# ADINGPOKS I

*Low-viscosity two-component epoxy resin used for injection*

## FIELD OF APPLICATION

For reparation of concrete and reinforced concrete structures, Adingpoks I is used to fill cracks in the structure by grouting and injection under pressure. Adingpoks I enables structural bonding between the concrete elements and return the load-bearing capacity of the structure. At the same time, the material forms an effective barrier to prevent water penetration into the cracks.
Due to the low viscosity of the product, Adingpoks I is used for sealing and grouting cracks with a width larger than 0.1 mm.
Adingpoks I is commonly used for the reparation of concrete structures in engineering and infrastructure objects, hydro technical and industrial facilities exposed to chemical aggression (e.g. bridges, tunnels, reservoirs, wastewater treatment plants, port facilities, etc.).

## PROPERTIES

- Low-viscosity, two-component resin;
- Does not contain solvents;
- Excellent adhesion to dry and wet surfaces;
- High compressive strength;
- High chemical and mechanical resistance;
- Waterproof;

## TECHNICAL FEATURES

| Property | Method | Declared values |
|---|---|---|
| Appearance | | |
| A component | - | Transparent viscous liquid |
| B component | - | Transparent viscous liquid |
| Density | EN ISO 2811-1 | ≈1,10 g/cm³ |
| Compressive strength | | |
| after 7 days | EN 12190 | ≥40 MPa |
| after 28 days | | ≥50 MPa |
| Flexural strength | EN 12190 | ≥30 MPa |
| Adhesive bond | EN 1542 | ≥ 2,0 MPa |
| Workability (pot life) at temperature T=23 °C | EN ISO 9514 | 30-60 minutes |

## METHOD STATEMENT:

## 1. SUBSTRATE PREPARATION

Cracks treated with Adingpoks I should be clean, free of oil, dust or water retention. It is recommended to clean cracks with compressed air before the application.
If grouting/injection of concrete slab or wall is performed, the cracks which occur throughout the complete concrete section need to be sealed on one side (bottom side of slabs), in order to prevent leakage of epoxy resin during installation. The cracks in the concrete slab are closed with epoxy mortar or with a suitable cement-polymer repair mortar. The temperature of the substrate on which the grouting is performed, as well as the air should be in the range from + 10°C to + 30°C.





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## 2. APPLICATION

**PREPARING THE MATERIAL**

The material is prepared by first mixing A and B components separately, and then mixed with each other until homogenization. Components A and B are mixed in a precisely defined ratio with a slow electric mixer (maximum up to 300 revolutions per minute), in order to avoid trapping air in the mixture.

**CRACK INJECTION**

Adingpoks I can be installed by injection under pressure using an injection pump for one-component materials (within the open time for product operation). The injection is carried out through packers, which are equipped with non-returnable nozzles. Packers are placed in holes drilled directly in the crack or under angle - where the packer should cut the crack. After placing the packers, the crack should be closed with epoxy putty in order to prevent leakage of the material during injection. The distance at which the packers are placed depends on the width and depth of the crack. The best results are achieved when the injection is performed in several stages. For better control of the effect of the injection, control cracks can be left through which the penetration of the resin through the cracks will be followed. In the case of vertical cracks, Adingpoks I is injected continuously from the lowest packer upwards, in order to prevent "trapping" of air in the crack.

The pressure under which the injection is performed needs to be adjusted to the type of construction in order not to cause additional damage to the concrete.

**GROUTING OF HORIZONTAL CRACKS**

When repairing horizontal concrete elements, Adingpoks I can be applied by direct grouting in the cracks, by gravity (no pressure). In this case, the cracks on the upper side that are sealed are recommended to be opened (expanded) so that the resin can easily penetrate into the crack itself.

## CONSUMPTION

Consumption of Adingpoks I is ≈1.10 g/cm$^3$

## CLEANING

Tools and equipment are cleaned with Solvent P immediately after their use.

## PACKAGING

In a set of 3.30 kg.
In a set of 18.00 kg.

## STORAGE

In original closed packing, in dry premises at temperature between 10 and 30°C. Shelf life: 9 months.

Health hazards: It is necessary to avoid contact of the product with the skin or eyes, as well as direct inhalation when mixing the A and B components. In case of accidental contact, the product should be removed immediately with a dry cloth or slightly moistened with Solvent P, and then the place should be thoroughly washed with clean water and soap. If the material explodes in the eye, rinse immediately with clean water and seek medical attention. It is necessary to provide ventilation of the premises where resins and solvents are used. Additional information is provided in the Safety Data Sheet of the product.
Fire: The information is given in the Safety Data Sheet for the product.
Cleaning and disposal: Unbound residues from Adingpoks I are cleaned with Solvent P and old used packaging must be disposed of in accordance with local regulations and regulations for this type of waste. We recommend the method of application and the required quantities to adapt to the conditions of the facility, as well as the mandatory use of adequate equipment. Additional information are provided in the Safety Data Sheet of the product.

CONCRETE REPAIR



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