Coating technology



# **Epoxy Coating EP 3**



- > high chemical resistance
- > food-safe
- > self-levelling
- > seamless
- > glossy



## **Product description**

Solvent-free, glossy, self-levelling, pigmented floor coating in two components on epoxy resin base with high chemical and mechanical capacity.

For producing coloured, optically appealing living rooms and showrooms as well as for high load industrial floors which are walked and driven on.

#### **Delivery format**

Container	Outer packaging	Pallet
25 KG / BHO	-	16 BHO
10 KG / BLE	-	42 BLE
5 KG / BKA	-	80 BKA
2 KG / BKA	-	100 BKA

#### Storage

Can be stored frost-free, cool, and dry on wooden shelves in the unopened original container for 365 days

#### **Processing**

#### **Recommended tools**

Slow-rotating electric agitator, suitable mixing vessel, trowel, smoothing trowel, spatula, micro paint roller, hand or surface rake, rubber broom, de-aeration roller.

#### Mixing

Component A and component B are in the relevant correct mixing ratios. A scale must be used to determine partial quantities. Thoroughly mix component A using a slow-rotating electric agitator (approx. 300 rpm), then add component B and continue mixing until a homogeneous, lump-free consistency is reached (approx. 2-3 minutes).

To prevent mixing and/or proportioning mistakes, the mixed material must be decanted into a clean, dry container (repotted) and stirred thoroughly again.

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#### **Processing**

Depending on the application, pour the material onto the pretreated substrate section by section and distribute across the entire surface with a suitable tool.

- Apply filled or unfilled as a coating and deaerate when fresh using a recommended tool
- Apply as a topcoat with a rubber brush and roll
- Mix the mixed coating with thixotropic agent on vertical or inclined surfaces

## **Technical data**

Density Comp. A + B approx. 1.4 - 1.5 g/cm<sup>3</sup> Viscosity Comp. A + B approx. 1,200 - 1,600 mPa\*s

Colour Can be coloured according to RAL colour card, ready-made

stock items: RAL 7032

Consumption approx. 1.4 kg/m² per mm

Mixing ratio A:B = 5:1

Recoatability after approx. 24 hrs
Bending tensile strength (7d) 28 N/mm²
Compressive strength (7d) 79 N/mm²

Temperature resistance short-term dry: 120°C; short-term wet: 90°C; long-term dry:

80°C; long-term wet: 50°C

E-module 6200 N/mm<sup>2</sup> Shore-D 70 - 75

## **Test certificates**

Tested in accordance with (standard, classification ...)

EN 1504-2:2004

## **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 Guideline "Industrial floors made of reactive 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:

- When working outside the ideal temperature and/or humidity range, the material properties may change significantly.
- Bring materials up to temperature accordingly before processing!
- To retain the product properties, no foreign materials may be mixed in!
- Water dosing amounts or dilution specifications must be precisely kept!
- Check coloured products before use for colour accuracy!
- Colour consistency can only be guaranteed within a batch.
- Environmental conditions significantly influence colouring.
- Carefully open the container and shake the product well!

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- Scales must be used for mixing partial amounts!
- After mixing, reaction resins are to be processed as quickly as possible.
- Water-based systems can only be kept for a limited time after dilution with water, which is why processing must be done as soon as possible.
- The amount of water specified by the manufacturer for water-based systems may only be added after components A and B have been mixed.
- Always allow primers to dry well/cure.
- Odour formation of solvent-based systems must be observed.
- Applied reaction resins can be walked on after 1 day at a constant temperature of + 20°C, after 3 days mechanically, and after 7 days are chemically resistant.
- UV exposure and exposure to certain chemicals can cause discolouration or yellowing on the surface, but this does not impair the functionality or suitability for use of the coating.
- The colour designations given (RAL, NCS,...) are to be understood as colour descriptions without binding the colour to the original colour cards.
- If different products (on the same object) are used, absolute colour matching cannot be guaranteed even if the colour designation is the same.
- Observe colour change when adding quartz sand, thixotropic agent, setting agent, or similar!
- 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 material, substrate, and air is +15°C to +25°C.
- The ideal relative air humidity range is between 40% to 60%.
- Increased humidity and/or lower temperatures delay and lower air humidity and/or higher temperatures accelerate drying, setting and hardening.
- Ensure sufficient ventilation during the drying, reaction, and hardening phase; avoid draughts!
- Protect from direct sunlight, wind, and weather!
- Protect adjacent components!
- The substrate temperature must be at least 3 K above the dew point (the prevailing relative humidity and the air temperature can be used to determine the respective dew point temperature by means of a dew point table).
- During the reaction phase protect against impurities (dust, insects, leaves, etc.).
- If the time window of 48 hours between the individual work steps is exceeded an intermediate sanding must be carried out!
- We recommend systems resistant to yellowing in areas with UV loads.
- The substrate must be prepared by means of a suitable mechanical process.

#### Tips:

- We recommend using a test surface first or a small area for initial, small-scale testing.
- Observe the product data sheets of all MUREXIN products used in the system.
- Keep a genuine original container of the respective batch for later repair work.
- To avoid projections and visible transitions of several working paths, these must be processed offset for longer lengths!
- Abrasive, scratching mechanical loads lead to wear marks.
- Contact with car tyres or other softening plastic can lead to discolouration, impressions or softening of the surface.
- For defined superstructures see the "Service" section on www.murexin.com with regard to anti-slip classes, fire classes, and decorative surface design.
- To reduce residual quantities that have already been mixed and are no longer required, we recommend they be mixed with quartz sand in good time!

The information provided reflects average values 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

Please refer to the safety data sheet for product-specific information with regard to composition, handling, cleaning, corresponding actions, and disposal.

Limiting and monitoring exposure

Personal protective equipment:

General protection and hygiene measures:

- Keep away from foodstuffs, beverages, and feedstuffs.
- Immediately take off dirty, soaked clothing.
- Wash hands before breaks and when finishing work.
- Avoid contact with the eyes and skin.

Breathing protection:

- For short-term or low load Breathing filter device: use self-contained breathing apparatus for more intensive or longer exposure. Hand protection: protective gloves.

Glove material

- Butyl rubber

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- Nitrile rubber
- 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.

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: Tightly-sealed safety goggles.

Body protection: work protection 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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