Premium Seal Coat

UZIN EP 20

Water-based, 2-component epoxy seal coat

MAIN APPLICATION FIELD:

Suitable as a wear-resistant, coloured and seamless sealant for cement- and calcium sulfate-bound substrates as well as magnesite. Can be used as a primer and smooth or slip-resistant sealant. By adding UZIN Anti-Slip Grains or UZIN Quartz Sand 0.8, the slip class of R10 or R12 can be adjusted.

UZIN EP 20 is, depending on the application, well suited for medium or heavy duty interior substrates, especially for:

- warehouses
- storerooms
- cellar rooms
- garages

SUITABLE ON / FOR:

- cementitious screeds
- concrete
- calcium sulphate screeds
- magnesite
- epoxy resin moisture barriers
- UZIN NC 750, UZIN NC 770 or UZIN NC 780







PRODUCT BENEFITS/FEATURES:

UZIN EP 20 Industrial Floor Sealer is a silky-matt, solventfree, coloured and water-dilutable floor sealant with a layer thickness of 0.1 - 0.25 mm on base epoxy resin. Provides unsightly or dusty raw and old floors a visually attractive, very resistant and easy to clean surface.

- easy to apply
- water vapour permeable
- resistant against chemicals

TECHNICAL DATA:

Packaging	plastic bucket (A) + metal bucket (B)
Pack size	10 kg (A+B = 8.4 kg + 1.6 kg)
Shelf life	min. 12 months
Mixing ratio	8.4 : 1.6 parts per weight
Color	agate grey or concrete grey
Consumption	100 - 250 g/m² per layer**
Working time	approx. 25 minutes*
Ready for foot traffic	after approx. 16 hours*
Minimum application temperature	10 °C at ground level
Slip resistance	R9, R10, R12
Dust-dry	after approx. 2 hours*
Reworkable	after approx. 16 hours*
Final strength	after 5 - 7 days*
Full mechanical resilience	after 3 days*
Chemically resistant	after 7 days*
Fire reaction	Bfl-s1
*At 20 °C and 65% relative humidity	1

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**Standard values without liability, consumption depends on the substrate condition.



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SUBSTRATE PREPARATION:

The substrate must be pressure-resistant and dimensionally stable, sufficiently dry, clean and free from materials that would impair adhesion. Remove old adhesive and filler layers completely down to the load-bearing substrate by milling, grinding.

The following limit values apply for substrates: CT (cement screed) \leq 5 CM-%; CA (calcium sulfate screed) \leq 0.3 CM-%.

Concrete strength classes: C30/37 \leq 5 CM%; C35/45 \leq 3 CM%.

Roughen smooth and dense substrates (concrete) by light / gentle shot blasting. Contaminated substrates should be flame-blasted and then thoroughly sanded or shot-blasted. Repair holes and break-outs using reaction resin mortar made of UZIN PE 460 2-Component Epoxy Sealant Primer and UZIN XS Special Filler 3.2 (MV approx. 1 : 10).

Prime DIN-compliant, dry, floating screeds with UZIN PE 360 + and smooth with UZIN NC 750, UZIN NC 770 or UZIN NC 780. UZIN EP 20 can be applied on top without priming.

APPLICATION:

- As a sealant: Allow both components (A + B) to come to room temperature. Mix component A thoroughly. Mix component B well and add to component A. Then mix with an electric mixer (approx. 300 - 400 rpm) for at least 2 minutes. Add a defined amount of water (1st coat: 10 %; 2nd coat: 5 %) and mix again for approx. 1 minute until a homogeneous mixture is obtained. Then pour into a clean container and mix again thoroughly for at least 1 minute.
- 2. As an anti-slip sealant with UZIN Anti-Slip Grain: Apply the first coat as described in point 1 "As a sealant". For the second coat, allow both components (A + B) to come to room temperature. Mix component A thoroughly. Mix component B well and add to component A. Then mix with an electric mixer (approx. 300 400 rpm) for at least 2 minutes. Add UZIN Anti-Slip Grains (1 cup per 10 kg A+B) and mix again for 1 minute. Add a defined amount of water (2nd coat: 5 %) and mix again for approx. 1 minute until a homogeneous mixture is obtained. Then pour into a clean container and mix again thoroughly for at least 1 minute.
- 3. As an anti-slip sealant with UZIN Quartz Sand 0.8: Allow both components (A + B) to come to room temperature. Mix component A thoroughly. Mix component B well and add to component A. Then mix with an electric mixer (approx. 300 400 rpm) for at least 2 minutes. Add a defined amount of water (1st coat: 10%; 2nd coat: 5 %; 3rd coat: 5%) and mix again for approx. 1 minute until a homogeneous mixture is obtained. Then pour into a clean container and mix again thoroughly for at least 1 minute. After applying the 1st coat, immediately sprinkle UZIN Quartz Sand 0.8 (approx. 3 kg/m²) fully-surface and in excess over the entire surface.. After curing, sweep off the loose sand and vacuum. Then apply 2 further coats as described in point 1 "As a sealant".

