**Description and Properties**

KLB-SYSTEM EPOXID EP 727 E is a 2-component, ready-to-use and rapid-setting epoxy-resin emulsion that is manufactured without the use of solvents. EP 727 E is used as a primer prior to application of water vapour permeable coatings. In combination with EP 782 Spachtelgrund and the coating EP 785 HS, a water vapour permeable flooring system can be produced.

KLB-SYSTEM EPOXID EP 727 E is used primarily where an impervious primer is not suitable. This is required where coatings with water vapour permeable systems, e.g. with still too damp and fresh concrete, moisture-sensitive magnesia and similar substrates.

The product hardens by drying of its water content and then by chemical cross-linking to produce a resistant and robust film with good adhesion.

It has a high penetration formula resulting in good wetting of the substrate, creating a base with good adhesion for subsequently applied materials. It reduces absorbency, binds dust and, with a smoothing coat, creates a smooth, sealed surface for a flow-coating.

EP 727 E hardens quickly, within 2 – 7 hours, ready for further coats. The end of the pot-life is not visible. Adhesion to the various substrate types, e.g. concrete, cement screeds, magnesia- and similar screeds, as well as to old synthetic-resin coatings, is excellent. EP 727 E produces a hard film that is physiologically harmless. The hardened product is resistant to water, liquid salt solutions, dilute acids and alkalis. Limited resistance to solvents.

**Product Features**

- ready-to-use formulation
- pleasant to apply
- rapid-drying and rapid-hardening
- no solvents
- excellent adhesion
- water vapour permeable
- easy to use
- protects the environment

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**EP 727 E – page 1**

<table>
<thead>
<tr>
<th>Mixing Ratio</th>
<th>Parts by weight</th>
<th>A : B = 1 : 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parts by volume</td>
<td>A : B = 1 : 3.2</td>
</tr>
<tr>
<td>Application</td>
<td>Temperature</td>
<td>15°C 20°C 30°C</td>
</tr>
<tr>
<td></td>
<td>Time</td>
<td>40 mins. 30 mins. 20 mins.</td>
</tr>
<tr>
<td>Setting</td>
<td>Temperature</td>
<td>15°C 20°C 30°C</td>
</tr>
<tr>
<td>(foot traffic)</td>
<td>Time</td>
<td>5 - 7 hrs. 3 - 4 hrs. 2 - 3 hrs.</td>
</tr>
<tr>
<td>Working</td>
<td>Dilution</td>
<td>ready-to-use formulation</td>
</tr>
<tr>
<td>temperature</td>
<td>Hardening</td>
<td>1 - 2 days for exposure to mechanical forces at 20°C</td>
</tr>
<tr>
<td></td>
<td>Further Coats</td>
<td>after setting, but not later than 48 hours at 20°C</td>
</tr>
<tr>
<td>Consumption</td>
<td>approx. 0.12 – 0.20 kg/m² per coat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>approx. 50 - 83 m² per 10kg unit</td>
<td></td>
</tr>
<tr>
<td>Packaging</td>
<td>Combi-can 10 kg, Combi-Hobbock 25 kg</td>
<td></td>
</tr>
<tr>
<td>Colours</td>
<td>colourless</td>
<td></td>
</tr>
<tr>
<td>Shelf life</td>
<td>12 months (in original sealed container; protect from frost)</td>
<td></td>
</tr>
</tbody>
</table>
Areas of Use

- as a primer prior to application of water vapour permeable flooring with EP 785 HS
- for use on magnesia- and anhydrite- screeds
- for coatings on “waterproof” substrates with high moisture content
- as a colourless, penetrative primer

Flooring Construction

- Shot-blast the substrate and vacuum thoroughly prime with EP 727 E, consumption approx. 0.15 kg/m²
- apply a scratch-coat with EP 782 Spachtelgrund, consumption: approx. 0.7 – 1.50 kg/m². For very porous and rough surfaces, a further trowel-applied coat must be applied as necessary.
- apply a flooring of EP 785 HS or a conductive coating construction with EP 799 conductive primer and EP 785 EL+

Substrate

The substrate to be coated must be level, surface dry, dust-free, have adequate compressive and tensile strength and be free from weakly bonded materials and surface sections.

Materials that will impair adhesion, such as grease, oil and paint residues, must be removed using suitable processes. Please refer to the current editions of the recommendations of the trade associations, e.g. BEB work-sheets KH-0/U and KH-0/S.

The surface to be coated must be mechanically prepared, preferably by shot-blasting. The surface strength must then be at least 1.5 N/mm².

The prepared surface must be carefully primed. Refer to the notes on the Product Information Sheets for EP 782 Spachtelgrund and EP 785 HS. Substrates can often be difficult to assess with regard to required absorbency and it is generally recommended to apply a primer-coat of EP 727 E and then a trowel-coat of EP 782 Spachtelgrund. If the substrate is not primed/coated so as to be fully sealed, bubbles and pin-holes may appear in the flooring due to rising air from the substrate. If in doubt, installation of a test area is recommended.

On old substrate surfaces, prior to mechanical preparation, intensive cleaning should be carried out.

Mixing

The material is supplied in a ready-to-use consistency and must not be further diluted.

