



KLB-SYSTEM EPOXID

EP 727 E

Rapid-setting 2-component epoxy resin emulsion base coat

Packaging units



Article no.	Packaging	Content (kg)	Units/pallet
AK2775-50	Bucket combo	10.00	30
AK2775-25	Hobbock combo	25.00	12

Product characteristics

Mixing ratio parts by weight	A : B = 1 : 3
Mixing ratio parts by volume	A : B = 100 : 320
Processing time	15 °C / 59 °F : 40 min. 20 °C / 68 °F : 30 min. 30 °C / 86 °F : 20 min.
Processing temperature	Minimum 15 °C / 59 °F (room and floor temperature)
Curing time (accessibility)	15 °C / 59 °F : 5 - 7 hrs. 20 °C / 68 °F : 3 - 4 hrs. 30 °C / 86 °F : 2 - 3 hrs.
Curing	1 - 2 days for mechanical load at 20 °C / 68 °F 7 days for chemical resistance at 20 °C / 68 °F
Further coatings	After curing, but not longer than 48 hours at 20 °C / 68 °F
Consumption	Approx. 0.120 - 0.200 kg/m ² for each layer
Colours	Non-pigmented
Shelf life	12 months (originally sealed) – Protect from frost!

Product description

KLB-SYSTEM EPOXID EP 727 E is a 2-component, ready-to-use and rapid-setting, solvent-free epoxy resin emulsion. **KLB-SYSTEM EPOXID EP 727 E** is used as base coat prior to the application of water vapour-permeable coatings and sealers. In combination with **KLB-SYSTEM EPOXID EP 782 E Spachtelgrund** and **KLB-SYSTEM EPOXID EP 785 HS** water vapour-permeable coatings may be generated.

Use **KLB-SYSTEM EPOXID EP 727 E** predominantly when vapour tight base coats are not suitable. Necessary within the system on water vapour-permeable coatings, e.g. on damp, early age concrete, magnesia substrate, susceptible to moisture and similar substrate.

The product cures by dehydration of the contained water and subsequent chemical cross-linking into a consistent, robust film with good adhesion. Due to its penetrating adjustment the substrate will be very well dampened, resulting in an excellent adhesive foundation for subsequent coatings. Absorbency will be reduced, dust will be bound. In addition the subsequent coating will result in a smooth, sealed surface for spread coatings.

KLB-SYSTEM EPOXID EP 727 E cures rapidly, within 2 - 7 hours, ready for subsequent coatings. The end of pot-life is not visible. Excellent adhesion on different substrates like concrete, cement screed, magnesia and similar, as well as

on older synthetic resin coatings. **KLB-SYSTEM EPOXID EP 727 E** results in a hard, physiologically harmless film.

KLB-SYSTEM EPOXID EP 727 E is certified according to the “Indoor Air Comfort Gold” and meets the requirements for a sustainable construction certification according to DGNB (Germany), LEED (United States) or BREEAM (Great Britain). “Indoor Comfort Gold” fulfills the highest requirements in regards to the emission of Volatile Organic Compounds and respects not only the German limits of AgBB or ABG, but also of the emissions regulations of many other European Countries. In combination with **KLB-SYSTEM EPOXID EP 740 E**, the product is DIBt(R)-accredited for recreation rooms.

The cured coating offers resistance to water, aqueous salt solutions, diluted acids and bases. Conditionally resistant to solvents.

Area of application

- As base coat prior to the water vapour-permeable coating **EP 785 HS**.
- For use on magnesia and anhydrite screeds.
- For coatings on “waterproof” substrates with increased moisture content.
- As base coat before sealing with e.g. **EP 740 E** and **EP 750 E**, or as non-pigmented film-forming impregnation.

Product features

- ready to use
- convenient processing
- tested, low-emission quality
- easy application
- environmentally friendly
- Total Solid according to GISCODE
- rapid-setting
- very high adhesion
- water vapour-diffusible

Technical data

Viscosity - Component A+B	80	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 35	%	KLB method
Density - Component A+B	1.05	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Adhesive tensile strength	> 1.5	N/mm ²	DIN EN 1542
Flashpoint	Not flammable	-	DIN 51755

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

Included in systems

- [System E1 KLB INDUSTRIAL DIFFUSION LOW-VOC EP Color](#)
- [System E2 KLB INDUSTRIAL DIFFUSION LOW-VOC EP Standard](#)
- [System E3 KLB INDUSTRIAL DIFFUSION LOW-VOC EP RX](#)
- [System F9 KLB CONDUCTIVE DIFFUSION LOW-VOC EP EX](#)
- [System N2 KLB DECOR LOW-VOC WALL PU](#)

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

Tests

External test certificates are available:

- Certified low-emission according to „Eurofins Indoor Air Comfort Gold“. Compliant with AgBB and DIBt®-accredited for recreation rooms.
- Classification of the fire behaviour in combination with **EP 785 HS** or sealer **EP 740 E** according to DIN EN 13501-01:2010-01: B_{fl}-s1.

