

# ADINGPOKS N

*Epoxy-based, solvent free adhesive for structural bonding between new and existing concrete.*

*In compliance with: EN 1504-4 /4.4*

## FIELD OF APPLICATION

Structural adhesive used for bonding fresh concrete or mortar and existing (hardened) concrete or other construction material. Typically, it is used for preparation of construction joints (brakes between different phases of concreting), bonding new concrete screeds on existing concrete substrate, or reparation, replacement or strengthening of damaged concrete sections

Adingpoks N is usually used for structural reparations of concrete structures, increasing protective layer on steel reinforcement, reparation of concrete segregation, etc.

Adingpoks N can also be used for grouting/fixing anchors.

## PROPERTIES

- Three component mixture;
- No shrinkage during material setting;
- Excellent adhesion to various substrates;
- High mechanical performances;
- High compression strength;
- High shear strength;
- Applicable on moist and water-dumped substrate;
- Waterproofed;

## TECHNICAL FEATURES

Properties	Declared value
Appearance A com	Light brown viscous liquid
Appearance B com	Amber-colored viscous liquid
Appearance C com	Quartz sand
Mixing ratio :	A:B:C = 3:1:2
Mixture specific weight: (According to EN ISO 1015-6)	1.4-1.5 g/cm <sup>3</sup>
Application temperature:	5°C to 30 °C
Compressive strength (According to EN 12190)	3 days ≥ 45 MPa 7 days ≥ 60 MPa 28 days ≥ 80 MPa
Adhesion strength (According to EN 12636)	≥ 2 MPa; (fracture in concrete)
Shear strength (According to EN 12615)	≥6 MPa
Open workability time at T= 23 °C	1-2 hours

CONCRETE REPAIR

## METHOD STATEMENT:

### SUBSTRATE PREPARATION

Concrete substrate, on which Adingpoks N is applied need to have high mechanical properties, to be clean, all unstable sections need to be mechanically removed (using water or sand blasting). Residues of grease, existing coatings and other pollution need to be removed. During application of material, there must not be water dumped on the surface of the concrete. Ambient and substrate temperature during application of material need to be between +10°C to +30°C.

### APPLICATION

The material is prepared by mixing components A and B with a slow electric mixer (maximum up to 300-500 rpm). Powdery component - C is gradually added in the mix with constant mixing until complete homogenization.

Application of material is conducted with metal trowel or hard brush in layers 1-2 mm thick. Fresh concrete is applied until Adingpoks N is still fresh and sticky when touched (30-60 minutes after application depending on the temperature). In case if Adingpoks N set before new cement/concrete mixture is applied, prior to concreting it is necessary to apply new layer of Adingpoks N using the same procedure.

### CONSUMPTION

Material consumption depends of absorption and roughness (texture) of the substrate. Furthermore, consumption depends on the application temperature (at low temperatures, material thickness and consumption increases).

Consumption for layer 1,0 mm thick: 1,4-1,5 kg/m<sup>2</sup>

### CLEANING

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

### PACKAGING

Set 6.6 kg

A component: 3.3 kg

B component: 1.1 kg

C component: 2.2 kg

Set 21 kg

A component: 10.5 kg

B component: 3.5 kg

C component: 7 kg

### STORAGE

In original, closed packing, in dry chambers, at temperatures from +10 to +30°C. Shelf life 9 months.

## CE MARKING

<p>CE</p> <p>2032</p>	
<p>ADING AD Skopje, Novoselski pat (ul 1409) br.11 1060 Skopje, Republic of North Macedonia</p>	
<p>16</p>	
<p>GCAA001/7 EN 1504-4 : 2004 <b>ADINGPOKS N</b> Epoxy adhesive for structural strengthening and bonding of existing concrete and new fresh concrete or mortar</p>	
Compressive strength	≥ 30 N/mm <sup>2</sup>
Adhesion strength with pull off test	Fracture in concrete
Shear strength	≥ 6 N/mm <sup>2</sup>
Shrinkage	< 0,1 %
Modulus of elasticity in compression	≥ 2000 N/mm <sup>2</sup>
Suitability for application and curing under special environmental conditions (wet surfaces)	Fracture in concrete
Open time	≥ 80 min
Pot life	120±20 at (23±2)°C
Glass transition temperature	≥ 40°C
Coefficient of thermal expansion	≤ 100·10 <sup>-6</sup> (1/°C)
Durability	Pass
Reaction to fire	Class F
Dangerous substances	No performance determined

**Health hazards:** It is necessary to avoid contact of the product with skin or the eyes, as well as direct inhalation during mixing of components. In case of contact with skin material must be cleaned with dry towel dip in Solvent -P, than skin must be cleaned with soap and water. If material get in contact with the eyes, it is necessary to clean with a lot of water and to ask for medical assistance. Closed space or chambers in which material is prepared or applied, must be supplied with ventilation system.

**Fire:** Adingpoks N and Solvent-P contains flammable solvents. They must not be used near the open flames, or to smoke during preparation and application.

**Cleaning and disposal:** Loose residues of Adingpoks N are cleaned with Solvent P. Old and used packaging should be disposed of in accordance with local rules and regulations for that type of waste. It is recommended to adjust prepared quantities with conditions on the construction site, as well as to use appropriate protection equipment.