

Coating technology

NATURAL STONE COVERING RESIN PU 1K

- > single component
- > transparent and lightfast
- > seamless
- > solvent-free



Product description

Single component, solvent-free, dries in contact with air humidity and resistant to yellowing polyurethane resin for the production of natural stone carpet coverings. In combination with Murexin marble pebbles, the binding agent forms a frost-dew cycle resistant, abrasion-proof, UV-resistant, non-slip surface after hardening.

Indoors and outdoors for decorative, porous natural stone carpet coverings in combination with Murexin marble pebbles Colorit coarse MG 24. Wide application spectrum in private, public and business areas, in particular terraces, pergolas, areas around pools, reception halls, living areas as well as sales, exhibition and presentation areas.

Delivery format

Container	Outer packaging	Pallet
6.25 KG / BLE	-	66 BLE
1.25 KG / BKA	4	240 BKA

Storage

Can be stored frost-free, cool, and dry on wooden shelves in the unopened original container for 180 days

Processing

Recommended tools

Electric agitator, suitable mixing vessel, smoothing trowel, trowel, long smoothing trowel.

Mixing

The desired colour mixture of marble pebbles is mixed at the given mixing ratios with natural stone carpet resin PU 1K. The binding agent is poured into the mixing vessel over the marble pebbles and thoroughly mixed with a slow running agitator (approx. 300 rpm). Then the mixture is decanted into a clean mixing vessel and mixed again.

The ratio of PU 1K to marble pebbles MG 24 is best matched with the specific surface of the marble pebbles MG 24. In exposed locations and for raised loads, we recommend increasing the proportion of binding agent to 1.4 kg.

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Processing

The mixed product is applied with a suitable tool.

For vertical surfaces, natural stone carpet resin PU 1K is mixed with approx. 7-8% suspending agent SN 1K and applied to the coating carrier without marble pebbles using a trowel.

Next, the natural stone carpet resin PU 1K mixed with suspending agent SN 1K is mixed with the marble pebbles MG 24 at a 1:10 mixing ratio (e.g.: 1.25 kg PU 1K + 7-8% SN 1K : 12.5 kg MG 24) applied wet-on-wet and smoothed.

During processing, we recommend intermediate cleaning of the tools with MUREXIN Epoxy Cleaner EP V4.

Post-treatment:

A thin-layered topcoat PU 1K is possible via a micro paint roller (bracing grid).

For cleaning the hardened surfaces, we recommend products from the Murexin cleaning program.

Loose dirt can be vacuumed with a vacuum cleaner. Dirt in the pores can be loosened by brushing the surface in combination with suitable cleaning agents and removed via wet vacuum cleaner.

Technical data

Density	1.10 kg/m ³
Colour	transparent
Consumption	per m ² and mm: 2 kg marble pebbles : 0,1 binding agent; per m ² at 6 mm layer thickness: 12,5 kg marble pebbles : 0,625 kg binding agent
Mixing ratio	25 kg MG 24 : 1,25 kg PU 1K
Processing time	30 - 45 Min.
Recoatibility	after approx. 24 hrs

Substrate

Suitable substrates

Requirements for mineral substrates:

The substrate must be dry, stable and free of separating, intrinsic and dissimilar substances, pursuant to the IBF Directive - industrial substrates of reaction resin. Residual moisture max. 4 % by weight, measured with the CM device. Substrate temperature greater than 12 °C and 3 K above dew point; adhesive tensile strength on average 1.5 N/mm²; adhesive tensile strength smallest single value 1.1 N/mm²

Product and processing instructions

Material information:

- If processing outside the ideal temperature and/or humidity range the material properties could change markedly.
- Bring the materials to the proper temperature before processing!
- In order to maintain the product properties, do not add any foreign materials!
- Water dosing quantities or dilution information must be strictly adhered to!
- Check tinted products for colour accuracy before application!
- Colour consistency can only be guaranteed within the same batch.
- The colour formation is significantly impacted by the environmental conditions.
- Carefully open the container and shake the product well!
- Use a scale to mix partial quantities!
- Reactive resins are to be processed as quickly as possible after mixing.
- Water-based systems have only a limited shelf life after dilution with water, which is why quick processing is recommended.

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- With water-based systems, the water quantity specified by the manufacturer may only be added after stirring components A and B.
- Always allow primer to dry/harden well.
- Observe the odours caused by solvent-based systems.
- At a constant temperature of + 20 °C, applied reactive resins can be walked on after 1 day, are mechanically resistant after 3 days and chemically resistant after 7 days.
- With UV loads and the influence of certain chemicals, the surface can discolour or yellow, which does not impair the functionality and usability of the coating.
- Residual quantities which are not needed and which have already been mixed must be mixed with quartz sand (smoke generation).

Environmental information:

- Do not process at temperatures below +5 °C!
- The ideal temperature range for the material, substrate and air is + 15 °C to + 25 °C.
- The ideal relative humidity range is 40% to 60%.
- Increased air humidity and/or lower temperatures may prolong the drying, setting and hardening time, while lower air humidity and/or higher temperatures will speed it up.
- Ensure adequate ventilation during the drying, reaction and hardening phase; avoid draughts!
- Protect against direct sunlight, wind and weather!
- Protect adjacent components!
- The substrate temperature must be at least 3 K above the dew point. (The corresponding dew point temperature can be determined via the prevailing relative air humidity and the air temperature from a dew point table.)
- Protect against contaminants (dust, insects, foliage etc.) during the reaction phase!
- If the time window of 48 hours is exceeded between the individual work steps, intermediate sanding is required!
- We recommend systems which are resistant to yellowing in areas exposed to UV.

Tips:

- We recommend using a test surface first or a small area for initial, small-scale testing.
- Please heed the product data sheets of all MUREXIN products used in the process.
- Keep a genuine original container of the respective batch for later repair work.
- To avoid sediments and visible transitions between work tracks, these are to be processed offset for longer lengths!
- Abrasive, scraping mechanical loads cause wear marks.
- Plasticisers from vehicle tyres can cause discolourations.
- For defined structures in terms of anti-slip classes, fire classes and decorative surface designs, please refer to the "Service" area on www.murexin.com.

The information provided reflects average values that were obtained under laboratory conditions. Due to the use of natural raw materials, the indicated values of individual deliveries may vary slightly without impacting the product suitability.

Safety instructions

Limiting and monitoring exposure

Personal protective equipment:

General protection and hygiene measures:

- Keep away from foodstuffs, beverages and feedstuffs.
- Take off contaminated, impregnated clothing immediately.
- Wash your hands before taking breaks and when finishing work.

Breathing protection:

- Use a breathing filter device for short term or minor exposure; for more intensive or longer exposure, use a self-contained breathing apparatus.

Hand protection: protective gloves.

Glove material

- The selection of a suitable glove depends not only on the material, but also on other quality properties, which may vary from manufacturer to manufacturer. As the product is a preparation made up of many materials, the resistance of glove materials cannot be predicted in advance and must therefore be checked before use.

Penetration time of the glove material

- The precise penetration time is to be found out from the protective glove manufacturer and complied with.

Eye protection: Protective goggles recommended when decanting.

Body protection: protective clothing.

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Please observe the current, technical, national and European standards, guidelines and data sheets regarding materials, substrates and the subsequent construction. Please contact us if you have any reservations or doubt.

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This version is rendered invalid if a new version is released. The most recent data sheets, safety data sheets and the terms and conditions are available online at www.murexin.com.