

AQUAFIN®-P1

Art.-No. 2 05090

PU-injection resin for water-bearing cracks

- single component highly reactive polyurethane resin
- with integrated catalyst
- ready to use
- very high foam volume on water influx
- rapid, visco-plastic and solid foam formation
- for the temporary sealing of cracks, with penetrating water
- resistant to a range of acids and alkalis
- compatible with bitumen

Areas of application:

AQUAFIN-P1 is used for injecting water-bearing cracks and joints in concrete and stonework.

AQUAFIN-P1 is used to:

- Stop water influx from cracks, joints and similar
- Consolidate loose stonework

AQUAFIN-P1 fulfills the requirements of the DiBt data sheet from Nov. 2000, "Assessment of the effects of construction products on concrete and ground water".

Technical Data:

Basis:	Water reactive one component polyurethane resin (with integral catalyst)
Colour:	brown
Viscosity at +5 °C:	approx. 2900 ± 300 mPa.s
Viscosity at +10 °C:	approx. 2100 ± 200 mPa.s
Viscosity at +15 °C:	approx. 1200 ± 100 mPa.s
Viscosity at +25 °C:	approx. 425 ± 75 mPa.s
Density*:	approx. 1.150 ± 40 g/cm ³ at +25 °C
Minimum reaction temp:	> +5 °C
Recommended application temperature:	+15 °C to +30 °C

Reaction time **:

Start time at +5 °C:	approx. 27 sec.
Start time at +10 °C:	approx. 26 sec.
Start time at +15 °C:	approx. 24 sec.
Start time at +20 °C:	approx. 22 sec.
Start time at +25 °C:	approx. 20 sec.
Foamed up at +5 °C:	approx. 4 min. 20 sec.
Foamed up at +10 °C:	approx. 3 min. 20 sec.
Foamed up at +15 °C:	approx. 2 min. 50 sec.
Foamed up at +20 °C:	approx. 2 min. 20 sec.
Foamed up at +25 °C:	approx. 2 min. 00 sec.

Note: The reaction times were determined by adding 10% water.

*) At +23 °C and 50% relative humidity

***) The determination of the reaction time is carried out through the addition of 10% water, foaming factor at the listed temperatures approx. 30-50. With free foaming: the reaction times, quantity of foam and the properties of the foam are dependent on the water quantity, the surface of the edge of the crack or rock, their distribution in AQUAFIN-P1, pressure and other factors.

Cleaning:	Clean tools thoroughly after use with ASO-R001. At the end of work or where there are lengthy interruptions in work, clean the injection equipment. Do not allow material residues to dry in the machinery and harden. Any cleaning agent or solvent must have a flash point above +21 °C. Please follow the guidelines from the machine manufacturer.
Packaging:	1.1 and 5.5 kg AQUAFIN-P1 is ready to use with no need to mix.
Storage:	Frost free, cool and dry ≥ +10 °C to +25 °C, 24 month, in the original unopened packaging. Use opened packagings promptly.

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Substrate preparation:

Appropriate to the particular substrate, the following criteria are also to be fulfilled:

- Concrete quality: min. C20/25
Tensile adhesion strength: $\geq 1.5 \text{ N/mm}^2$
Age: min. 28 days
- Screed quality: min. EN13813 CT-C35-F5
Tensile adhesion strength: $\geq 1.5 \text{ N/mm}^2$
- Render quality: P III
Tensile adhesion strength: approx. 0.8 N/mm^2

Product preparation:

AQUAFIN-P1 reacts with the moisture in the air and with water. For this reason a skin may form with opened containers but this does not affect the injection.

AQUAFIN-P1 is usually injected through packers and either hand or motor driven pumps into the water-bearing area. On contact with water AQUAFIN-P1 foams extensively and hardens.

If there is too little water in the area to be waterproofed, then the reaction and hardening processes can be supported by either pre-injecting or post-injecting with water.

We recommend, prior to application, that the product is stored for at least 12 hours at a minimum temperature of $+15 \text{ }^\circ\text{C}$ in order to ensure that the recommended application temperature of $+15 \text{ }^\circ\text{C}$ to $+30 \text{ }^\circ\text{C}$ is achieved.

Method of application / consumption:

- Drill into the existing cracks (crack width approx. 0.2 mm) at approx. 20 cm intervals.
- Clean the boreholes of drilling dust using oil-free compressed air.
- Place the injection packers.
- Inject AQUAFIN-P1 with appropriate injection equipment.
Consumption: approx. 1,150 g/l.

- Once the injection resin has cured, remove the injection packers, as necessary and close off the bore holes with ASOCRET-M30 and level off with the concrete surface.

For application with suitable injection equipment, we recommend contacting HTG HIGH TECH Germany GmbH in Berlin, www.hightechspray.de.

Important advice:

- Protect areas which are not to be treated against the influences of AQUAFIN-P1.
- The given consumption rates are calculated values without addition for surface roughness and absorption, levelling and residual material in the packaging. We recommend adding a calculated safety factor of 10 % to the consumption rates.
- Applications, which are not clearly mentioned in this technical data sheet, may only be carried out following consultation with and written confirmation from SCHOMBURG Technical Services.
- Cured product can be disposed of under waste code AW 150106.

Please observe a valid EU Health & Safety data sheet.

GISCODE: RU40