

ACRYLINJECT®

Injection acrylate gel for water leakage prevention

1. Product characteristics

Injection acrylate gel intended for sealing water leakage from the backside of constructions

- suitable for permanent sealing of all kinds of masonry
- simple and quick application, precise dosage
- odorless
- eco-friendly

2. Use

ACRYLINJECT® acrylate injection gel is used for sealing water leakage through the masonry. Injection gel is applied by injectors (so-called packers) behind the backside of the construction. **ACRYLINJECT®** a non-toxic aqueous solution of multifunctional methacrylates and water soluble catalyst and initiator. 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 and tacky cross-linked gel. In wet or dry conditions, the volume of the gel increases or decreases in a reversible manner assuring perfect waterproofing.

3. Physical and mechanical properties

Component	A - resin	B - catalyst	C - initiator
Appearance	orange liquid	clear liquid	white powder
Dry matter (%)	42	-	-
Water solubility	soluble	soluble	soluble
Density (g.cm ⁻³)	1.2 ± 0.2	1.15 ± 0.1	1.05 ± 0.1
pH	6.5 – 7.0	7.5 – 8.0	-
Viscosity at 20 °C (mPas)	20 - 30	160 - 180	-

4. Test certificates

The product is certified according to § 12 of Act No. 22/1997 Coll. and according to § 6 of Government Regulation No. 163/2002 Coll. as amended.

Continuous independent production quality control is provided by AZL 1687 LABBET®.

Supervision of Quality Management Systems, Environmental Relations and OSH is carried out by Certification Body No. 3029.

5. Instruction for preparation and application

ACRYLINJECT® acrylate injection system is applied by following procedure. The first step should be preparation of mixture of **ACRYLINJECT®** resin (component A) with **ACRYLINJECT®** catalyst (component B) in a ratio according to the required reaction time (see point 6 – reaction time). Next step should be preparation of mixture of **ACRYLINJECT®** initiator (component C), which is supplied in a form of a powder, with water, also in a ratio according to the required reaction time (see point 6 – reaction time). Avoid any contact between the B component (catalyst) and the C component (initiator) without having been diluted in their respective mixture. Mixtures must be perfectly homogenous before the application. It is advisable to close these two prepared mixtures opaque plastic containers each with a lid. It is recommended to take a small amount of each component and test the actual reaction time, before the first application of **ACRYLINJECT®** system. The mixture of all components (A + B + C + water) can be further diluted up to ratio 1:3 (component A: water). The mixture of component A and B is stable for at least a few hours, if kept covered in a cool and dry place even longer. The mixture of component A3 + water is stable for a few days below a temperature of 25 °C.

Injection itself is put in prepared injectors (packers) by a two-component pump, ideally both the mixtures are injected in a volume ratio of 1:1. For slow setting one can use a mono-component pump, when the mixture of components A and B and a mixture of component C and water are injected in volume ratio 1:1. The viscosity of the **ACRYLINJECT®** gel will depend on the temperature and dilution. It will remain constant up to the setting point.

Gelling of **ACRYLINJECT®** slows down at low temperature but still fast even below 0 °C. 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.

Tools can be cleaned by water.

Drying time of the treated construction depends on its thickness, absorbability of the masonry material, on temperature, a ventilation intensity. Drying will be apparent in about 2 – 5 weeks. Simultaneously with the application of **ACRYLINJECT®**, it is advisable to remove the old wet plaster. Their removal and replacement with new sanitation plaster will significantly speed up the drying time. Treated (insulated) walls can be newly plastered at the latest after 7-14 days. It is necessary to remove the original plaster to a height of approximately 0.5 m above the original limit of wetted masonry. It is appropriate to rake up out the joints between the bricks or stones, remove all

the loose material and dispose of dust and debris from masonry surface. The prepared base is coated with restoration plaster **SANOFIX** according to WTA 2-9-04.

6. Reaction time

The reaction time **ACRYLINJECT**[®] system can be adjusted in a large scale using different volume ratio of the catalyst (component B) and initiator (component C). The resin (component A) is always mixed in volume ratio of 1:1 with water and the catalyst with the initiator are dosed in percentage of the weight of this composition. The following table gives two different setting times measured at temperature of 20 °C.

Initiator (%)	Catalyst (%)	Setting time (min.)
0.25	0.25	43
0.50	0.50	12
1.00	1.00	3
2.00	2.00	0.5

7. Packing and storage

The product is supplied in sets of 22 kg together in following packing: component A (resin) PE drum of 20 kg, component B (catalyst) drum of 1 kg, component C (initiator) drum of 1 kg. The storage life of the product in original undamaged packaging is 6 months. Store in a dry place at temperature between 0 ÷ 25 °C, protect against moisture. Do not expose to direct light on sunshine.

8. Health protection at work

ACRYLINJECT[®] injection gel is a substance with high alkalinity at normal temperature. Therefore, it is necessary to wear suitable protective clothing, goggles, rubber gloves, etc. In case of contact with eyes or skin, it is necessary to immediately rinse the affected area with large amounts of water. If swallowed, immediately seek medical advice. Store separately from food.

Issued MSDS meets the requirements of EC-Regulation 1907/2006, Article 31.

Because the product meets the criteria for classification as hazardous, it is necessary to provide the recipient or carriers with MSDS.

In countries where regulation REACH (para. 33.1): EU regulation on chemicals and their safe use (REACH: EC 1907/2006) is valid, professional users and distributors must be provided with following information automatically and without request: *This product is subject to Regulation (EC) no. 1907/2006 (REACH). It does not contain any substances that could be released from product under normal or reasonably foreseeable conditions of use. Therefore, there are no registration requirements for substances in articles within the meaning of Article 7.1 of the Regulation. Based on our current knowledge, this product does not contain SVHC (substances of very high concern) from candidate list published by the European Chemicals Agency in concentrations above 0.1% (w / w).*

9. Waste disposal

During disposal of contaminated packages or clearing debris from product, it is necessary to follow the Act no. 185/2001 Coll. on waste, as amended.

10. Important notice

All information mentioned above, especially advice for processing and application of our products, is based on our knowledge from the development of chemical products and on years of experience with applications in practice at standard conditions, and proper storage and use. Due to the differing conditions during processing, high count of products, varying nature and modifications of base and other external influences, the procedure based on the information provided or on other written or oral recommendations, may not always ensure satisfactory working results. BETOSAN s.r.o. assumes no liability for provided advice or recommendation. The applicator must prove, that he submitted complete information on time and in writing which is necessary for a proper detailed assessment by BETOSAN s.r.o. The applicator must test the suitability of the products for the intended application. Proprietary rights of third parties, above all, must be taken into account. All received are orders subject to our current "General sales and delivery conditions ". Please always make sure that you follow the most recent issue of the Technical Data Sheet. It is available, along with other information, at our Technical Department or at www.betosan.cz

Technical Data Sheet No. 5-14

Issued 23. 2. 2024

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