

Chemically resistant self-levelling epoxy floor

Product Description

EPOLIT S is a 3-part self-levelling floor based on epoxy resins and fillers.

Uses

EPOLIT S is primarily intended for the protection of concrete surfaces against mechanical and chemical attacks. It is used in normal, medium and heavy conditions of exploiting thanks to its physical and chemical characteristics. EPOLIT S can withstand high mechanical loads and it is chemically inert to water and detergents, mineral acids and alkalis solutions, salt solutions, petroleum and petroleum derivatives, various nonpolar solvents. EPOLIT S is used in chemical, food, pharmaceutical, electronic, textile and other kinds of industry.

- Production and processing areas, workshops
- Sport facilities
- Breweries, cold storage plants, shops, warehouses
- Laboratories, hospitals
- Printing shops, car services
- Chemical storage areas
- Dairies, slaughterhouses

Advantages

- Excellent chemical resistance
- High mechanical resistance
- Resistance to impacts
- Transport resistance
- Easy washing and cleaning
- Decorative appearance with high gloss finish
- Fast building-in
- Long life
- Big choice of colours
- No joints
- Impermeable

Certificate

Report of quality No. UIV – 334/11 Institute IMS, Belgrade
SRPS Z.S2.240 Road markings - Requirements for thinfilm material and application.
SRPS G.S2.613 Plastics - Determination of compressive properties of thermosetting plastics.
SRPS G.S2.614 Plastics - Bending test.
SRPS G.S2.753 Flooring. Flammability. Testing of flooring from plastics and rubber.
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 Paint and varnishes. Rapid deformation (impact resistance) tests-Part 1: Falling-weight test, large-area indenter.
Health Certificate No. 3635/05, SGS Belgrade Ltd, Belgrade

TECHNICAL SPECIFICATIONS

Colour

Decorativeness of this product is revealed through a great choice of colours and shades. In time high glow changes into matt. See RAL Chart.

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 for 43 kg of the finished mixture
Part A : Part B : Part C = 10 kg : 4 kg : 29 kg.
Form and size of a set can be done according to your requests.

PHYSICAL SPECIFICATIONS

Volume Mass of Bound Material, g/cm³	1,876
Compressive Strength, N/mm²	97,1
Flexural Strength, N/mm²	32,5
Adhesive Strength, N/mm²	> 7,0 (Concrete failure)
Abrasion Resistance, mg	41 (weight Taber Index)
Hardness, Sh D	Sh D / 1 : 80
Chemical Resistance	See Chemical Resistance Table of EPOKSAN Products
Impact Resistance	There is no cracking while a wight falls from the height of 100 cm (weight mass 1000 g, gauge diameter 20 mm).
Flammability	Hardly flammable with permanent change of the surface appearance

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.

Pot Life

+15°C	+20°C	+30°C
60 minutes	40 minutes	20 minutes

Drying time

	+15°C	+20°C	+30°C
Ready for foot traffic	2 days	1 day	12 hours
Lightly Serviceable	3 days	2 days	1 day
Fully Serviceable	10 days	7 days	5 days

Necessary Tools

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

INSTRUCTIONS FOR USE

Primer + Coating

1-2 x PRIMER + 1x EPOLIT S (A+B+C)

Material Consumption

About 5,0–5,5 kg/m² for floor thickness of 3mm.
(The values are not in effect for porous, uneven, too blotting bases and material scattering).

Substrate Quality

The substrate must be clean, dry (the moisture content below 4%) and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. The new concrete substrate must be at least 28 days old, a minimum degree of roughness, compact, even (max. Unlevelling \pm 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 strength (minimum 30 N/mm²) with a minimum pull off strength of 1.5 N/mm². There are further information on conditions and methods of base preparation in standards SRPS U.F.2.033 and SRPS U.F.2.034 and in our advertising materials.

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 cement 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.

Surface Priming

Primer part A and Primer part B join in a suitable vessel in the delivered mixing ratio and mix by electric stirrer. Immediately after mixing 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) priming is sufficient in one coating with the consumption of primer from 0,25-0,30 kg/m². Prepared primer should be built-in in the course of half an hour.

Apply the coating after the priming coat has dried tack-free all over.

Final Layer Making

Prior to mixing stir Epolit S part A mechanically in the original pail, and after that join with Epolit S part B in a vessel of a corresponding volume (30-40 l) and mix it by electric stirrer (300-400 rpm). While mixing slowly add Epolit S part C and homogenize the mass. The whole process of homogenization lasts several minutes. The parts should be obligatorily mixed in the above mentioned the mixing ratio i.e. in the mixing ratio they are packed in. After mixing the mass is poured on the concrete surface, spread evenly by means of a notched trowel (blade size: 4mm or 5mm) to the thickness of 3mm. Roll immediately in two directions with a spiked roller to ensure even thickness and to remove entrapped air. Final layer application in a not-suggested thickness may have consequences to the functionalism and aesthetic appearance. The mass that was in the vessel should always obligatory be mixed before pouring. The mixed mass is built-in in the course of half an hour.

CAUTION

Freshly applied layer of Epolit S must be protected from humidity, condensation, water and heavier chemical and mechanical loads, 7 days at least. While application indoors, it is obligatory to provide good ventilation.

Tool Cleaning

Tools should be washed in solvent 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 physical-chemical 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.