

ADINGPOKS 1

Low viscosity, two component, solvent free epoxy resin used as transparent final coating or for preparation of epoxy mortar

In compliance with EN 1504-2:2004/2.2(C), 5.1(C); 6.1(C), 8.2(C) and EN 13 813: 2002/SR B2.0-IR20

FILED OF APPLICATION

Epoxy resin used to prepare epoxy mortar, epoxy levelling compound or as final transparent coating for wall and floor, where joint-less system is required or where the surfaces are intended to be exposed to high mechanical and chemical impacts, according to the requirements for high hygiene levels.

PROPERTIES

- Excellent adhesion to the substrate;
- High resistance to abrasion;
- High resistance to diluted acids;
- High resistance to dilutions of salts and mineral oils;
- Solvent free;
- Non- toxic when cured;
- Bacteriologically resistant;
- Decorative;
- Final flooring without joints;
- Easy maintenance.

TECHNICAL FEATURES

PROPERTY	METHOD	DECLARED VALUE
Appearance	visual	viscose mixture
Mixing ratio	-	A:B = 2:1
Density	EN ISO 2811-1	1,0-1,1g/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}
Water vapor permeability	EN ISO 7783	class III Sd>50m
Abrasion resistance	EN ISO 5470-1	< 3000mg
Impact resistance	EN ISO 6272-1	class II ≥10Nm
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%
Tensile strength of mortar prepared with Adingpoks 1: Polnilo S/H 0,3-0,8mm, ratio 1:3	-	>20MPa
Compressive strength of mortar prepared with Adingpoks 1: Polnilo S/H 0,3-0,8mm, ratio 1:4	-	> 55MPa
Open time on 20°C	EN 12189	up to 30min
Touch dry on 25°C	-	5h
Period between two layers, on 25°C	-	24h
Hardness after 1 day, on 25°C	ISO 868	65 Shore D
Hardness after 7 days, on 25°C	ISO 868	51 Shore D
Substrate and air temperature during the application	-	10-30°C
Relative substrate humidity	-	< 7%

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Relative air humidity	-	< 70%
Mechemical use, on 20°C	-	after 3 days
Chemical use (including water contact), on 20°C	-	after 15 days
Stability of the coating during the exploitation	-	between -20°C to + 70°C

METHOD STATEMENT

SUBSTRATE PREPARATION

The substrate for application must be sound, dry, clean, free of dust, grease and condensate. 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 10-30°C and the relative air humidity must be lower than 70%, to prevent condensation on the substrate for application. The application on substrate with condensate can result with visual changes of the coating, 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 25MPa and the structural moisture of the substrate must be less than 7%. Cement laitance, mortar, stains of paint and grease must be removed mechanically or using chemicals. 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.

APPLICATION

The substrate for application should be primed using Adingpoks 1P or Adingpoks 1PV (for substrates with higher moisture). Apply the primer by squeezing it into the substrate using brush or fur roller. The extremely porous substrates need to repeat the priming, before Adingpoks 1 is applied. For substrates with joints, it is necessary to fill the joints using epoxy mortar. Mix A and B component of Adingpoks 1 until the mixture homogenize using slow mixer (300-500 rotations/ minute). The application and the mixed quantity of the product must be applied during the open time of the product (30min counting of the moment when the components are mixed together).

Apply coating of Adingpoks 1 in layer with uniform thickness using rubber trowel and paint it using fur roller.

To prepare epoxy mortar of Adingpoks 1 mix the component A and B using slow mixer until the mixture homogenize. Then add quartz sand Polnilo S/H 0.3-0.8mm. The ratio between Adingpoks 1 and the quartz sand is according to the required viscosity of the mortar: for vertical surfaces, ratio 1:6 and for horizontal surfaces between 1:3 and 1:4. Apply epoxy mortar pressing it using steel trowel and flat the final surface. When required, the surface with applied mortar can be coated using Adingpoks 1.

To prepare epoxy levelling compound for vertical substrates mix Adingpoks 1 with Polnilo S/H 63µ, ratio 1:1. Prepare levelling compound for horizontal surfaces using Adingpoks 1 and Polnilo S/H 0.0-0.3mm, ratio 1:2. Apply it using steel trowel.

The temperature of the substrate and air temperature during the application should be between 10-30°C.

MAINTENANCE

Epoxy durability depends of the appropriate maintenance. Clean the final coating of Adingpoks 1 using washing machines with brushes, water soluble detergents or warm water.

CONSUMPTION

Adingpoks 1P: 0.2-0.35kg/m²

Adingpoks 1 (coating): 0.20-0.40kg/m²

CLEANING

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

PACKAGING


Sets A+B: 3kg
A component: 2kg
B component: 1kg

Sets A+B: 9kg
A component: 6kg
B component: 3kg

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.

CE MARKING

 2032	
ADING AD Skopje, Novoselski pat (ul 1409) br.11 1060 Skopje, North Macedonia 17 GDFC001/5 EN 1504-2:2004 ADINGPOKS 1 Epoxy surface protection system for concrete, for moisture control and improved physical and chemical resistance	
Adhesion strength by pull-off test	≥ 2,0 N/mm²
Capillary absorption and permeability to water	w < 0,1 kg/m²·h^{0,5}
Permeability to water vapour	Class III, S_D > 50 m
Abrasion resistance	< 3000 mg
Impact resistance	Class II ≥ 10 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 1 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.