

Coating technology

## EPOXY BASE RASIN EP 70 BM



- > low viscosity
- > universally applicable



### Product description

Low-viscosity, modified, solvent-free, unpigmented, epoxy resin hardening system in two components for universal use in construction.

The material is low in emissions and can be filled with fire-dried quartz sand by the customer as required.

For interior or exterior use. Primer and scratch coat for epoxy coatings, for the repair of screed cracks, filling of grouting screeds with injection procedure, for preparation of mortar mixes with quartz sand for the casting of machine foundations and stayers, as well as for the production of vapour-retarders.

### Delivery format

Container	Outer packaging	Pallet
200 KG / BFA	-	2 BFA
20 KG / BLE	-	16 BLE
10 KG / BKA	-	42 BKA
3 KG / BLE	-	80 BLE
1.5 KG / BKA	-	198 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 mixer, appropriate mixing vessel, trowel, spatula, roller, rubber brush.

#### Mixing

Component A and component B are principally supplied at the proper mixing ratio. Use a scale to determine partial quantities. Stir component A thoroughly by means of a slow-running electric mixer (about 300 rpm), then add component B and stir until a homogeneous, streak-free

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consistency is achieved (about 2-3 minutes).

To prevent mixing and/or ratio mistakes, the mixed material must be transferred to a clean, dry container (re-potted) and thoroughly stirred 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 vapour barrier, apply the first coat without spreading quartz sand and allow it to harden. (application rate approx. 300 g/m<sup>2</sup>). After 12 hours and max. 48 hours, apply the second coat (application rate approx. 150 g/m<sup>2</sup>) and then immediately spread dry quartz sand 0.6 - 1.2 completely and thoroughly.

- roll or smooth unfilled if used as primer and vapour barrier
- as scratch coat - 1:1 to 1:2 with QS (0.1-0.2 / 0.1-0.5 / 0.3-0.8 mm)
- trowelable reaction resin mortar MR - 1:7 with QS 0.063 - 3.5 mm

## Technical data

Density	Comp. A + B approx. 1.1 g/cm <sup>3</sup>
Viscosity	Comp. A + B approx. 420 mPa*s
Colour	transparent
Consumption	as primer approx. 0.3 kg/m <sup>2</sup> per application; as scratch coat approx. 0.7 kg/m <sup>2</sup> pro mm with MV 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, MR 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. 12 hours.

## Test certificates

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

EN 1504-2:2005

## Substrate

### Suitable substrates

Requirements for standard 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 above 12 ° C and 3 K above dew point; tensile strength on average 1.5 N/mm<sup>2</sup>; tensile strength minimum single value 1.1 N/mm<sup>2</sup>

### 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.
- Open the container carefully and mix the product well!
- Use a scale to mix partial quantities!
- Reactive resins must be processed quickly once mixed.
- Water-based systems have limited durability after dilution with water; please process as quickly as possible.
- For water-based systems, the amount of water specified by the manufacturer may only be mixed in after components A and B have been stirred.
- Always allow primers to dry well.
- Solvent-based systems may produce an odour.
- At a steady temperature of + 20 °C, applied reaction resins can be walked on after 1 day, loaded mechanically after 3 days and are chemically resistant after 7 days.
- Discolouration or yellowing can occur on the surface due to UV exposure and the effect of certain chemicals, but this does not impair the functionality and suitability for use of the coating.
- The indicated colouring descriptions (RAL, NCS, ...) are to be understood as colour tone descriptions without a binding guarantee to match the original colour cards.
- When using different products (on the same object), absolute colour matching can not be guaranteed even if the colour tone is the same.
- Please observe that the colour may change with the addition of quartz sand, thixotropic agents or similar materials!
- Any remaining quantities that are already blended must be mixed with quartz sand (smoke may form).

#### Environmental information:

- Do not process in temperatures below +5 °C.
  - The ideal temperature range for the material, substrate and air is + 15 °C to + 25 °C.
  - The ideal humidity range is 40% to 60% relative humidity.
  - 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 respective dew point temperature can be determined by means of a dew point table by applying the relative humidity and air temperature.)
  - Protect against contamination during the reaction phase (dust, insects, leaves, etc.)!
  - If the time window of 48 hours between the individual working steps is exceeded, an intermediate sanding must be carried out!
  - In areas subjected to UV light, we recommend using systems that are resistant to yellowing.
  - Adhesive tensile strength: average  $\geq$  1.5 MPa; smallest single value: 1.1 MPa
  - Maximum residual moisture (CM measurement): 4% by weight; for breathable systems: 6% by weight
  - The substrate must be prepared by means of a suitable mechanical processes.

#### 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.
- In order to avoid build ups and visible transitions from several tracks of application, these should be applied staggered for longer lengths!
- Abrasive, scratching mechanical loads can cause wear marks.
- Contact with car tyres or other plastics containing softeners can lead to discolouration, imprints or softening of the surface.
- Defined constructions with regard to anti-friction classes, fire classes and decorative surface designs can be found in the "Service" section at [www.murexin.com](http://www.murexin.com).
- To prevent temperature changes, odours and smoke, we recommend mixing unused residual quantities with quartz sand as soon as possible!

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

Product-specific information with regard to composition, handling, cleaning, corresponding actions and disposal are found on the safety data sheet.

Limitation and monitoring of exposure

Personal protective equipment:

General protection and hygiene measures:

- Keep away from food, drink and animal feed.
- Take off dirty, soaked clothes immediately.
- Wash hands before breaks and after finishing work.
- Do not breathe in gas/fumes/aerosols.
- Avoid contact with eyes and skin.

Breathing protection:

- Filter A/P2.
- Use a breathing filter device for short-term or low-level exposure; use a self-contained breathing apparatus for intensive or prolonged exposure.

Hand protection: protective gloves.

Glove material

- Nitrile rubber
- Butyl rubber
- Gloves made of PVC.
- Gloves should be selected not only based on the material, but also other quality features which may vary from manufacturer to manufacturer. Since the product is a preparation consisting of several substances, the durability of certain glove materials is not predictable and must therefore be checked before use.

Penetration time of the glove material

- Information about the exact penetration time must be obtained from the protective glove manufacturer and must be heeded.

Eye protection: Tightly sealed 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.

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