

VELOSIT® IR 601

Water Activated Hydrophobic Polyurethane Injection Grout



Application fields

VELOSIT IR 601 is a two component semi rigid hydrophobic water activated injection grout based on MDI chemistry. It is mixed with the Accelerator VELOSIT at 3 % to 20 % to control reaction time of the grout.

Typical application fields are as follows:

- Stopping active water leaks in cracks and joints
- Filling of large voids
- Waterproofing pipe penetrations
- Curtain Wall applications
- Suitable for both Potable and Waste Water

Properties

When VELOSIT IR 601 comes in contact with water it forms a semi rigid foam that expands to unto 30 times of its original volume. Since VELOSIT IR 601 is hydrophobic, it does not use water to form its cell structure. This results in a cured foam that will not shrink or swell and will not be affected if the treated area becomes dry.

VELOSIT IR 601 is mixed with the Accelerator VELOSIT at varying amounts to achieve the desired reaction and set time. Depending on the amount added and the pressure at which the resin is injected, the resultant foam may vary from closed cell to slightly open cell. Due to the low viscosity of the resin, it has the ability to penetrate under pressure and fill hairline cracks, voids, and unconsolidated areas in concrete, shotcrete and stone. It can also act as a high strength soil stabilization grout. The VELOSIT IR 601 can be and is often used in conjunction with other products in the VELOSIT IR line.

- Applied as an one component system with single component pumps
- Fast foaming
- 2 component (resin + catalyst)
- Closed cells
- Variable reaction time
- 3000% expansion in case of free foaming
- Hard elastic
- Phtalate-free
- Reacts with water
- No shrinking after curing
- Low viscosity

Application

VELOSIT IR 601 and the Accelerator VELOSIT are packaged separately to allow for adjustment of the reaction time. The Accelerator VELOSIT must be added to ensure that the resin reacts. Because the accelerator can be added across a wide range, VELOSIT IR 601 becomes a very versatile injection grout that can be used in a variety of applications. The reactive properties, gel times, and expansion rates can be adjusted. For waterproofing applications, an addition of 3 % – 10 % of the Accelerator VELOSIT is recommended. In instances of very high active water flow or low temperatures, the addition of the accelerator is increased to up to 20 %. For conditions that require longer open time so the resin can travel a distance before expanding (hairline cracks etc.), a 5 % addition is used. Temperature and humidity greatly influence the gel times of the product. Do not mix more material than can be pumped in a reasonable period of time.

Ensure that all equipment including mixing paddles, pails, pumps and hoses are dry. If product begins to foam or the viscosity of the mixed resin increases, cease pumping and begin to clean the system out.

Cleaning

VELOSIT IR 601 can be cleaned in the fresh state with Acetone. Once it has cured mechanical removal is necessary.

Quality features

Color:	Amber
Solids:	100 %
Mix Ratio by weight:	10:1 Accelerator VELOSIT IR 601
Density:	1.15 g/ml
Viscosity:	130 mPas
Reaction Time 15 °C/60 F:	11 sec (10 % Accelerator VELOSIT IR 601)

Properties of Cured Resin

Expansion %:	3000 %
Elongation %:	10 – 20 % ASTM D 638
Shrinkage %:	< 4 % ASTM D 1042
Appearance:	Yellowish Foam

Packaging

VELOSIT IR 601 is available in 10 kg metal jugs, the Accelerator VELOSIT IR 601 is available in 1 kg metal tins.

Storage

VELOSIT IR 601 can be stored in unopened original packs for 12 months at 5 – 25 °C (40 – 77 °F) in a dry storage place protected against sunlight.

Safety

Please observe the actual valid material safety data sheet and follow the described safety measures for handling of the product.

Recommendations

VELOSIT IR 601 is only available for professional applicators. All described product features are determined under controlled laboratory conditions according to the relevant international standards. Values determined under job site conditions may deviate from the stated values.

Please always use the latest version of this data sheet available from our website www.velosit.de

Manufacturer

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