

Technical Information Sheet

Rofaplast® BG PUR Primer / Sealer

Art.No. 0970

Solvent-based, unpigmented, single component polyurethane impregnation for cementitious substrates.

Property profile:

Rofaplast BG is a solvent-based polyurethane sealant and impregnation agent for strengthening sanding concrete and screed surfaces. It is used to reduce abrasion and improve maintenance properties. Rofaplast BG is highly resistant to thinned acids and lyes, oils, fats and de-icing salts.

Range of use:

To be used for the impregnation and sealing of porous, cementitious, solvent-resistant substrates such as concrete, screed and render on floor and wall areas in warehouses, garages, parking garages and industrial facilities that are not exposed to weathering.

Characteristic data of the product:

Density (20°C):	0.98 g/cm ³
Viscosity (20°C):	60 mPas
Solid content:	48% by weight
Colour:	yellowish brown
Drying time:	12 hours (foot traffic) 7 days (full loading capacity)
Light resistance:	yellows
Abrasion resistance:	0.05 g, (according to Taber, 1000 g load, roll CS 17 at 1000 rev.)
Degree of gloss:	light gloss to matt

Substrate:

The surfaces to be treated must be clean, dry and absorbent. Remove soiling, surface laitance and silicate layers, substances with a parting effect such as e.g. oils, grease, paraffin, abraded rubber, parting and curing agents, the remains of coatings, etc. are to be removed by steel ball jetting. Remove dust thoroughly afterward with an industrial vacuum cleaner. The substrate must be dry. The moisture content in the exterior, 2 cm thick layer should not exceed 4% by weight (see also DBV Code of Practice – "The use of cold-

cured resins in concrete construction" – part 2). Floor slabs must be protected in a suitable manner against capillary rising moisture.

Working instructions:

Rofaplast BG is applied generously with a brush or rubber wiper and worked into the substrate well. After initial hardening in approx. 3-4 hours, the second coat can be applied. The third and each following coat should be applied at the earliest in 12 hours (after the solvent has evaporated), but 24 hours at the latest. On very dense substrates, Rofaplast BG is diluted with V 101 thinner. The thinning ratio for the primer coat is up to 1:1, for intermediate coats 5:1 and the final coat is applied undiluted.

The thinning ratio must be chosen so that the first two coats are absorbed by the substrate. On highly absorbent substrates, Rofaplast BG is worked undiluted.

When working indoors, ensure adequate ventilation.

Working guidelines:

The ambient temperature and that of the substrate should not fall below +8°C. The reaction with humidity and resulting hardening are accelerated at higher temperatures, delayed at lower temperatures.

The formation of condensation on the surfaces to be coated which often occurs when the temperature falls below the condensation point temperature considerably reduces adhesion. For multiple-layered construction, a subsequent coat should never be applied if the temperature of the substrate is less than or equal to the condensation point temperature. For this reason, the condensation point temperature should be at least 3°C below the temperature of the substrate to be coated. (To determine the condensation point temperature, relative humidity and the ambient temperature are measured with e.g. a thermohygrometer and determined with the aid of a condensation point table.)

If the temperature relationship is unfavourable, the use of heating equipment is required.

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Condensation point table:

