

KLB-SYSTEM EPOXID

EP 785 EL+

Low-emission, water vapour-permeable, conductive 2-component epoxy resin emulsion self-levelling coating

Packaging units



Article no.	Packaging	Content (kg)	Units/pallet
AK2741-48	Bucket combo	11.00	30
AK2750-30	Hobbock combo	30.00	12

Product characteristics

Mixing ratio parts by weight	A : B = 1 : 10
Mixing ratio parts by volume	A : B = 1 : 5.6
Processing time	15 °C / 59 °F : 350 min. 20 °C / 68 °F : 30 min. 30 °C / 86 °F : 25 min.
Processing temperature	Minimum 15 °C / 59 °F (room and floor temperature)
Curing time (accessibility)	15 °C / 59 °F : 24 - 36 hrs. 20 °C / 68 °F : 18 - 24 hrs. 30 °C / 86 °F : 14 - 18 hrs.
Curing	2 - 3 days for mechanical load at 20 °C / 68 °F 7 days for chemical resistance at 20 °C / 68 °F
Further coatings	After 18 - 24 hours, but not longer than 48 hours at 20 °C / 68 °F
Consumption	2.6 - 3.0 kg/m ²
Colours	KLB-Standard Colours – see chart. Other colours upon request!
Shelf life	12 months (originally sealed) – Protect from frost!

Product description

KLB-SYSTEM EPOXID EP 785 EL+ is a low-emission, pigmented, electrically conductive self-levelling coating on the basis of a water-emulsified 2-component epoxy resin system with very good flow and smoothing properties.

The special advantage of **KLB-SYSTEM EPOXID EP 785 EL+** is based on its composition resulting in an electrically conductive and, at the same time, water vapour-permeable coating film.

KLB-SYSTEM EPOXID EP 785 EL+ is therefore particularly suitable for coating magnesita. Under certain conditions, new substrates with excessive residual moisture can also be coated. The required application conditions must be well coordinated. Seek advice! In addition, all common substrates that are suitable for receiving a rigid system can of course be coated. The coating system can be used in industrial and commercial areas with medium stress where conductivity is required.

KLB-SYSTEM EPOXID EP 785 EL+ is certified according to the "Indoor Air Comfort Gold" and meets the requirements for a sustainable building certification according to DGNB, LEED or BREEAM. The "Indoor Air Comfort" product certification sets the highest requirements for the emission of volatile organic compounds and meets

not only the German requirements of AgBB or ABG, but also the emissions regulations of many other European countries.

KLB-SYSTEM EPOXID EP 785 EL+ is resistant to aqueous solutions, diluted acids, bases, motor and heating oil. **KLB-SYSTEM EPOXID EP 785 EL+** is not suitable for increased demands to the resistance as well as for permanently wet areas. Due to its formulation, the material is convenient to work with and physiologically harmless and low-emission after curing.

Area of application

- Smooth floors in commercially and industrially used areas. especially in the renovation area on substrates that, from a technical point of view, may not be coated vapour-proof but, at the same time, must be electrically conductive.
- For use on concrete, cement, magnesite and anhydrite screeds.
- On substrates with ascending moisture.

Product features

- ready to use
- electrically conductive
- odorless
- environmentally friendly
- water vapour-diffusible
- matt surface
- low-emission according to AgBB

Technical data

Viscosity - Component A+B	3500	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 84	%	KLB method
Density - Component A+B	1.76	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Compressive strength	> 50	N/mm ²	DIN EN 196/1
Shore-hardness D	80	-	DIN 53505 (after 7 days)
Diffusion resistance rate	1290	-	DIN EN ISO 12572
Diffusion equivalent air layer thickness Sd	(2 mm) 2,6	m	DIN EN ISO 7783-2
Electrical resistance	(in combination with EP 799 Ableitgrund) Approx. 10 ⁶	Ohm	DIN EN 61340-4-1

The values established in tests are average values. Deviations from the product specification may occur.

Included in systems

- [System F9 KLB CONDUCTIVE DIFFUSION LOW-VOC EP EX](#)

Please visit our website to get more information about our KLB systems: www.klb-koetzal.com

Tests

External test certificates are available:

- Certified as low-emission according to "Eurofins Indoor Air Comfort Gold". AgBB-compliant and suitable for recreation rooms.
- Product is compliant with DIN EN 13813: 2003-01.

Note:

Please ask for the tested system build-up!

Build-up of coats

- Test the substrate. Shot-blast and vacuum.
- Prime with **EP 727 E**, consumption approx. 0.140 - 0.160 kg/m².
- Alternatively, apply the base coat **EP 724 E Haftgrund Super** by addition of 10 - 15 % water, consumption approx. 0.200 - 0.400 kg/m².
- Apply a scratch coat with **EP 782 E Spachtelgrund**, consumption approx. 0.6 - 1.0 kg/m², depending on the roughness of the substrate.
- Alternatively, apply a scratch coat with **EP 724 E Haftgrund Super** by addition of 5 % water and 15 - 20 % of quartz sand 0.3/0.8 mm, consumption approx. 1.3 - 1.5 kg/m² (mixture). In the case of highly porous and rough substrates, a further trowel coat may have to be applied.
- Glue in copper bands **KLB-Kupferbänder** for discharge in an imagined grid-pattern in place into the room - every 6 - 8 m, up to 1 - 2 m. Earth connection by an electrician based on VDE regulations.
- Apply a cross-conductible coat with **EP 799 Ableitgrund**, consumption approx. 0.100 - 0.140 kg/m².
- Apply the conductive self-levelling coating **EP 785 EL+** with a toothed trowel (**Toothed blade RS4** or Pajarito 48,) consumption approx. 2.6 - 3.0 kg/m². Vent with a spiked roller.
- Optional: seal with **EP 790 EL+**, consumption approx. 0.150 - 0.180 kg/m².
- For special demands to the electrical conductivity, the entire system sealed with **EP 790 EL+** has to be maintained with **PS 90**.