With combi-cans, factory-measured material in the precise mixing ratio is provided in one package. The can containing Component B is large enough to accept the total mix quantity. Fully decant Component A into the can of hardener. Blend mechanically with a slow-speed mixer (200 – 400 rpm) and for 2 – 3 minutes until a homogeneous, streak-free, white-ish emulsion is produced. To avoid mixing errors, it is recommended to empty the mixed resin/hardener into a clean container and then mix briefly once again so as to guarantee a completely homogeneous mix.

Application

As with all reaction resins, application should be carried out immediately after mixing.

Application as a primer is immediately after mixing and using a nylon fibre roller. Apply the material in a uniformly thin and fully sealed coat onto the substrate. Avoid pooling and inconsistent thickness. If the substrate has high absorbency, a further coat is recommended.

Check the climatic conditions and, after application, ensure adequate drying and good exchange of air. Do not carry out the application at below 15°C room and floor temperature and/or above 75% relative humidity. The difference between floor and room temperatures must be less than 3°C so that drying is not affected. In the event of a dew-point situation, proper drying cannot take place, there will be drying problems and spots will form.

Cleaning

To remove fresh contamination and to clean tools, use water immediately after use. Hardened material can only be removed mechanically or with VR 33 thinners.

Storage

Store in dry and frost-free conditions. Ideal storage temperature is 15 – 20°C. Before application, bring to a suitable working temperature. Tightly re-seal opened containers and use the contents as quickly as possible. Protect from frost.
Special Notes

The product falls outside the hazardous materials-, operational safety- and transport- regulations for hazardous goods. The relevant notes are in the DIN Safety Data Sheet. Refer to the label notes on the container!

GISCODE: RE 0

Designation of VOC Content
(EU Regulation 2004/42) Maximum Permissible Value 140g/l (2010,II,l/wb) :
Fresh product at the time of application contains < 140 g/l VOC

Technical Data*

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity Components A + B</td>
<td>80 mPas</td>
<td>DIN 53018 (bei 23°C)</td>
</tr>
<tr>
<td>Solids content Components A + B</td>
<td>&gt;35 %</td>
<td>TP OS 3.6/DIN EN ISO 3251</td>
</tr>
<tr>
<td>Flash Point</td>
<td>non-flammable</td>
<td>DIN 51755</td>
</tr>
<tr>
<td>Specific Density Components A + B</td>
<td>1,05 kg/litre</td>
<td>EN ISO 2811-2 (bei 23°C)</td>
</tr>
<tr>
<td>Adhesive Tensile Strength</td>
<td>&gt;1.5 N/mm²</td>
<td>DIN EN 1542</td>
</tr>
</tbody>
</table>

(*values achieved in sampling are average values. Variations from the product specification are possible)

Details are based on our experience and practical testing. We guarantee the perfect quality of our products, but cannot accept responsibility for the success of your completed work as we have no influence on the application and application conditions. It is recommended, in individual cases, to prepare a test surface. In addition, our "General Conditions of Trade" apply. The publication of this, new Data Sheet invalidates all preceded information.

Prüfung


Produktmerkmale

- Standard-Epoxidharz
- Lösungsmittelfrei
- wirtschaftlich
- schwundarm
- universell einsetzbar
- hydrolyse- und verseifungsbeständig

Einsatzbereich

- Grundierungen vor Beschichtungen
- Kratzspachtelungen zum Porenschluss und Ausgleich
- Reparatur-, Ausgleichs- und Unterlagsmörtel
- Montage- und Vergussarbeiten

KLB-SYSTEM EPOXID EP 28

2-K-Epoxidharz

Mischungsverhältnis Gewichtsteile

\[ A : B \quad = \quad 3 : 1 \]

Volumenteile

\[ A : B \quad = \quad 100 : 39 \]

Verarbeitung

Temperatur  
\[ 10°C \quad 20°C \quad 30°C \]

Zeit

\[ 40 \text{ Min.} \quad 25 \text{ Min.} \quad 15 \text{ Min.} \]

Verarbeitungstemperatur

Mindestens 10°C (Raum- und Bodentemperatur)

Härtung

Temperatur  
\[ 10°C \quad 20°C \quad 30°C \]

Zeit

\[ 20 - 24 \text{ Std.} \quad 6 - 10 \text{ Std.} \quad 4 - 6 \text{ Std.} \]

Durchhärtung mechanisch

2 - 3 Tage bis zur mechanischen Beanspruchbarkeit bei 20°C

Durchhärtung chemisch

7 Tage bis zur chemischen Beanspruchbarkeit bei 20°C

Überarbeitbarkeit

Im Nasszustand oder nach Härtungszeit, spätestens jedoch nach 36 Std.

Verbrauch

Grundierung

\[ 0,3 - 0,4 \text{ kg/m}^2 \quad \text{pro Auftrag} \]

Kratzspachtelung

\[ 0,4 - 0,6 \text{ kg/m}^2 \]

Mörtel

\[ 0,15 - 0,3 \text{ kg/m}^2 \quad \text{je 1 mm Dicke} \]

Verpackung

Kombi-Gebinde 10 kg, Hobbock-Kombi 30 kg, Fass-Kombi 200 kg (800 kg Liefermenge)

Haltbarkeit

12 Monate (Originalverschlossen)