Air temp	Condensation point temperature ¹⁾ in °C with a relative humidity of:															
°C	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	98%	99%
30	10.5	12.9	14.9	16.8	18.4	20.0	21.4	22.7	23.9	25.1	26.2	27.2	28.2	29.1		
29	9.7	12.0	14.0	15.9	17.5	19.0	20.4	21.7	23.0	24.1	25.2	26.2	27.2	28.1		
28	8.8	11.1	13.1	15.0	16.6	18.1	19.5	20.8	22.0	23.2	24.2	25.2	26.2	27.1		
27	8.0	10.2	12.2	14.1	15.7	17.2	18.6	19.9	21.1	22.2	23.3	24.3	25.2	26.1		
26	7.1	9.4	11.4	13.2	14.8	16.3	17.6	18.9	20.1	21.2	22.3	23.3	24.2	25.1		
25	6.2	8.5	10.5	12.2	13.9	15.3	16.7	18.0	19.1	20.3	21.3	22.3	23.2	24.1		
24	5.4	7.6	9.8	11.3	12.9	14.4	15.8	17.0	18.2	19.3	20.3	21.3	22.3	23.1		
23	4.5	6.7	8.7	10.4	12.0	13.5	14.8	16.1	17.2	18.3	19.4	20.3	21.3	22.2		
22	3.6	5.9	7.8	9.5	11.1	12.5	13.9	15.1	16.3	17.4	18.4	19.4	20.3	21.3		
21	2.8	5.0	6.9	8.6	10.2	11.6	12.9	14.2	15.3	16.4	17.4	18.4	19.3	20.2		
20	1.9	4.1	6.0	7.7	9.3	10.7	12.0	13.2	14.4	15.4	16.4	17.4	18.3	19.2		
19	1.0	3.2	5.1	6.8	8.3	9.8	11.1	12.3	13.4	14.5	15.5	16.4	17.3	18.2		
18	0.2	2.3	4.2	5.9	7.4	8.8	10.1	11.3	12.5	13.5	14.5	15.4	16.3	17.2		
17	-0.6	1.4	3.3	5.0	6.5	7.9	9.2	10.4	11.5	12.5	13.5	14.5	15.3	16.2		
16	-1.4	0.5	2.4	4.1	5.6	7.0	8.2	9.4	10.5	11.6	12.6	13.5	14.4	15.2		
15	-2.2	-0.3	1.5	3.2	4.7	6.1	7.3	8.5	9.6	10.6	11.6	12.5	13.4	14.2		
14	-2.9	-1.0	0.6	2.3	3.7	5.1	6.4	7.5	8.6	9.6	10.6	11.5	12.4	13.2		
13	-3.7	-1.9	-0.1	1.3	2.8	4.2	5.5	6.6	7.7	8.7	9.6	10.5	11.4	12.2		
12	-4.5	-2.6	-1.0	0.4	1.9	3.2	4.5	5.7	6.7	7.7	8.7	9.6	10.4	11.2		
11	-5.2	-3.4	-1.8	-0.4	1.0	2.3	3.5	4.7	5.8	6.7	7.7	8.6	9.4	10.2		
10	-6.0	-4.2	-2.6	-1.2	0.1	1.4	2.6	3.7	4.8	5.8	6.7	7.6	8.4	9.2		

¹⁾ Approximations may be interpolated linearly.

Tools and cleaning:

Brushes, lambskin roller, rubber wiper.

Tools and any splashes should be cleaned immediately while the material is fresh with V 101 thinner.

After hardening, cleaning is no longer possible. The material can only be removed mechanically.

Packaging, application rate and storing:

Packaging: 5 kg and 30 kg tin containers

Application rate: The amount required is dependent on the state of the substrate and amounts to:
 for priming: approx. 0.2 kg/m²
 for impregnation: 0.2 - 0.4 kg/m²
 for sealing: 0.4 - 0.6 kg/m²

Shelf-life: Rofaplast BG is pre-packaged under nitrogen and can be stored for 6 months in original, closed containers. Opened containers must be used within a few days (2-3 working operations).

Safety, ecology, disposal:

Further information concerning safety during transport, storage and handling as well as for disposal is found in the latest Safety Data Sheet.

GISCODE: PU 50

The statements above are compiled from our field of production and according to the latest technological developments and application techniques. Since application and working are beyond our control, no liability of the producer can be derived from the contents of this information sheet.

Any statements made beyond the contents of this information must be confirmed in writing by the producer.

In all cases, our general conditions of sale are valid.

With the publication of this Technical Information Sheet all previous editions are no longer valid.