Note:

Please ask for the tested system build-up!

Build-up of coats

- Shot-blast the substrate and vacuum thoroughly.
- Apply a base coat using **EP 727 E**, consumption approx. 0.140 - 0.160 kg/m²
- Apply a scratch coat using **EP 782 E Spachtelgrund**, consumption approx. 0.6 - 1.0 kg/m². In the case of highly porous and rough substrates, a further trowel coat may have to be applied.
- Apply **EP 785 HS** or an electrically conductive coating layer with **EP 799 Ableitgrund** and **EP 785 EL+**.

Substrate

The substrate to be coated must be even, surface 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 surface strength must then be at least 1,5 N/mm². The prepared area must be primed carefully. Consider the notes provided by the product informations of **EP 782 E Spachtelgrund** and **EP 785 HS**. It is often difficult to judge the necessary pore-free condition of substrates. It is therefore recommended that the primer **EP 727 E** and subsequent layer coat with **EP 782 E Spachtelgrund** be applied. If the substrate has not been primed to be pore-free, bubbles and pores can develop in the coating due to air rising from the substrate. Old substrates must be cleaned intensively before any mechanical preparation. In case of doubt, we recommend testing on a trial surface.

Mixing

The material has a ready-to-use consistency and may not be diluted additionally.

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 and whitish emulsion forms. To prevent mixing errors, empty ("repot") the entire resin/hardener mixture into a clean container and mix it once again briefly with the necessary amount of water depending on the application to ensure complete homogenisation.

The processing time must not be exceeded – (see chart “Processing time”).

Note: end of pot life is not visible!

Processing

As with all reactive resin systems, processing should take place immediately after mixing. Priming should be performed immediately after mixing using a nylon roller. Apply the material to the substrate in a uniformly thin, closed layer. Avoid the formation of puddles and uneven layer-thicknesses. In the case of substrates with high absorbency, applying another coat is recommended.

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. Exposure to water and chemicals should be avoided during the first 7 days. The specified curing times apply for 20 °C / 68 °F; temperatures below this require longer processing and curing times, while higher temperatures require shorter times. If working conditions are not complied with, the technical properties of the end product may deviate from those specified.

Cleaning

To remove fresh contamination and to clean tools, use water immediately. Hardened material can only be removed mechanically

Storage

Store in dry and at frost-free conditions. Ideal storage temperature is between 15 - 20 °C / 59 - 68 °F. Bring to a suitable working temperature before application. Tightly re-seal opened containers and use 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

	
1119	
KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 FRG-89335 Ichenhausen	
13	
EP727E-V1-022013	
DIN EN 1504-2:2004	
Surface protection products-coating DIN EN 1504-2: ZA.1d,ZA.1f,ZA.1g	
Abrasion resistance	complied with
CO ₂ -permeability	SD > 50m
Water vapour permeability	Class II
Capillary water absorption and water permeability	< 0.1 kg/m ² *h0.5
Resistance to increased chemical excavation	complied with
Impact resistance	Class I
Tear-test for adhesive strength evaluation	> 1.5 N/mm ²
Fire behaviour	B _f -s1

	
KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 FRG-89335 Ichenhausen	
13	
EP727E-V1-022013	
DIN EN 13813:2003-01	
Synthetic resin screed mortar DIN EN 13813: SR-B1.5-AR0.5-IR6	
Fire behaviour	B _f -s1
Emission of corrosive substances	SR
Wear resistance BCA	AR 0.5
Adhesive tensile strength	B 1.5
Impact resistance	IR 6

VOC content

The product complies with the high requirements to low VOC contents, as required for sustainable construction. Therefore, these values exceed by far the European Union directive 2004/42/EG (decopaint directive).

	Limit value	Actual content	
Decopaint Directive 2004/42/EG - Component A	< 140	0	g/l
Decopaint Directive 2004/42/EG - Component B	< 140	0	g/l
DGNB - Components A + B	< 3	0	%
Klima:aktiv - Components A + B	< 3	0	%
LEED - Components A + B	< 100	0	g/l
Minergie ECO(R) - Components A + B	< 1 (< 2)	0	%

(According to the decopaint directive, single components are used for the calculation. For the quality rating systems for sustainable construction, the mixture of both components in the correct mixing ratio is the determining factor.)



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-koetzal.com. In addition, our "General Terms and Conditions" apply.