

Vapour-Permeable Floor Seal

UZIN EP 21

Vapour-permeable, epoxy resin seal that can be diluted with water, for use on interior mineral substrates

Description:

UZIN EP 21 is a solvent-free, epoxy resin floor seal for 0.05 – 0.15 mm application that can be diluted with water and has a vapour-permeable surface. Gives unattractive or dusting, new or old floors a visually appealing, resistant and easy-care surface.

Due to its vapour-permeable surface finish, it is particularly suitable for use as a durable, seamless and pigmented finish on cement-based substrates with high residual moisture up to 5.0 CM-% and substrates with no incorporated damp-proof membrane, e.g. on cement- and calcium sulphate-screeds, concrete and UZIN cement levelling compounds in:

- ▶ storage rooms and cellars
- ▶ garages, etc.

Product Properties / Benefits:

Pigmented, 2-component, epoxy resin seal produced by mixing Resin A and Hardener B and diluting with 10 – 15 % by weight of water. Resistant to mechanical loading and abrasion, resistant to water, benzene, oils, detergents and chemicals.

- ▶ Vapour permeable
- ▶ Good covering capacity
- ▶ Low odour
- ▶ Abrasion resistant
- ▶ Chemical resistant
- ▶ Easy to clean
- ▶ Solvent-free

On very smooth surfaces, can be installed as a slip-resistant finish by scattering the first coat with fire-dried quartz sand.

Note: When exposed to strong light, can become slightly chalky, therefore not suitable for areas with high visual demands, e.g. in domestic locations.



Technical Data:

Packaging:	metal combi-can
Packsize (A + B):	5 kg
Shelf life:	min. 12 months
Colour:	available in 5 standard and 13 special (on request) colours See the UZIN Coatings colour-card
Hazard features:	see "Protection of the Workplace and Environment"
Mixing ratio:	A : B = 4,22 : 0,78 parts by weight
Working temperature:	min. 10 °C at floor level Do not apply at below 10 °C The product will not set
Pot life:	60 – 80 minutes*
Consumption**:	approx. 150 – 200 g / m ² per coat
Touch dry:	after approx. 8 hours*
Set to foot traffic:	after 8 – 12 hours*
Further applications:	after 8 – 12 hours* Apply the next coat within 24 hours
Chemical resistant:	after 7 days*
Final strength:	after 5 – 7 days*

* At 20 °C and 65 % relative humidity.

** Standard values for which no liability can be accepted as the consumption is highly dependent on the surface condition.

Subfloor Preparation:

The substrate must be resistant to compressive and tensile forces, surface dry, clean and free from materials that would impair adhesion.

Remove soft or weakly bonded surface sections by abrading. Roughen smooth and dense surfaces (concrete) by shot-blasting. Burn off contamination and then thoroughly abrade or shot-blast. Repair any holes and cracks with reaction resin mortar made from UZIN EP 10 Epoxy Primer and UZIN XS Special Fillers (mixing ratio approx. 1:10) or with UZIN NC 182 low-slump smoothing compound. Thoroughly clean the surface using an industrial strength vacuum cleaner. For other substrates, please request our technical advice.

Application:

1. Before use, allow the combi-can to come to room temperature. Punch several times through the plastic plug and the floor of the upper container (Hardener B), e.g. using a long screwdriver. Allow the hardener to drain completely into the lower container (Resin A). Remove the empty upper container and thoroughly blend the components with suitable mixing equipment (e.g. UZIN basket mixer). Then add 10 – 15 % of clean, lukewarm water and mix thoroughly once again (dilution: first coat = primer with 15 % by weight = 750 ml of water; second coat with 10 – 15 % by weight = 500 – 750 ml of water). Decant the mix into an oval bucket and mix again briefly. When mixing, ensure that the material around the floor and walls of the bucket is incorporated and well mixed.
2. Immediately apply a thin, even coat of UZIN EP 21 Floor Seal onto the substrate using the UZIN nylon fibre roller. At edges, UZIN EP 21 can be applied with a radiator brush. Work quickly and within the stated working time. Ensure a fully sealed coat. Observe the limited pot-life.
3. Clean tools immediately after use with UZIN VE 124. Hardened material can only be removed by mechanical means.
4. Setting time: set to foot traffic and ready for second coat, or application of epoxy seal, after 8 – 12 hours. Apply the second coat within 24 hours.

Colour Range:

Standard Colours

Colour No.	Colour	Article No.
7038	Agate grey	33143
7023	Concrete grey	33144
7035	Light grey	33145
5014	Pigeon blue	33151
1002	Sand yellow	33152

Special colours on request.

Consumption:

According to surface absorbency and condition, consumption for roller application: 150 – 200 g/m² of undiluted material per coat. Dependent on the structure of the surface, higher consumption is possible, e.g. on surfaces fully grit-blinded with UZIN Fine Sand 0.8, consumption is up to 450 g/m² of undiluted material.

Important Notes:

- ▶ Shelf life minimum 12 months in original packaging when stored in relatively cool, dry conditions. In cold conditions, the material can thicken and become stringy.
- ▶ Minimum floor temperature 10 °C and 3 °C above dew-point. Optimum application temperature is 20 °C. Maximum relative humidity (RH) is 85 %.
- ▶ Use neutral or slightly alkaline maintenance and cleaning materials.
- ▶ Substrate residual moisture content must not exceed 5.0 CM-%; refer to VOB Part C, DIN 18 363 Para. 3.
- ▶ Concrete substrates must be at least 28 days old.
- ▶ In accordance with DIN 1048, Part 2, the surface adhesive tensile strength should average at least 1.5 N/mm². The minimum single value must not be below 1.0 N/mm². In areas of heavy loading, e.g. for fork-lift truck traffic, the average value should be 2.0 N/mm² and the minimum single value should be at least 1.5 N/mm².

Protection of the Workplace and the Environment:

Solvent-free. Non flammable. Comp. A: Irritant. Contains amine hardener. Comp. B: Irritant. Contains epoxy resin. Both components: May cause irritations to eyes, skin or respiratory system. May cause sensitisation by skin contact. Use barrier cream, protective gloves and safety-goggles. Provide good ventilation. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In liquid form, "hazardous to the environment", therefore do not allow into drains, water courses or landfill. Observe safety information on product label as well as safety data sheet. Once cured, has neutral odour and presents no physiological or ecological risk.

Disposal:

Do not allow into drains, water courses or landfill. Empty, scraped out and drip-free metal containers are recyclable [Interseroh]. Containers with unhardened residues, as well as collected, unhardened product residues, are Special Waste. Mixed and hardened product residues, as well as containers with mixed, hardened residues are Construction Waste.