

ADINGPOKS 1BP

Two component epoxy coating for floor surface protection of concrete exposed to mechanical and chemical impacts

In compliance with EN 1504-2: 2.2(C); 5.1(C); 6.1(C); 8.2(C)

FIELD OF APPLICATION

Epoxy coating used for protection and decoration of concrete floor surfaces in: warehouses, garages, parking lot levels, food industry, hospitals, schools, shopping malls. It is recommended as final coating for constructions exposed to food contact, for rooms where high hygiene standards are required, in case of chemical aggression, high resistance to abrasion and similar. The flooring is excellent final coating, which can also offer a slippery resistant systems using fillers with various granulations or epoxy chips.

PROPERTIES

- Excellent adhesion;
- High resistance to abrasion;
- High mechanical resistance;
- High resistance to diluted acids, bases, dilutions of salts and mineral oils;
- Watertight;
- Non- toxic when cured;
- Resistant to bacteria;
- Decorative – available in different colors;
- Simple application;
- Easy maintenance.

TECHNICAL FEATURES

PROPERTY	METHOD	DECLARED VALUE
Appearance	visual	colored paste
Mixing ratio	-	6,0:1,0
Density	EN ISO 2811-1	A component - 1,65-1,75g/cm ³ B component - 1,00-1,05g/cm ³
Adhesion to the substrate/ bond strength by pull-off test	EN 1542	≥ 2MPa
Water absorption	EN 1062-3	w≤0,1kg/m ² h ^{1/2}
Abrasion resistance	EN ISO 5470-1	< 3000mg
Impact resistance	EN ISO 6272-1	class I ≥4Nm
Resistance to severe chemical attack (petrol, diesel, motor oil, 10%CH ₃ COOH, 20%H ₂ SO ₄ , 20%NaOH; 20%NaCl)	-	class II, reduction in Shore hardness ≤ 50%
UV	-	unstable
Open time on 20°C	EN 12189	30-45min
Pot life	EN ISO 9514	70-90min
Touch dry on 25°C	-	5h
Period between two layers, on 25°C	-	24h

Hardness after 7 days, on 25°C	ISO 868	60-70 Shore D
Hardness after 14 days, on 25°C	ISO 868	70-80 Shore D
Substrate and air temperature during the application	-	5-35°C
Relative air humidity	-	< 70%
Mechanical use for foot traffic, on 20°C	-	after 3 days
Mechanical use for heavy traffic, on 20°C	-	after 7 days
Chemical use (including water contact), on 20°C	-	after 14 days
Stability of the coating during the exploitation	-	from -20°C to + 70°C

METHOD STATEMENT

SUBSTRATE PREPARATION

The substrate for application must be sound, dry, clean, free of dust, grease and condensate. For industrial flooring it must be waterproofed, in order to prevent separation of the final coating as a consequence of negative hydrostatic pressure. The moisture of the substrate must be lower than 7%, the temperature during the application between 5-35°C and the relative air humidity must be lower than 70%, to prevent condensation on the substrate for application. The application on substrate with water condensate can result with unequally change of the coating color, lose the gloss or show spotting. Despite these negative effects the physical and chemical characteristics of the coating would not change.

New concrete substrate

Concrete must be cured at least 28 days, the compressive strength must be over 25 MPa and the structural substrate moisture must be less than 7%. Cement laitance, mortar, stains of paint and grease must be removed. Finally the substrate should be cleaned of dust using industrial vacuum cleaner.

Old concrete substrate

In order to achieve an excellent adhesion to the substrate, it must be sound and clean. The cement laitance should be removed mechanically. Penetrated grease and dirt into the substrate should be removed using detergents or special agents. All cracks and damages of the substrate must be repaired using suitable materials.

Old epoxy substrate

The surface should be treated with sandpaper and it must be clean of dust using industrial vacuum cleaner.

APPLICATION OF ADINGPOKS 1BP AS COATING

In case of very porous substrate is recommended to apply pre-coating Adingpoks 1P or 1PV (for substrates with higher moisture). Apply the primer by squeezing it into the substrate using fur roller.

Mix A and B component of Adingpoks 1BP separately 2-3 minutes using slow mixer (up to 400 rotations/minute). Then add B component into A and mix until it homogenize. The application of the epoxy coating must be applied during the pot life of the product (30-45 min. counting of the moment when the components are mixed together).

The application is intended to be in two layers, using brush, short fiber paint roller or by spraying. Apply the second layer on firm first layer, 24h after the application of the previous layer, on temperature of 20°C. The thickness of one layer is recommended to be between 200-250µm. The temperature of the substrate must be between 5-35°C and the moisture lower than 7%.

