

KLB-SYSTEM EPOXID

EP 52 Spezialgrund

Moisture-tolerant, solvent-free 2-component epoxy resin special primer

Packaging units



Article no.	Packaging	Content (kg)	Units/pallet
AK1016-92	Combi can	1.00	240
AK1016-50	Bucket combo	10.00	30
AK1016-30	Hobbock combo	30.00	12
AK1016-01	Drum combo	960.00	0,33

Product characteristics

Mixing ratio parts by weight	A : B = 100 : 60
Mixing ratio parts by volume	A : B = 100 : 66
Processing time	10 °C / 50 °F : 60 min. 20 °C / 68 °F : 40 min. 30 °C / 86 °F : 20 min.
Processing temperature	Minimum 10 °C / 50 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F : 24 - 28 hrs. 20 °C / 68 °F : 12 - 15 hrs. 30 °C / 86 °F : 8 - 12 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 curing, but not longer than 48 hours at 20 °C / 68 °F
Consumption	Base coat : Approx. 0.3 - 0.4 kg/m ² Scratch coat : Approx. 0.4 - 0.6 kg/m ² Mortar : Approx. 0.150 - 0.300 kg/m ² for each mm of layer
Shelf life	12 months (originally sealed)

Product description

KLB-SYSTEM EPOXID EP 52 Spezialgrund is a solvent-free 2-component epoxy resin which is highly tolerant to moisture.

KLB-SYSTEM EPOXID EP 52 Spezialgrund humidifies matt-damp surfaces, blocks water, and leads to excellent adhesion.

In combination with the degreaser **KLB-SYSTEM PS 22 Ölentferner**, oily substrates can be cleaned. Afterwards, a base coat can be applied.

Because of the very good penetration capability and high wettability properties, the material stands the test on critical substrates. It particularly offers increased adhesive strength for substrates with lacking solidity. Because of its medium viscosity, the material can be used for scratch coats and as a wet bonding layer for bonded screed. Good adhesion on sand-blasted steel.

Area of application

- As base coat before coating pale-damp and chemically wet-cleaned substrates.
- As base coat on early age screed and concrete substrates.
- As base coat on sand-blasted steel.
- Solidification of weakly based substrates.

- Scratch coat for sealing and levelling.

Product features

- Total Solid according to GISCODE (test method «Deutsche Bauchemie»)
- tested, low-emission quality
- approved for interior spaces by DIBt® (German Institute for Construction Technology)
- very high adhesion
- strengthening
- all-purpose use
- consistent to hydrolysis and saponification
- increased durability to osmosis
- high penetration
- free of deleterious substances against varnish
- hardening on pale-damp surfaces

Technical data

Viscosity - Component A+B	950	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 99	%	KLB method
Density - Component A+B	1.08	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Weight loss	0.3	weight-%	after 28 days
Water absorption	< 0.2	weight-%	DIN 53495
Bending tensile strength	> 25	N/mm ²	DIN EN 196/1
Compressive strength	> 70	N/mm ²	DIN EN 196/1
Adhesive tensile strength	> 1.5	N/mm ²	DIN EN 1542
Shore-hardness D	82	-	DIN 53505 (after 7 days)

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

Included in systems

- [System H1 KLB KITCHEN EP Standard](#)
- [System L3 KLB DECOR STONE-CARPET PU Outdoor](#)

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

Tests

External and internal test certificates are available:

- Tested in composite behaviour with **EP 220** according to the "Protection and maintenance of concrete construction parts" by DAfStb, parts 2 and 4.
- Suitability against backside moisture exposure according to the "Protection and maintenance of concrete construction parts" by DAfStb
- Classification of the fire behaviour according to DIN EN 13501-01:2010-01: B_{fl}-s1.

Note:

Please ask for the tested system build-up!

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 traces of paint

should be removed with suitable measures. **EP 52 Spezialgrund** can be used as a bonding course on pale-damp substrates after degreasing with **PS 22**. Surfaces suitable are concrete C20/25, cement screed CT-C35-F5, as well as other sufficiently solid substrates. The substrate has to have adequately high strength for the intended occupational use. Adhesive tensile strength can be increased on stability-lacking substrates because of the reinforcing effect of the material (Conduct pre-trials though!). Coating of mastic asphalt with epoxy resin is not recommended. 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. For concrete, moisture content must not exceed 4.5 CM-%, remaining residual humidity. The possibility of moisture ingress from the rear must be permanently excluded.

