2-part waterborne epoxy coating

Product Description

EPOSAN W is a 2-part, water dispersed, solvent free, coloured, epoxy resin based coating.

Uses

EPOSAN W is intended for the protection of concrete surfaces, cement screeds, old epoxy coatings and epoxy mortars against mechanical and chemical attacks. It can be applied to relatively fresh concrete bases, when the process of concrete maturing has not yet been completed and the percentage of humidity is still high. Application on vertical surfaces is possible. EPOSAN W is used in chemical, food, pharmaceutical, electronic, textile and other kinds of industry.

- Production and processing areas, workshops
- Sport facilities
- Warehouses, schools
- Laboratories, hospitals
- Waste water basins
- Garages
- Dairies, slaughterhouses

Advantages

- Easy application
- Fast building-in
- Water vapour permeable
- Water dilutable
- Excellent adhesion
- Environmentally friendly
- Good overlaying capability
- Easy washing and cleaning
- Decorative appearance
- No joints
- A great choice of colours

Certificate

Report of quality no. UVI-162/09 Institute IMS, Belgrade.
SRPS Z.S2.240 Road markings - Requirements for thinfilm material and application.
SRPS ISO 868 Plastics and ebonite – Determination of indentation.
hardness by means of a durometer (Shore hardness).
SRPS EN ISO 4624 Paint and varnishes - Pull-off test for adhesion.
SRPS EN ISO 6272-1 Paints and varnishes - Rapid-deformation (impact resistance) tests.
SRPS G.S2.753 Flooring - Flammability testing of flooring from plastics and rubber.

TECHNICAL SPECIFICATIONS

Colour

Available in various colours shades according to RAL Card. Decorativeness of coating is revealed through a great choice of shades, with a silky matte surface.

Storage and Shelf Life

6 months minimum in unopened package stored in a dry place at temperature over +15°C. Protect from freezing.

Packaging

Exactly definite irretrievable package:
Part A 2,1 kg Part B 10,0 kg
Form and size of a set can be done according to your requirements.

PHYSICAL SPECIFICATIONS

Volume Mass of Bound Material, g/cm³	1,312 (after 7 days)
Adhesive Strength, N/mm²	>5,0 (Concrete failure)
Abrasion Resistance, mg	59 (weight Taber Index)
Solid Content	75%
Flammability	Hardly flammable with permanent change of the surface appearance.
Hardness, Sh D	D / 1:80
Chemical Resistance	See Chemical Resistance Table of EPOKSAN Products.
Impact Resistance	There is no cracking while a weight falls from the height of 100 cm (weight mass 1000 g, gauge diameter 20 mm)

Work Conditions

- Room temperature: min. 15°C, max. 30°C (optimal 20-25°C).
- Relative air humidity: below 85%.
- The substrate and uncured floor must be at least 3°C above dew point to reduce the risk of condensation or blooming on the floor finish.
- In the course of work protect floor from direct influence of sun rays and prevent the room ventilation.

Waiting time between applications/Overcoating

6–24 hours (depending on exterior temperature).

Necessary tools

Paint roller, squeegee, filling knives, a brush, low speed electric stirrer (300-400 rpm), scales (20-30kg), industrial vacuum cleaner, floor duster, vessel for mixing (V=30/40 l), clogs with nails.

INSTRUCTIONS FOR USE

System Structure

Concrete substrate	Normal load	Very load
Normal absorbent surface	1 x EPOSAN W * 1-2 x EPOSAN W	1 x PRIMER W 2 x EPOSAN W
Non absorbent surface	1 x PRIMER W 1-2 x EPOSAN W	1 x PRIMER W 2 x EPOSAN W
Very absorbent surface	1 x PRIMER W 2 x EPOSAN W	1 x PRIMER W 2 x EPOSAN W

* diluted with 10% of water

Material Consumption

About 0,6 – 0,8 kg/m2 in two layers of coating.
Thickness cca 250 µm per a layer. The values are not in effect for porous, uneven, too blotting bases and material scattering.

Substrate Quality

The substrate must be clean, dry or damp and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. New concrete substrate should age at least 14 days before being coated. The concrete substrate must be compact, a minimum degree of roughness, even (max. Unlevelling ± 1mm/m), without cement laitance, cracks and badly adhered parts. The hydroisolation should be done in underground rooms. The concrete substrate must be of sufficient compressive strenght (minimum 25 N/mm2) with a minimum pull off strength of 1.5 N/mm2.
Metal surfaces should be cleaned from fats, corrosion and old poor adhered coatings.

Substrate Preparation

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface. Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed. Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the range of EPOKSAN materials.
The concrete or screed substrate has to be primed or levelled in order to achieve an even surface. High spots must be removed by e.g. grinding. Before application of layers all dust and loose materials must be completely removed by brushes or a vacuum cleaner. Metal surfaces should be cleaned from fats, corrosion and old poor adhered coatings.

Surface Priming

PRIMER W part A and PRIMER W part B join in a suitable vessel in the delivered mixing ratio and mix by electric stirrer. Add 70% water in relation to A+B and again stir well. Immediately after mixing primer do surface impregnation of concrete by paint rollers and/or brushes.
After a couple of hours, in case the primed surface gets dry appearance of a light colour, priming must be repeated partially or completely. Avoid puddles on the surface with the primer.
For compact concrete substrates (required quality) primering is sufficient in one coating with the consumption of primer from 0,30-0,40 kg/m2. Prepared primer shuld be built-in in the course of half an hour. Apply the coating after the priming coat has dried tack-free all over.

Application

Prior to mixing stir Eposan W part B mechanically in the original pail, and after that join with Eposan W part A in a vessel of a corresponding volume (30-40 l) and mix it. Mixing should obligatory be done (for quantities over 2 kg) by electric stirrer (300-400 rpm) in the course of several minutes, and immediately after that apply the coating by paint rollers and/or brushes, making efforts that the thickness of the coating is even, and pores in the concrete filled in (by rubbing in).
After 6-24 hours, repeat the procedure and apply the final layer of the coating. Built-in coating is servicable after 24 hours (at 20°C).

CAUTION

Freshly applied layer of Eposan W must be protected from humidity, condensation, water and heavier chemical and mechanical loads, 7 days at least.

Tool Cleaning

Tools should be washed in solvent or water immediately after use.

SAFETY REGULATIONS AND SAFETY AT WORK

The use of safety and personal protective equipment is obligatory. Observing the fire fighting measures is required. The physical, safety-technical and ecological data and regulations in work with chemical materials, as well as storage and waste removal must be observed.

STATEMENT ON LIMITED LIABILITY

All information mentioned in this technical sheet have been transferred faithfully and conscientiously and they are based on our knowledge. The final appearance of the floor coating and its physicalchemical characteristics depend on careful preparation, building-in and conditions of the substrate to which we have no influence. The obligation in the warranty period is limited to the quality of the delivered goods. In cases of important building enterprises or if there are problems you are to ask advice from our technical service.

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