

VELOSIT® IR 602

Low Viscosity Flexible Hybrid Polyurethane Injection Grout

Application fields

VELOSIT IR 602 is a two component Flexible hydrophobic injection grout based on MDI chemistry. It is 100% solids and solvent free.

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 602 comes in contact with water it forms a flexible gel resin under pressure. Since VELOSIT IR 602 is hydrophobic, it does not use water to form its cell structure. 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 602 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 602. First, the leaking crack or joint is injected and the VELOSIT IR 602 will foam and stop the active leak. After 15 minutes, the area is injected again with VELOSIT IR 602. The VELOSIT IR 602 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.

Application

VELOSIT IR 602 is a two component product supplied with equal amounts of both A and B. The mix ratio is 1:1 by volume. The VELOSIT IR 602 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. The VELOSIT IR 602 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 602 can be cleaned in the fresh state with Acetone. Once it has cured mechanical removal is necessary.

Quality features

	Comp A:	Comp B:
Color:	Amber	Brown
Solids:	100%.	100%
Mix Ratio by volume:	1 Part	1 Part
Density:	1.02 g/ml	1.14 g/ml
Flash Point:	313°F	356°F
Viscosity:	60-70 cps	80-90 cps
Reaction		

Induction Time 68°F/20°C:	30 sec (10% IR 610)
Gel Time 68°F/20°C:	70 sec (10% IR 610)
Induction Time 68°F/20°C:	15 sec (15% IR 610)
Gel Time 68°F/20°C:	50 sec (15% IR 610)

Properties of Cured Resin

Expansion %:	30-40%
Elongation %:	>100% ASTM D 638
Tensile Strength:	260 psi ASTM D 638
Adhesion Strength:	>260 psi
Concrete	
Appearance:	Brown
Chemical Resistance:	Organic solvents, Alkalis, Microorganisms

Packaging

VELOSIT IR 602 A is available in 5 Gallons
VELOSIT IR 602 B is available in 5 Gallons

Storage

VELOSIT IR 602 can be stored in unopened original packs for 12 months at 40-95°F (5-35°C) 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 602 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. Velosit USA LLC warrants this product for a period of 1 year from the date of installation to be manufactured without defects and to be consistent with printed technical characteristics. Velosit USA LLC makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties expressed or implied.

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

Manufacturer

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