INJECT ACRYL B

THE INJECT ACRYL B SYSTEM IS A NON-TOXIC AQUEOUS SOLUTION OF MULTIFUNCTIONAL METHACRYLATES.

The compound gels in a few seconds to a few minutes when an activator or initiator is added just before use. The final product is a soft, elastic and tacky crosslinked gel. In wet or dry conditions, the volume of the gel increases or decreases in a reversible manner assuring perfect waterproofing.

Applications

The INJECT ACRYL B system is used for sealing and consolidation works in presence of water. The substance is injected through packers or injection hoses. The low viscosity of the product assures high fluidity. It's a hydrophilic system with a controlled set time used in the following applications :

- Treatment of water infiltration and ground water ingress.
- Treatment of soils.
- Treatment of voids and cavities, in the form of sand grouts.
- Injection of water bearing cracks in concrete or masonry walls.
- For grout injection hoses use the INJECT ACRYL ELASTIC R system.

Applications Prescriptions

THE FOLLOWING MIXTURES NEED TO BE PREPARARED

Mixture 1: INJECT ACRYL B Resin (A1) + ACRYLINJECT catalyst (A2)
Mixture 2: ACRYLINJECT Initiator (B1) + water (alternatively ACRYLINJECT Polymer (B2))
The mixtures are then mixed in ratio of 1:1
Prepare the mixture of components A1 and A2 and B1 + water in two opaque plastic containers each with a lid. Take an equal volume of each component and check the setting time of the mixture. Adjust the ratio if necessary. The mixture of component A1 and A2 is stable for at least a few hours, if kept covered in a cool and dry place even longer. The mixture of component B1 + water is stable for a few days below a temperature of 25°C.

APPLICATION

For slow setting one can use a mono-component pump. Only prepare amounts that can be injected before the gel sets by mixing one volume of components A1 and A2 and one volume of components B1 and water. For all types of setting, the use of a two component methacrylate pump is recommended. Both the mixtures are injected in a volume ratio of 1:1.

HANDLING

When handling the ACRYLINJECT ELASTIC B system, observe the recommendation set out in the MSDS sheets. Only stainless steel or plastic containers can be used (PVC, polyethylene, polypropylene). Avoid any contact between the A2 component or catalyst and the B1 component or initiator without having been diluted in their respective mixture (resin + cat and initiator + water). The mixtures have to be perfectly homogeneous before use. Do not add more than three volumes of water. Cleaning of equipment: water.

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Properties of the injection fluid

COMPOSITION

The standard injection fluid is obtained by mixing two mixtures in a ratio of 1:1. However depending on the conditions of the injected substrate the quantity of water present in the injection solution may be up to 3 time the volume of resin.

VISCOSITY

The viscosity of the **INJECT ACRYL B** solution will depend on the temperature and dilution. It will remain constant up to the setting point.

SETTING POINT

Gelling slows down at low temperature but still fast even below 0°C. In acid conditions the reaction is slowed down, while under alkaline conditions the reaction is speeded up. The presence of minerals and metals (specially iron and copper) may increase or decrease the rate of setting, depending on their concentration. When immersed in water the unconfined gel can absorb up to 2 times its own weight of water in a few weeks without cracking. Under humid conditions the volume of the gel will remain approximately constant. In the absence of water, the gel will slowly shrink, without cracking. These dimensional changes are reversible and do not degrade the gel. For better control of dry-wet cycles use ACRYL INJECT Polymer.

Thechnical data

The **INJECT ACRYL B** system consists of three products:

- Component A1: **INJECT ACRYL B** resin.
- Component A2: ACRYLINJECT catalyst, a liquid activator for standard setting times between 10 seconds and 30 minutes.
- Component B1: ACRYLINJECT initiator, in powder form to be dissolved in water.

CHARACTERISTICS	
Appearance	Blue liquid
Active content	42%
Water solubility	Soluble
pH	6,5-7,0
Density	1,2 kg/l
Viscosity at 20°C	33 mPa.s (EN ISO 3219)
Dry-wet cycles	Conform (EN 14498)
Resistance to pH	Up to 12

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Reaction Time

INJECT ACRYL B				
Variable mix ratio CAT + 2.5% INIT				
Mix A (%CAT)	Temperature components			
	0,5°C	17,2°C	20,4°C	35°C
2.5	> 60'	> 60'	55'	50'
5	15' 28''	11' 44''	3' 53''	3' 27''
10	4' 4''	1' 5''	57''	21''
15	2' 5''	35''	25''	11''

INJECT ACRYL B + ACRYLINJECT POLYMER				
Variable mix ratio CAT + 2.5% INIT				
Mix A (%CAT)	Temperature components			
	0,5°C	17,2°C	20,4°C	35°C
2.5	> 60'	> 60'	50'	8' 30''
5	29' 44''	7' 21''	4' 10''	3' 57''
10	2' 16''	41''	39''	10''
15	1' 7''	20''	19''	5''

INJECT ACRYL B				
Variable mix ratio INIT + 5% CAT				
Mix B (%INIT)	Temperature components			
	0,5°C	17,2°C	20,4°C	35°C
0,2	> 60'	55'	34' 17''	30'
1	50'	15' 15''	6' 30''	3' 57''
3	12' 37''	3' 36''	2' 58''	2' 50''
5	1' 11'	2' 28''	2' 18''	1' 29''

INJECT ACRYL B + ACRYLINJECT POLYMERYL B				
Variable mix ratio INIT + 5% CAT				
Mix B (%INIT)	Temperature components			
	0,5°C	17,2°C	20,4°C	35°C
0,2	> 60'	> 60'	45'	15'
1	30' 19''	9' 34''	8' 35''	4' 40''
3	14' 5''	1' 57''	1' 47''	1' 24''
5	10' 35'	1' 8''	56''	53''

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Packaging

- A1 component (resin): 20 kg pails
- A2 component (catalyst): 3 kg
- B1 component (initiator): 1 kg
- B2 component (polymer): 25 kg

Can be supplied under private label.

Storage

Store at a temperature above 0°C and below 25°C.
Do not expose directly to light or sunlight.
Storage in these conditions for min. 12 months.

Safety and health precautions

For more information, consult the safety data sheet.