

Hardfloor varnish PR

Water-Borne, nanomolecular, hybrid polyurethane impregnation primer



HARDFLOOR VARNISH PR is a hybrid, aliphatic polyurethane impregnation primer with high penetration, specially designed for pressed cement screed and cementitious substrates of floors and walls. It protects against moisture ingress, while reinforcing the cohesion of the surfaces. It maintains the natural appearance of pressed cement screed, without significantly darkening its shade or creating a wet-look effect after varnish application. Thanks to its unique composition, it creates a durable, transparent film, offering excellent mechanical and chemical resistance, ensuring high stability and durability even on fragile surfaces. Its water-based formulation is environmentally friendly, as it contains no solvents and has low VOC levels, contributing to safer and more sustainable application.

Field of Application

It is suitable for:

- Pressed cement screed surfaces and cementitious substrates on floors and walls intended to be coated with polyurethane varnishes HARDFLOOR VARNISH AK-W and HARDFLOOR VARNISH PU 2KS
- Sealing porous surfaces and concrete floors to prevent dust formation
- Stamped floors intended to be coated with HARDFLOOR VARNISH AK-S
- Natural stones, bricks, tiles and masonry
- Terraces exterior floors and coatings
- Warehouses, garages and areas with heavy traffic

Properties – Advantages

- Moisture protection absorbency regulation: Protects surfaces against moisture ingress preserving their durability and aesthetics, while stabilizing their absorbency.
- Retains natural appearance: Maintains the natural look of pressed cement screed, without significant darkening or wet-look effect after varnish application.
- Suitable for exterior use: Resistant to yellowing, providing long-term protection for outdoor applications.
- Mechanical and chemical resistance: Exhibits very good mechanical and chemical resistance, ensuring long-term system durability and stability.
- Environmentally friendly: Water-based, single-component, solvent-free and low in VOCs making it safe for both the user and the environment.

Physical & Technical Characteristics

Form	Liquid
Color	Transparent after drying
Density	1.0 ± 0.2 kg/L

Application Method – Instructions

a. Surface Preparation

The surface must be solid, clean, dry and free from rising moisture, dust, oils, grease, lime, tar and loose materials that may affect adhesion. Any weak points or old coatings must be carefully removed using appropriate mechanical or chemical methods. Depending on the type of substrate, suitable mechanical treatment may be required to smooth out irregularities, open pores and create optimal bonding conditions.

b. Application

HARDFLOOR VARNISH PR is applied in one coat using a roller, brush, or airless spray, diluted 25-30% by weight with water.

Dilution

Dilute 25-30% by weight with water.



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Technical Specification

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Version Number: 1st

Application Conditions

To ensure optimal product performance, the substrate moisture must be less than 4% and the relative atmospheric humidity (RH) must not exceed 70%. The air and substrate temperature must range between +10°C and +35°C.

Drying – Recoating

Drying at 25°C

Touch dry: 1 hour

Recoat: 24 hours

Full cure: 7 days

At lower temperatures or under increased humidity conditions drying times are extended. Avoid applications at temperatures below +10°C and above +35°C.

Recommendations

- Do not apply under humid conditions or if wet weather is expected during the curing period
- Do not apply on surfaces previously treated with water repellents (e.g. silicone or siloxane-based) or waxes
- On natural stones it is recommended to conduct a test application to evaluate the result
- Between coats carefully remove any dust that has settled on the surface

Coverage

Approximately 15-20 m²/L per coat

Shelf Life – Storage

Shelf life up to 24 months from production date if stored in the original sealed container in a dry shaded environment at +5°C to +35°C. Protect from frost. Reseal tightly after use.

Tool Cleaning

Tools should be cleaned with water immediately after use.

Waste Management

Do not dispose leftover paint with household waste or in the sewage system. Dispose of empty packaging according to local regulations. Seek advice from local authorities or national waste disposal services.

Volatile Organic Compounds (V.O.C.)

The EU maximum VOC content limit (Directive 2004/42/EC) for this product [Category A/h “Primers” Type wb] is 30 g/L (2010). The ready-to-use product contains a maximum of 29 g/L.

Packaging

Available in containers of 1 kg, 3 kg and 10 kg

Safety Instructions

For instructions on safe handling, see the container label. For detailed instructions on the hazards regarding storage, disposal, and safe use, please refer to the latest Safety Data Sheet which contains ecological, toxicological and other data on safety when handling the product. Poison Center for GREECE: 210 7793 777 / for CYPRUS 1401..

All details, technical data, advice and information provided in this manual are the result of laboratory measurements, numerous tests, long-term research, multiple technical applications, and many years of experience. This information and specifications should be considered as recommendations, as there may be discrepancies between them. The company tries to ensure the accuracy of the information provided, but product specifications are subject to change without notice and may differ from those shown. In practice, differences in materials, substrates and application conditions can affect the suitability of materials for the specific use and working conditions. No liability whatsoever can be established against the company on the basis of the information, written instructions or any other form of instructions provided herein. It is the responsibility of the user to confirm that the material is suitable for the intended use, and consequently, the user is solely responsible for the results obtained from the use of the product. Moreover, the Company is not responsible for normal wear and tear or damage caused by environmental or other improper conditions. The limitations and conditions of the disclaimer apply in line with the applicable legislation. The company maintains a Technical Support Department, which is the only one responsible for providing technical advice and solutions to problems. Requests to the Technical Support Department are addressed and answered only in writing. To access the latest version of the Technical Data Sheet, which replaces all previous versions, please visit our official website at www.vernilac.gr.

