High viscosity ultra rapid setting, two-component polyurethane resin to be injected for the consolidating and waterproofing of structures subject to strong water ingress

WHERE TO USE

- Waterproofing rock or lose ground diggings, dams, shafts or tunnels where there is strong water ingress.
- Waterproofing bulkheads even when subject to constant water pressure.

Some application examples

- Waterproofing tunnels subject to high pressure water ingress through possible cracks or in fissures between keystones.
- Waterproofing shafts or hydraulic structures that have high pressure water ingress through working joints or cracks.
- Repairing cracks in dams, channels and bulkheads when permanently immersed in water.
- Sealing cracks in floorings or slabs that are damp or saturated with water.

TECHNICAL CHARACTERISTICS

Foamjet T is a two-component polyurethane, halogene free resin, composed of:

Foamjet T Part A, a combination of polyether mixture and special additives and **Foamjet T**

Part. B, a diphenylmethane diisocyanate based polyisocyanate; after having mixed the two components together in the ratio 1:1 by volume, with a special pump, **Foamjet T** forms a polyurethane foam of great strength.

Thanks to its high fluidity, **Foamjet T** can also penetrate through cracks of only some one hundred microns wide and seal the cracks even if they are subject to water infiltrations.

At the end of the setting time, between 45 and 70 seconds, depending on the temperature, **Foamjet T** becomes completely waterproof and ensures an adequate consolidation to the treated structure.

RECOMMENDATIONS

Foamjet T is particularly recommended for waterproofing large areas where there is water ingress, also under pressure.

Temperature influences the hardening time of **Foamjet T**; temperatures lower than +15°C lengthen setting time. It is therefore recommended to seek information from our technical service before injection takes place in structures that are subject to high pressure water ingress.



DIRECTIONS FOR USE Sealing cracks by injection Positioning the injectors

Make off-set holes on the sides of the cracks. The size of the holes should fit the diameter of the injectors that will be used.

Expansion injectors with a non-return valve can be easily fixed by self-tapping completely to the walls of the hole.

If there is no water ingress, normal copper, steel or PVC tubes with a diameter of approximately 10 mm can be used and can be fixed with **Adesilex PG1.**

Preparing the product and injecting

The two components that make up **Foamjet T** must be mixed together by a special pump for two-component resins.

In order to carry out injection, **Foamjet T** part A and **Foamjet T** part B in the ratio 1:1 by volume, must be separately conveyed through the pump and into the nozzle previously placed on the injector and mixed by a worm screw placed within the nozzle.

After mixing, **Foamjet T** must be injected continuously through the crack. When the two components are mixed, the viscosity of the mixture increases substantially, therefore the injected mixture will not separate or be washed out by the pressure of water. The increase in volume of the foam and its fast reaction stops the water ingress within a few minutes.

In the absence of water, **Foamjet T** hardens without increasing in volume and rapidly seals the crack.

Safety measures to be observed during application

It is recommended to wear protective masks, gloves and goggles during preparation and application of the product. Should the substance come into contact with skin or eyes, wash thoroughly with running water and consult a doctor.

Use the product only in well ventilated areas and wear breathing masks.

In case of accidents, immediately consult a doctor.

Cleaning

Clean injection equipment (pump and tubes) with mineral oil, free of water and impurities after use.

COVERAGE

- In the absence of water: approximately 1.1 kg of mixture (Part A + Part B).
- In the presence of water: approximately 0.3 kg of mixture (Part A + Part B).

PACKAGING

22.6 kg units:

- Part A = 10.3 kg (10 l).
- Part B = 12.3 kg (10 l).

STORAGE

Store in covered and dry place in original sealed containers and at temperatures between +10°C and +30°C.

PRODUCT FOR PROFESSIONALS.

WARNING

N.B. - Although the technical details and recommendations contained in this product report correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical applications: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

TECHNICAL DATA (typical values)

PRODUCT IDENTIFICATION:

	Part A	Part B
Colour:	light yellow	dark brown
Appearance:	liquid	liquid
Specific gravity (at +25°C):	1.030 kg/dm³	1.230 kg/dm ³
Viscosity (at +15°C):	1000 ± 50 MPa•s	500 ± 20 MPa•s
Viscosity (at +25°C):	400 ± 50 MPa∙s	200 ± 40 MPa•s
Storage:	6 months in original sealed packaging. Protect from humidity and store in temperatures between +10°C and +30°C	
Health hazard classification according to EEC 88/379:	Part B is harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. Do not breathe vapour/spray. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label or the technical data sheet where possible). Part A is corrosive. Contains amines that could cause burns, sensitization by skin contact and damage to fertility. Wear suitable protective clothing, gloves and goggles. Should the substance come into contact with eyes, immediately wash with plenty of running water and consult a doctor. In case of accident or if you feel unwell, seek medical advice immediately (show the label or the technical data sheet where possible).	
Customs class:	3909 50 90	
Mix ratio:	Part A : Part B = 1:1 (by v	<i>r</i> olume)
Mixture characteristics: - setting time at +15°C: - setting time at +25°C: - time required to harden at +15°C: - time required to harden at +25°C: - foaming factor at +15°C: - foaming factor at +25°C:	1' 20" ± 15" 0' 45" ± 10" 15' 00" ± 60" 8' 00" ± 60" 1.1-2.0 1.1-2.0	

* 100 dm³ of water was added to 50 dm³ of part A and 50 dm³ of component B after mixing for 10 seconds.

The information refers to laboratory test therefore can vary according to the conditions of the building site.





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