post-injection with an injection resin must be carried out within 45 min through the same valves or packers to close the open pore structure of the PU foam.

"After curing, remove packer if necessary and close remaining drill holes with PL® mortar.

To note:

Although the material has a sufficiently long processing time after mixing, a solid skin may form on the surface due to the influence of atmospheric moisture. After this layer has been penetrated, however, the mixture can be processed without any reduction in quality. Cleaning of the tools and equipment is carried out with the PL® Cleaner

Safety advice:

The prescribed protective measures of the chemical trade association must be observed. Work with gloves and protective goggles. Avoid skin contact with the product. For better protection of the hands, apply a skin protection cream. If material splashes on the skin or in the eye, rinse immediately with plenty of water and then consult a doctor immediately. Please observe the hazard statements and safety advice on the safety data sheets and the product labels. GISCODE: PU40

Status: 01/18

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