- 4. Immediately apply an even coat of UZIN EP 20 onto the substrate with the UZIN Nylon Fibre Roller. At the edges, UZIN EP 20 can be applied with a brush. Ensure a fully sealed coat. Pay attention to the limited working time.
- Clean tools with water after use. During application and cleaning, always wear the recommended protective equipment (suitable safety gloves are listed in the safety data sheet at point 8).
- Curing time: Ready for foot traffic and overworkable after approx. 16 hours. Apply second coat within 24 hours. If waiting times exceed 24 hours, roughen the existing layer by means of suitable measures (e.g. sanding). The surface must be made 100% dust-free by subsequent vacuuming and cleaning with damp cloths.

Consumption with roller application is approx. $100 - 250 \text{ g/m}^2$ per coat, depending on the roughness and absorbency of the substrate. When applying UZIN EP 20 in the slip-resistant version, the consumption is $700 - 1000 \text{ g/m}^2$.

Color number 7038 - agate grey - Item No. 162562 Color number 7023 - concrete grey - Item No. 162563

IMPORTANT NOTES:

- A shelf life of 12 months when stored in moderately cool conditions, in the original packaging. Allow containers to come to room temperature before use. When stored in cold conditions, the material may get thick and tough.
- Best applied at 20 °C, with the floor temperature above 10 °C, 3 °C above dew point and relative air humidity below 75%. High temperatures and high air humidity shorten the drying time. Whilst low temperatures and low air humidity lengthen the drying time.
- When used on areas with extreme exposure, a third layer application is recommended. When applying a third layer, 5% of water has to be added.
- When applying on non absorbent substrates, priming with UZIN EP 20 (slightly sanded with quartz sand (< 50 g/m²)) is necessary. Furthermore the added water amount for the first coat is reduced to 5% instead of 10%.
- Slight color deviations are unavoidable due to the raw materials. We therefore recommend applying products from the same batches per floor. The batch number of the product is indicated on the packaging.
- UZIN EP 20 can be used as a primer in system buildup. To apply UZIN EP 20, add 10 % water.
- UZIN EP 20 can also be used as an anti-slip sealant by adding UZIN Anti Slip Grains. See "Application".
- The use of neutral or slightly alkaline cleaners is recommended.

The above information is based on our experience and careful investigations. The variety of associated materials and different constructions and working conditions cannot be individually checked or influenced by us. The quality of your work depends, therefore, on your own professional judgement and product usage. If in doubt, conduct a small test or obtain technical advice. Observe the installation recommendations of the floor covering manufacturer. The publication of this Product Data Sheet invalidates all previous product information. The respective updated version of this datasheet can be found on our website under www.uzin.com | 12/2020

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- Substrate residual moisture content must not exceed 5.0 CM-%; refer to VOB Part C, DIN 18 363 Para. 3. For residual moisture from 2.0 to 5.0 CM-%, prepare with UZIN PE 460 2-component epoxy sealer-primer and obtain technical advice.
- 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.

SEALS OF QUALITY & ECOLABELS:

- Solvent-free
- EMICODE EC 1 PLUS / Very low emission

COMPOSITION:

Polyamine-hardened epoxy resin.

PROTECTION OF THE WORKPLACE AND THE ENVIRONMENT:

Solvent-free. Non flammable. Comp. A: Contains epoxy resin/irritant. Comp. B: Contains amine hardener/corrosive. Both components: May cause irritations or burns to eyes, skin or respiratory system. May cause sensitisation by skin contact. 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. Use barrier cream, protective gloves and safety-goggles. 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:

Where possible, collect product residues and re-use. Do not allow dispersal into drains, sewers or ground. Empty, scraped and drip-free containers are recyclable. Containers with liquid residue, as well as the liquid product, are classed as Special Waste. Dried product residues are classed as Construction Waste. Therefore collect waste material, mix both components and allow to harden, then dispose as Construction Waste.