Substrate

The substrate to be coated must be even, dry, free of dust, sufficiently resistant to tension and compression as well as be free from weakly-bonded components or surfaces. Materials impairing adhesion such as grease, oil and paint residues should be removed with suitable measures. Observe the information issued by the trade associations, e.g. the most recent versions of BEB worksheets KH-0/U and KH-0/S. The substrates to be coated should be prepared mechanically, preferably by shot-blasting. The prepared area must be primed carefully. Please note the product information of **EP 727 E**, **EP 782 E Spachtelgrund**, **EP 799 Ableitgrund**, **EP 785 EL+** and **EP 790 EL+**. It is often difficult to judge the necessary pore-free condition of substrates. It is therefore generally recommended that the primer **EP 727 E** be applied with an additional coat **EP 782 E Spachtelgrund**. If in doubt, we recommend processing a sample area.

Mixing

Combo-packaging will be supplied in the correctly measured mixing ratio. The package of Component B has sufficient volume for the entire packaging unit. Empty all of component A into the hardener compound B. Blend with a slow speed mixer (200 - 400 r/pm) for at least 2 - 3 minutes until a homogeneous, streak-free compound forms. To prevent mixing errors, empty ("repot") the entire resin/hardener mixture into a clean container and mix it once again briefly to ensure complete homogenisation.

Processing

Process the material immediately after mixing and spread it over the prepared surface with a toothed trowel (e.g. **Toothed blade RS4** or Pajarito 48) in a uniform layer. The product is adjusted for optimum defoaming, however, rolling with a spiked roller is recommended to improve the wetting of the substrate, to optimise levelling and to remove remaining air bubbles. To work seamlessly, always work "fresh-in-fresh".

Processing time max. 30 minutes at 20 °C / 68 °F (see chart “Processing time”).

Note: end of pot-life is not visible!

Important: water vapour-permeable coatings are less easy to clean due to their surface structure. To improve cleanability, a coloured sealing layer with **EP 790 EL+** can be applied. Furthermore, it is possible to apply an antistatic care emulsion, e.g. **PS 90**. To improve and evenly maintain the conductivity values, the application of **PS 90** can be repeated according to the description in the product information.

Floor and air temperature must not fall below 15 °C / 59 °F and humidity must not exceed 75 %. The recommended climatic conditions must also be maintained during curing or drying. The difference in floor and room temperature must remain less than 3 °C / 3 K / 5.4 °F so as not to impede the curing process. If a dew-point situation arises, regular curing will not be possible with hardening problems and spotting to occur. If working conditions are not complied with, the technical properties of the end product may deviate from those specified, particularly the conductivity of the entire system.

Cleaning

To remove fresh contamination and to clean tools, use water immediately. Hardened material can only be removed mechanically, use thinner **VR 24** when necessary.

Separate cleaning and care recommendations are available for cleaning floors produced with KLB coatings and sealers.

Storage

Store in dry and frost-free conditions. Ideal storage temperature is between 10 - 20 °C / 50 - 68 °F. Bring to a suitable processing temperature before application. Tightly re-seal opened packages and use up the content as soon as possible.

Special remarks

The product is regulated by the German Ordinance on Hazardous Substances (GefStoffV), the German Ordinance on Industrial Safety and Health (BetrSichV), and transport regulations for hazardous goods. The necessary information is contained in the DIN Safety Data Sheet. Observe all identification information on the container label!

GISCODE: RE20

Indication of VOC-content:

(EG-Regulation 2004/42) Maximum Permissible Value 140 g/l (2010,II,j/wb): Ready-for-use product contains < 140 g/l VOC.

CE marking

	
KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 FRG-89335 Ichenhausen	
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EP785EL+-V1-022013	
DIN EN 13813:2003-01	
Synthetic resin screed mortar DIN EN 13813: SR-B1.5-AR0.5-IR5	
Fire behaviour	B ₁ -s1
Emission of corrosive substances	SR
Wear resistance BCA	AR 0.5
Adhesive tensile strength	B 1.5
Impact resistance	IR 5



Please consider the latest version of this product information on our website.

All stated information is based on our experience and technical preparation. We guarantee the correct and proper quality of our products. We do not assume any responsibility for the work not carried out by us, since we have no influence on the processing or processing conditions. We recommend on-site trials to be conducted. With appearance of this new KLB product information, all prior information loses validity. The updated version is available on our website www.klb-koetztal.com. In addition, our "General Terms and Conditions" apply.