

KLB-SYSTEM EPOXID

EP 28 Bauharz

Solvent-free 2-component epoxy resin primer

Packaging units



Article no.	Packaging	Content (kg)	Units/pallet
AK1071-50	Bucket combo	10.00 kg	30
AK1071-30	Hobbock combo	30.00 kg	12
AK1071-12	Drum combo	590.00 kg	0,5

Product characteristics

Mixing ratio parts by weight	A : B = 100 : 47
Mixing ratio parts by volume	A : B = 100 : 51
Processing time	10 °C / 50 °F : 45 minutes 20 °C / 68 °F: 30 minutes 30 °C / 86 °F: 15 minutes
Processing temperature	Minimum 10 °C / 50 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F : 16 - 20 hrs. 20 °C / 68 °F: 12 - 15 hrs. 30 °C / 86 °F: 8 - 12 hrs.
Curing	2 - 3 days until mechanical load at 20 °C / 68 °F 7 days until chemical load at 20 °C / 68 °F
Further coatings	When wet or after curing, but after 48 hours at the latest
Consumption	Primer: 0.3 - 0.4 kg/m ² per application Scratch coat: 0.4 - 0.6 kg/m ² Mortar: 0.150 - 0.300 kg/m ² for each mm of layer
Packaging	Bucket combo 10 kg, Hobbock combo 30 kg, Drum combo 590 kg
Shelf life	12 months (originally sealed)

Product description

KLB-SYSTEM EPOXID EP 28 Bauharz is an unfilled epoxy resin. Suitable as primer, scratch coat, and levelling screed.

KLB-SYSTEM EPOXID EP 28 Bauharz offers good wettability properties, is highly fillable, and has very good processing properties.

KLB-SYSTEM EPOXID EP 28 Bauharz cures very well and evenly, offering good adhesion to mineral-based substrates.

Area of application

- Primer prior to coatings.
- Scratch coat for levelling the depth of roughness.
- Mortar for repair work, levelling and as bedding layer.
- For installation and grouting work.

Product features

- Total Solid according to GISCODE (Test method "Deutsche Bauchemie")
- very economical
- low-shrink
- all-purpose use

- consistent to hydrolysis and saponification
- free of deleterious substances against varnish

Technical data

Viscosity - Component A+B	600	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 99	%	KLB method
Density - Component A+B	1.09	kg/l	DIN EN ISO 2811-2 (23 °C / 73.4 °F)
Weight loss	0.3	weight-%	after 28 days at 60 °C / 140 °F
Water absorption	< 0.2	weight-%	DIN 53495
Bending tensile strength	(with KLB 1 in mixing ratio 1 : 8) > 15	N/mm ²	DIN EN 196/1
Compressive strength	(with KLB 1 in mixing ratio 1 : 8) > 50	N/mm ²	DIN EN 196/1
Adhesive tensile strength	> 1.5	N/mm ²	DIN EN 1542
Shore-hardness D	80	-	DIN 53455 (after 7 days)

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

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. Surfaces suitable for coating are concrete C20/25, cement screed CT-C35-F5, as well as other sufficiently solid substrates. The substrate has to have adequate high strength for the intended occupational use. Coating 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. Observe the information issued by the trade associations, e.g. the most recent versions of BEB worksheets KH-0/U and KH-0/S.

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 and mortar:

Scratch coats:

1.0 kg **KLB-SYSTEM EPOXID EP 28 Bauharz**
0.5 - 0.8 kg mixed sand **KLB-Mischsand 2/1**

Epoxy resin mortar:

1.0 kg **KLB-SYSTEM EPOXID EP 28 Bauharz**
8.0 - 10.0 kg mixed sand **KLB-Mischsand 1**

Before adding any additives, the resin must be premixed, only then is added the supplement. The amount of mixed sand depends on the necessary consistency and stability.

Processing

Primer: process the material as a base coat immediately after mixing with a squeegee, trowel, or nylon roller. Apply an evenly sealed coat on the substrate. Apply a second layer or a saturated scratch coat if the substrate is highly absorbent. Scatter the fresh coating with approx. 0.8 kg quartz sand (grain size 0.3/0.8 mm) for optimum adhesion. This is mandatory if the subsequent coating will be applied later than 24 hours after the primer.

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

Epoxy resin mortar: EP 28 Bauharz is suitable as underlayment mortar and for repair work. The special resin **EP 150** is recommended for visible industrial mortar coatings. Process immediately after mixing. Pull over a lath, then compact and smooth with a trowel. Clean tools with small amounts of **VR 24**.

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.

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 1** or **KLB-Mischsand 2/1**. For this, we recommend adding at least 1 - 3 parts by weight of filler.

Cleaning

To remove any 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: RE90

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

	
KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 FRG-89335 Ichenhausen	
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EP28-V1-022013	
DIN EN 13813:2003-01	
Synthetic resin screed mortar DIN EN 13813: SSR-B1.5-AR0.5-IR4	
Fire behaviour	E _f -s1
Emission of corrosive substances	SR
Wear resistance to BCA	AR 0.5
Adhesive tensile strength	B 1.5
Impact resistance	IR 4



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 in individual cases. With the publication of this new KLB product information, all prior information loses validity. The latest version is available electronically on our website www.klb-koetztal.com. In addition, our "General Terms and Conditions" apply.