Under certain circumstances, **EP 52 Spezialgrund** may be applied on substrates with increased dampness (up to approx. 6.0 CM-%). In those cases, a double layer of primer is required. If necessary, get advice from KLB technical support.

Observe the information issued by the trade associations, e.g. the most recent versions of BEB worksheets KH-0/U and KH-0/S. Reconstruction beyond the regular requirements demands a monitoring of the result, e.g. by conducting a tensile bonding test.

Mixing

If the components are packed individually, they should be weighed out exactly in the specified mixing ratio. Combo-packaging will be supplied in the correctly measured mixing ratio. The package of Component A has sufficient volume to contain the entire packaging unit. Empty all of the hardener compound B into the resin. 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 resin/hardener mixture into a clean container and mix it once again briefly.

Producing scratch coats:

1.0 kg **KLB-SYSTEM EPOXID EP 52 Spezialgrund**
0.5 - 0.8 kg mixed sand **KLB-Mischsand 2/1**

Premix the binding agent before adding any additives. The amount of mixed sand depends on the necessary consistency and stability.

Processing

Base coat: process the material as a base coat immediately after mixing with a coating knife, trowel, or nylon roller. Apply an evenly sealed coat on the substrate, re-roll after some time if necessary. To achieve a compact surface, apply a second layer or a saturated scratch coat if the substrate is highly absorbent. Scatter the fresh coating with approx. 0.8 kg of fire-dried quartz sand (grain size 0.3/0.8 mm) for optimum adhesion. This is mandatory if the subsequent coating will be applied later than 36 hours after the primer. In case the primer should have an increased osmosis resistance, work with two layers of primer or primer plus scratch coat. Do not scatter the first primer and proceed within the recommended time frame.

Scratch coat: apply a scratch coat before any further coatings to level the substrate - but also for pore-sealing. Use a trowel, metal, or rubber coating knife. The consistency of the filling compound has to be adjusted according to the substrate absorbency, for a material that runs true.

Floor and air temperature must not fall below 10 °C / 50 °F and humidity should not exceed 75 %. 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. 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.

Special remarks: we advise against the "gumming" of screed/flat joints with pure or with epoxy resin-filled thixotropic agent. In the course of time, these areas will begin to show on the surface. For the application, always use the KLB primer resin in combination with quartz sand e.g. **KLB-Mischsand 2/1**. For this, we recommend adding at least 1 - 3 parts by weight of filler.

Cleaning To remove fresh contamination and to clean tools, use thinner **VR 24** or **VR 33** immediately. Hardened material can only be removed mechanically.



Storage Store in dry and at 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: RE30

Indication of VOC-content:
(EG-Regulation 2004/42) Maximum Permissible Value 500 g/l (2010,II,j/lb): Ready-for-use product contains < 500 g/l VOC.

CE marking

			
1119		KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 FRG-89335 Ichenhausen	
KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 FRG-89335 Ichenhausen		13	
13		EP52-V1-022013	
EP52-V1-022013		DIN EN 13813:2003-01	
DIN EN 1504-2:2004		Synthetic resin screed mortar DIN EN 13813: SR-B1.5-AR0.5-IR7	
Surface protection products-coating DIN EN 1504-2: ZA.1d,ZA.1f,ZA.1g		Fire behaviour	C _r -s1
Abrasion resistance	complied with	Emission of corrosive substances	SR
CO ₂ -permeability	SD > 50m	Wear resistance BCA	AR 0.5
Water vapour permeability	Class III	Adhesive tensile strength	B 1.5
Capillary water absorbtion and water permeability	< 0.1 kg/m ² *h0.5	Impact resistance	IR 7
Resistance to increased chemical excavation	complied with		
Resistance to impact	Class I		
Tear-test for adhesive strength evaluation	> 1.5 N/mm ²		
Fire behaviour	C _r -s1		



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.