APPLICATION OF ADINGPOKS 1BP AS SELF-LEVELLING SYSTEM

Varinat 1 (levelling (flattening)):

Material is prepared by slowly mixing components A and B of Adingpoks 1BP (until completely uniform), and then add quartz filler. Recommended ratio Adingpoks 1BP: Filler S/H(0.0-0.3mm) = 1:0.5. A slow mixer is used for mixing. Apply the material using flat trowel and process the applied layer using bristle roller to remove the entrapped air off the epoxy. The applied material should be treated 15-20 min right after the application. The temperature of the substrate must be between 10-30°C. On the prepared flat surface, it is recommended to apply a finishing layer of Adingpoks 1BP as a coating with a roller.

Varinat 2 (self-levelling finish system):

Material is prepared by slowly mixing components A and B of Adingpoks 1BP (until completely uniform), and then add quartz filler. Recommended ratio Adingpoks 1BP: Filler S/H(0.0-0.3mm) = 1:0.7. A slow mixer is used for mixing. Apply the material using notched trowel and process the applied layer using bristle roller to remove the entrapped air off the epoxy. The applied material should be treated 15-20 min right after the application. The temperature of the substrate must be between 10-30°C.

CONSUMPTION

As coating:

Adingpoks 1P: 0.20-0.30 kg/m²

Adingpoks 1BP, one layer: 0.30-0.40 kg/m²

Adingpoks 1BP, two layers: 0.50-0.60 kg/m²

Variant 1:

Adingpoks 1P: 0.20-0.30 kg/m²

Adingpoks 1BP (A+B+ Filler S/H(0.0-0.3mm)), 1 mm thick layer: 1.0 kg/m² or,

A : B : Filler S/H(0.0-0.3mm) = 0,57kg : 0,09kg : 0,33kg, for 1 mm layer

Variant 2:

Adingpoks 1P: 0.20-0.30 kg/m²

Adingpoks 1BP (A+B+ Filler S/H(0.0-0.3mm)), 2 mm thick layer: 1.5 – 1.8 kg/m² or,

A : B : Filler S/H(0.0-0.3mm) = 0,85kg : 0,15kg : 0,7kg, for 2 mm layer

CLEANING

Clean tools and equipment right after the application, using Solvent P.

PACKAGING

Sets A+B: 5.0 kg

A component: 4.3 kg

B component: 0.7 kg

Sets A+B: 24.5 kg

A component: 21 kg

B component: 3.5 kg

STORAGE

In the original, closed packaging, placed in dry rooms at temperature between 10°C and 30°C. The product must not be exposed to direct sunlight and freezing. Shelf life: 9 months.

STANDARD COLOURS

RAL1001, RAL1015, RAL3012, RAL5024, RAL6019, RAL6021, RAL7004. RAL7032, RAL7035, RAL7045, RAL9002.

Note: The remaining RAL colors are available for orders over 90 kg.

CE MARKING

<p style="text-align: center;">CE 2032</p>	
<p style="text-align: center;">ADING AD Skopje, Novoselski pat (ul 1409) br.11 1060 Skopje, North Macedonia 17</p>	
<p style="text-align: center;">GOAB0XX/6 EN 1504-2:2004 ADINGPOKS 1BP</p>	
<p style="text-align: center;">Epoxy coating for surface protection of concrete and improved physical and chemical resistance</p>	
Adhesion strength by pull-off test	≥ 2,0 N/mm²
Abrasion resistance	< 3000 mg
Impact resistance	Class I ≥ 4 Nm After loading, no cracks, no delamination
Resistance to severe chemical attack	Class II: 28 days without pressure ≤ 50% reduction in Shore hardness after treatment in test liquids: petrol; diesel and motor oil; 10% CH₃COOH; 20% H₂SO₄; 20% NaOH; 20% NaCl
Reaction to fire	Class F
Dangerous substances	No performance determined

Health hazards: Avoid contact of the product with skin and eyes, as well as direct inhalation when you mix the components. In case of accidental contact, the product should be removed immediately with dry towel or mildly wetted towel with Solvent P. Then, wash the spot with pure water and soap. If the material has been splashed into eyes, immediately rinse it with pure water and call for medical help. Ventilate the room where you use resins and solvents.

Fire: The product is not flammable.

Cleaning and disposal: Loose residues of Adingpoks 1BP are cleaned with Solvent P. The old and used packing should be discarded in accordance with the local relevant regulations. We recommend that the method of application and the necessary quantities should be adjusted to the conditions on site, as well as mandatory use of appropriate equipment. Additional information is provided in the Product Safety Data Sheet.