VELOSIT® IR 605

Low Viscosity Flexible Polyurethane Injection Grout

Application fields

VELOSIT IR 605 is a two component flexible hydrophobic phthalate free injection grout based on MDI chemistry.
Typical application fields are as follows:

- Damp or Dry Cracks
- Hairline Cracks
- Sealing of Construction Joints
- Waterproofing pipe penetrations
- Tunnels, Dams Bridges
- Waste Water Tanks

Properties

When VELOSIT IR 605 comes in contact with water it forms a flexible foam resin under pressure. This results in a cured resin that will not shrink or swell and will not be affected if the treated area becomes dry.

VELOSIT IR 605 can also be used to seal dry cracks as it does not need water to cure. When water is not present and the resin is injected under pressure, it will form a flexible solid body gel that undergoes little to no foaming. If water is present, the product will foam and stop any active water leaks. A dual injection is usually done with the VELOSIT IR 605. First, the leaking crack or joint is injected and the VELOSIT IR 605 will foam and stop the active leak. After 15 minutes, the area is injected again with VELOSIT IR 605. The VELOSIT IR 605 will then fill in around the foam creating a secondary seal in the form of a solid body resin, making the area watertight. 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, masonry, shotcrete and stone.

- Applied as an one component system with single component pumps
- Fast foaming in contact with water
- 2 component (resin + hardener)
- Stops water flow
- Closed cells
- Variable reaction time
- 1:1 mixing ratio
- Elastic
- Phtalate-free
- For injection of injection hose systems
- Alkaline stable
- Non corrosive
- Low viscosity

Application

VELOSIT IR 605 is a two component product supplied with equal amounts of both A and B. The mix ratio is 1:1 by volume. VELOSIT IR 605 is generally mixed and pumped through a single component pump. Be sure to observe the temperature and humidity of the environment since both will affect the pot life. Do not mix more material than can be pumped within the pot life window.
VELOSIT IR 605 can also be pumped through suitable 1:1 plural component injection equipment.

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

Quality features

	Comp A:	Comp B:
Color:	Transparent	Brown
Solids:	100 %	100 %
Mix Ratio by volume:	1 Part	1 Part
Density:	1.06 g/ml	
Viscosity:	170 mPas	
Induction Time, 20 °C:	50 sec	
Pot life:	40 min.	

Properties of Cured Resin

Elongation %:	17 % ASTM D 638
Shore A hardness:	30
Glass transition temp:	- 23 °C

Packaging

VELOSIT IR 605 Comp. A is available in 5 kg pails and VELOSIT IR 605 Comp. B is available in 5 kg pails.

Storage

VELOSIT IR 605 can be stored in unopened original packs for 12 months at 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 605 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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