

## EPOXY EXPRESS RESIN EP 90



> quick reacting

### Product description

Low-viscosity, solvent-free, unfilled, quick-reacting epoxy resin hardening system in two components for universal application in construction. The material can be filled with fire-dried quartz sand on-site if required. Indoors and outdoors as primer and scratch filler for subsequent reaction resin systems, for the renovation of screed cracks, for filling hollow screed areas by injection, for the production of mortar mixtures with quartz sand for casting machine foundations and pedestals, as well as for the production of vapour barriers.

#### Delivery format:

Container	Outer packaging	Pallet
3 KG / BKA		80
1,5 KG / BKA		198
8 KG / BKA		33
4 KG / BKA		80

#### 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, smoothing trowel, spatula, roller, rubber broom.

#### 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.

#### Processing:

Depending on the application, pour the material onto the pretreated substrate section by section and distribute across the entire surface with a roller or notched trowel. When using a two-layer moisture barrier,

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apply the first coat without adding quartz sand and allow it to dry. (Consumption approx. 300 g/m<sup>2</sup>). Wait at least 4 hours (but 48 hours at the most) before applying the second coat (consumption approx. 150 g/m<sup>2</sup>) and then immediately spread dry quartz sand 0.6 - 1.2 completely and thoroughly.

- roll unfilled or fill as primer and vapour barrier.

- as scratch filler - 1:1 to 1:2 with QS (0.1 - 0.2 / 0.1 - 0.5 / 0.3 - 0.8 mm) - as trowel applied reactive resin mortar mixing ratio - 1:7 with QS 0.063 - 3.5 mm

## Technical data

Density	Comp. A + B approx. 1.03 g/cm <sup>3</sup>
Colour	transparent
Viscosity	Comp. A + B approx. 3800 mPa*s
Consumption	as primer approx. 0.3 kg/m <sup>2</sup> per application as scratch filler approx. 0.7 kg/m <sup>2</sup> per mm at mixing ratio 1:1 to 1:2 with QS 0.1 - 0.2 mm / 0.1 - 0.5 mm / 0.3 - 0.8 mm as coarse mortar approx. 3 kg/m <sup>2</sup> per cm, mixing ratio 1:7, QS 0.063 - 3.5 mm as vapour barrier approx. 0.45 kg/m <sup>2</sup>
Mixing ratio	A:B = 2:1
Pot life	approx. 25 - 30 min
Recoatibility	after approx. 4 hrs

## Test certificates

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

EN 1504-2:2005

## 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/mm<sup>2</sup>; adhesive tensile strength smallest single value 1.1 N/mm<sup>2</sup>

## 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 and stir the product well!
- Use a scale to mix partial quantities.
- 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.

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## Coating Technology

- 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 the 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!
- In areas with UV loads, we recommend systems resistant to yellowing.
- Adhesive tensile strength: average:  $\geq 1.5$  MPa; smallest single value: 1.1 MPa
- Maximum residual moisture (CM measurement): 4 p.b.w.; for permeable systems: 6 p.b.w.
- The substrate must be pretreated with suitable mechanical processes.

### 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](http://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 the skin.

##### Breathing protection:

- Breathing filter device for short-term or low load; for more intensive or longer exposure use a self-contained breathing apparatus.

##### Hand protection: protective gloves.

##### Glove material

- Butyl rubber
- 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. 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 must be ascertained from the glove manufacturer and observed.

##### Eye protection: tightly closing protective goggles.

##### 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. 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](http://www.murexin.com).