KLB-SYSTEM EPOXID
EP 785 HS

Low-emission, water vapour-permeable 2-component epoxy resin emulsion flow-coating

Packaging units



Article no.	Packaging	Content (kg)	Units/pallet
AK2725-11	Bucket combo	11.00	30
AK2725-30	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 : 35 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	2.5 - 3.5 kg/m²
Layer thickness	1.5 - 2.5 mm
Addition of quartz sand	Not recommended!
Colours	KLB-Standard Colours – see chart. Other colours on request!
Shelf life	12 months (originally sealed) – **Protect from frost!**

Product description

KLB-SYSTEM EPOXID EP 785 HS is a solvent-free, pigmented 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 HS** is its special composition resulting in a water vapour-permeable coating film. **KLB-SYSTEM EPOXID EP 785 HS** is therefore particularly suitable for coating moisture-sensitive magnesia screeds as well as substrates in contact with the ground without adequate waterproofing. 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. Usually the coating thickness is approx. 1.5 mm to a maximum of 2.5 mm.

KLB-SYSTEM EPOXID EP 785 HS 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 HS results in smooth, fine-grip, very appealing, matt surfaces. The coating can be used in industrial and commercial areas with medium mechanical stress. Application on wet surfaces is not recommended. The product can be manufactured in various colours, including light colours. **KLB-SYSTEM EPOXID EP 785 HS** dries and cures very well compared to other emulsion systems. Adhesion is very good on all kinds of different substrates. The coating is resistant to aqueous solutions, diluted acids, bases, motor and heating oil. **KLB-SYSTEM EPOXID EP 785 HS** 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.

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.
- For use on magnesia and calcium sulphate screeds.
- On substrates with ascending moisture.
- For coatings on “water-resistant” substrates with increased moisture.
- Slip-resistant scattered coatings.

Product features

- ready to use
- convenient processing
- odorless
- tested, low-emission quality
- environmentally friendly
- Total Solid according to GISCODE
- matt, appealing surfaces
- water vapour-diffusible

Technical data

Viscosity - Component A+B	Approx. 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/ mm²	DIN EN 196/1
Shore-hardness D	80	-	DIN 53505 (after 7 days)
Flashpoint	Not flammable	-	DIN 51755
Diffusion resistance rate	1290	-	DIN EN ISO 12572
Diffusion equivalent air layer thickness Sd	(2 mm) 2,6	m	DIN EN ISO 7783-2

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

Included in systems

- System E2 KLB INDUSTRIAL DIFFUSION LOW-VOC EP Standard
- System E3 KLB INDUSTRIAL DIFFUSION LOW-VOC EP RX

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

Tests

External test certificates are available:

- Classification of the fire behaviour according to DIN EN 13501-01:2010-01: B_{fl}-s1.
- Certified as low-emission according to Eurofins "Indoor Air Comfort Gold“.
- Compliant with AgBB for recreation rooms.
- Water vapour permeability according to DIN EN ISO 7783-2.
- Slip-resistant scattered coating grade R11 V4 possible within the SYSTEM E3, according to DIN 51130 and BGR 181.
- Product is compliant to DIN EN 13813: 2003-01.

Note:

Please ask for the tested system build-up!

Build-up of coats

- Shot-blast the substrate and vacuum thoroughly.
- Apply the base coat 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. In the case of highly porous and rough substrates, a further trowel coat may have to be applied.
- 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.
- Application of **EP 785 HS** with a toothed trowel (e.g. **Toothed blade RS4** or Pajarito 48), consumption 2.5 - 3.5 kg/m². Vent with a spiked roller.
- Seal with one of the suitable sealers **EP 705 E**, **EP 740 E**, **EP 706 E** according to the requirements. **PS 88** can alternatively also be used as care product.

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** and **EP 782 E Spachtelgrund**. 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 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. If in doubt, we recommend processing a sample area. Old substrates must be cleaned before any mechanical preparation.

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. Partial quantities need to be weighed out in the right mixing ratio after having stirred up the single components.

Processing time max. 30 minutes at 20 °C / 68 °F (see chart “Processing time”).
Note: end of pot life is not visible!

Processing

Process the material immediately after mixing and spread it over the prepared surface with a coating knife or toothed trowel (e.g. **Toothed blade RS4** or Pajarito 48) in a uniform layer. The product is adjusted for optimum deaeration, however, rolling with a spiked roller is recommended to improve the wetting of the substrate, to optimise levelling and to remove remaining air bubbles. This should be carried out time-delayed after 10 - 20 minutes. To work seamlessly, always work “fresh-in-fresh” and define work areas before starting. Do not scatter too early because of deaeration, the optimum time is at 20 °C / 68 °F after 20 - 30 minutes. Avoid strong draughts and sunlight!

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.

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

To ensure intercoat adhesion, water-based sealers may be grouted with KLB products after 7 days at the earliest (at 20 °C / 68 °F).

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

CE

KLB Kötztal Lacke + Beschichtungen GmbH **Günztalstraße 25** **FRG-89335 Ichenhausen**
15
EP785HS-V2-072015
DIN EN 13813:2003-01
Synthetic resin screed mortar DIN EN 13813: SR-B1.5-AR0.5-IR5

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 5

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