KLB-SYSTEM EPOXID
EP 727 E

Rapid-setting 2-component epoxy resin emulsion primer

Packaging units

Article no.	Packaging	Content (kg)	Units/pallet
AK2775-50	Bucket combo	10.00 kg	30
AK2775-25	Hobbock combo	25.00 kg	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 until mechanical load at 20 °C / 68 °F 7 days until chemical load at 20 °C / 68 °F
Further coatings	After curing, but after 48 hours at the latest at 20 °C / 68 °F
Consumption	Approx. 0.120 - 0.200 kg/m² per application
Colours	Colorless
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 epoxy resin emulsion, which is produced without any solvents. **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 created.

Use **KLB-SYSTEM EPOXID EP 727 E** predominantely 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, which is susceptible to moisture, and similar substrates.

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 poured coatings.

KLB-SYSTEM EPOXID EP 727 E cures rapidly within 2 - 7 hours to be 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 “Indoor Air Comfort Gold” and meets the requirements for a sustainable building certification according to DGNB, LEED or BREEAM. The “Indoor Air Comfort Gold” 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.

The cured coating offers resistance to water, aqueous saline 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
- tested, low-emission quality
- easy application
- environmentally friendly
- Total Solid according to GISCODE
- rapid-setting
- very high adhesion
- water vapour-permeable

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/mm²	DIN EN 1542
Flashpoint	Non combustible	-	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-koetztal.com

Tests

The following external test certificates are available:

- Certified low-emission according to "Eurofins Indoor Air Comfort Gold“. Compliant with AgBB for recreation rooms.
- Classification of the fire behaviour in combination with **EP 785 HS** or top 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 must 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 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 done immediately after mixing using a nylon roller. Apply an evenly thin, sealed layer on the substrate. Avoid puddle formation 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 poblems 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 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

CE

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 absorbtion and water permeability	< 0.1 kg/m²*h0.5
Resistance to increased chemical excavation	complied with
Impact resistance	Class I
Tear-test for adhesive strength evaluation	> 1.5 N/mm²
Fire behaviour	B_{fl}-s1

CE

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_{fl}-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 ® - Components A + B	< 1 (< 2)	0	%

(According to the Decopaint directive, single components are used for calculation. In the sustainable building rating systems, 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.

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