

ADINGPOKS TER

Two component epoxy coating for surface protection of concrete and steel surfaces exposed to mechanical and chemical influence

Compliant to EN 1504-2: 1.3(C); 5.1(C); 6.1(C)

FILED OF APPLICATION

Epoxy coating for chemical and mechanical protection of concrete and steel surfaces in: industrial facilities, waste-water treatment plants, concrete and steel reservoirs for petrol and petrol derivatives, chemically corrosive substances, laboratories, warehouses, etc. Adingpoks TER is recommended for final treatment of concrete surfaces exposed to chemical aggression, mechanical influences, abrasion, etc.

PROPERTIES

- Extremely high resistance to chemical aggression,
- Resistant to petrol and petrol derivatives;
- High mechanical resistance;
- High adhesion to concrete and steel surfaces;
- High resistance to abrasion;
- Watertight;
- Non- toxic when cured;
- High bacteriological resistance;
- Easy maintenance.

TECHNICAL FEATURES

PROPERTY	METHOD	DECLARED VALUE
Appearance	visual	colored paste
Mixing ratio	-	3,0:1,0
Density	EN ISO 2811-1	A component - 1,2-1,3g/cm ³ B component - 1,05-1,15g/cm ³
Adhesion to the substrate / pull-off test	EN 1542	≥ 2MPa
Water absorption	EN 1062-3	w≤0,1kg/m ² h ^{1/2}
Open time for application on 20°C	EN 12189	30-45min
Setting time on 25°C	-	5-6h
Period between application of two layers, on 25°C	-	24h
Hardness after 7 days, on 25°C	ISO 868	75 Shore D
Substrate and air temperature during the application	-	10-35°C
Relative air humidity	-	< 70%
Mechemical exposure, on 20°C	-	after 3 days
Chemical exposure, on 20°C	-	after 14 days

METHOD STATEMENT

SUBSTRATE PREPARATION

The substrate for application of Adingpoks TER must be sound, dry, clean, and free of dust, grease and condensate. Industrial floor surfaces must be waterproofed, in order to prevent exposure of epoxy coating to negative hydrostatic pressure. The moisture content of the substrate must be lower than 7%, the temperature of air and surface during the application must be between 10-35°C

New concrete substrate

Concrete must be cured at least 28 days, the compressive strength must be over 25 MPa and the substrate moisture must be less than 7%. Cement residue, mortar, stains of paint and grease must be removed.

Old concrete substrate

In order to achieve high adhesion of coating to the substrate, concrete surface must be sound and clean. The cement residue, mortar, stains of paint and grease must be removed. All cracks and damages of the substrate must be repaired using suitable materials.

Steel substrate

Steel surfaces, immediately prior to application of Adingpoks TER, must be completely cleaned using sand-blasting until SA2½ purity class of surface is achieved. Surfaces on which Adingpoks TER is applied also must be dry (without possibility for occurrence of condensation).

APPLICATION

In case of very porous concrete substrate it is recommended to apply pre-coating Adingpoks 1P or Adingpoks 1PV. Pre-coating is applied using roller. Steel surfaces don't need to be pre-coated.

Preparation: Mix A and B component of Adingpoks TER separately 2-3 minutes using slow mixer (up to 300 rotations/ minute). Then add B component into A and mix until complete homogenization. The application of the epoxy coating must be carried out within the pot life of the product (30-45min after two components are mixed together).

The application is carried out in two or three layers, using brush or short fiber paint roller. Second layer is applied on the set first layer, (usually 24h after the application of the previous layer, on temperature of 20°C). The dry-thickness of one layer is recommended to be between 300-500µm.

In order to achieve less slippery surface (skid-free surface) Adingpoks TER can be covered with quartz sand, applied on the fresh (not set) first layer. After setting, excess sand is removed, and second layer of Adingpoks TER is applied.

CONSUMPTION

Adingpoks 1P or Adingpoks PV: 0.2-0.3 kg/m²

Adingpoks TER, two layers: 0.40-0.50 kg/m²

CLEANING

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

PACKAGING

Sets A+B: 16kg

A component: 12kg

B component: 4kg

Sets A+B: 4kg

A component: 3kg

B component: 1kg

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

Available in black and grey colour


CHEMICAL RESISTANCE CHART

CHEMICAL RESISTANCE CHART		
Chemical	Maximal weight change(%)	Chemical resistance properties and durability in contact with chemicals
Xylene	- 0.5%	Suitable for long-term exposure
Toluene	+ 0.1%	Suitable for long-term exposure
Ethylene glycol	- 0.3%	Suitable for long-term exposure
Ethanol	+ 1.0%	Suitable for occasional exposure
Methanol	+ 2.4%	Suitable for occasional exposure
10% acetic acid	+ 2.6%	Occasional exposure, followed by immediate clean-up
98% acetic acid	Not resistant	Not recommended
20% sulfuric acid	+ 0.4%	Suitable for long-term exposure
98% sulfuric acid⁽¹⁾	+0.6%	Suitable for long-term exposure
37% hydrochloric acid⁽²⁾	+ 0.9%	Suitable for long-term exposure
97% phosphoric acid	+ 1.2%	Suitable for long-term exposure
25% nitric acid	+ 2.6%	Occasional exposure, followed by immediate clean-up
65% nitric acid	Not resistant	Not recommended
50% lactic acid	+ 2.5%	Occasional exposure, followed by immediate clean-up
50% sodium hydroxide	0%	Suitable for long-term exposure

(1) Exposure to concentrated sulfuric acid will cause formation of a reddish surface film that can be removed by washing with water and mild detergents. However, this occurrence does not affect the performance of the material.

(2) Exposure to concentrate hydrochloric and phosphoric acid may cause minor change in color. Changes in color do not affect the properties of the coating.

CE MARKING

 2032	
ADING AD Skopje, Novoselski pat (ul 1409) br.11 1060 Skopje, North Macedonia 20 GGAB001/1 EN 1504-2:2004 ADINGPOKS TER Epoxy coating for surface protection of concrete and improved physical and chemical resistance	
Capillary absorption and permeability to water	w < 0,1 kg/m²·h^{0.5}
Adhesion strength by pull-off test	≥ 2,0 N/mm²
Impact resistance	Class I ≥ 4 Nm After loading, no cracks, no delamination
Abrasion resistance	< 3000 mg
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
Chemical resistance	No visible changes after 30 days exposure to test chemicals (Test chemicals are given in TDS)
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 soak 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 flammable.

Cleaning and disposal: Loose residues of Adingpoks TER 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.