KLB KÖTZTAL
Lacke + Beschichtungen GmbH

PARKHAUS-Oberflächenschutzsystem KLB-SYSTEM EPOXID
EP 5530

OS 8 OS 11 OS 14

Ready-to-use 2-component epoxy resin primer for epoxy and polyurethane resin coatings as well as for surface protection systems (OS 8, 11a/b and OS 14) in accordance with DAfStb and TR maintenance directive

Packaging units

Article no.	Packaging	Content (kg)	Units/pallet
AK1333-51	Bucket combo	12.00 kg	30
AK1333-31	Hobbock combo	30.00 kg	12
AK1333-02	Drum combo	1200.00 kg	0,33

Product characteristics

Mixing ratio parts by weight	A : B = 5 : 1
Mixing ratio parts by volume	A : B = 100 : 33
Processing time	10 °C / 50 °F : 45 min. 20 °C / 68 °F : 25 min. 30 °C / 86 °F : 15 min.
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
Consumption	Primer: 0.3 - 0.6 kg/m² depending on the substrate's roughness Scratch coat: 0.5 - 0.6 kg/m² depending on the substrate's roughness whilst adding 20 - 50% of 0.1/0.3 mm quartz sand (depending on temperature) if necessary
Packaging	Bucket combo 12 kg, Hobbock combo 30 kg, Drum combo 1200 kg
Colours	For manufacturing reasons, colour tone irregularities may appear depending on the batch.
Shelf life	12 months (originally sealed)

Product description

KLB-SYSTEM EPOXID EP 5530 is a 2-component epoxy resin primer for preparing substrates for subsequent car park coatings made of epoxy or polyurethane resin.

KLB-SYSTEM EPOXID EP 5530 is used as a ready-to-use primer as well as to even out roughness and for levelling. Its preferred use is for subsequent scattered coatings where sufficient levelling is achieved for the top coatings, e.g. OS 8 floors with **KLB-SYSTEM EPOXID EP 216 Universal.**

Suitable as a primer on all moisture-resistant, dimensionally stable substrates such as concrete and cement screed. The product has very good compressive strength and is suitable for all car park surface protection system applications.

However, it can also be used for smooth coatings, which requires double application for normally absorbent substrates. If a scratch coat has to be applied to even out higher levels of roughness, approx. 20 – 50 % of 0.1/0.3 mm fire-dried quartz sand can be added.

KLB-SYSTEM EPOXID EP 5530 provides a solid basis for all subsequent surface protection systems and coverings, hardens through quickly without shrinkage. The product has good compressive strength and is suitable for all parking, industrial and commercial flooring applications.

Area of application

- As a primer before applying **KLB-SYSTEM POLYURETHAN PU 5550** to install surface protection systems (OS 11a/b and OS 14).
- As a primer before applying **KLB-SYSTEM EPOXID EP 216** to install the surface protection system OS 8.
- As a primer and scratch coat prior to the application of scattered coverings and coatings.

Product features

- ready-to-use
- rapid-setting
- quickly reworkable
- good interlayer adhesion
- Total Solid according to GISCODE (Test method "Deutsche Bauchemie")
- very economical

Technical data

Viscosity - Component A+B	Approx. 1200	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 99	%	KLB method
Density - Component A+B	1.40	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Adhesive tensile strength	> 1.5	N/mm²	DIN EN 1542
Shore-hardness D	87	-	DIN 53505 (after 7 days)

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

Included in systems

- System K1 - KLB PARKING EP OS 8
- System K2 - KLB PARKING PU OS 11a
- System K3 - KLB PARKING PU OS 11b
- System K4 - KLB PARKING PU OS 14
- System K6 - KLB PARKING PU OS8 Flex
- System K7 - KLB PARKING EP OS8 Flex

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

Tests

- Test report (system test): Performance test for the use as a surface protection system/product according to DIN EN 1504-2 “Products and systems for the protection and maintenance of concrete supporting structures, part 2: surface protection systems for concrete; German version EN 1504-2:2004”, in consideration of DIN V 18026, “Surface protection systems for concrete from products following DIN EN 1.5.2004-2” and in accordance with the DAfStb guidelines “Protection and maintenance of concrete components” and the TR maintenance directive.
- Declaration of performance in accordance with Annex III of (EU) Regulation n. 305/2011 (construction product regulation), for the single products
- Fire behaviour classification according to DIN EN 13501-01:2010-01
- Suitability against backside moisture exposure according to the DAfStb guidelines or the TR maintenance directive.

Build-up of coats

Priming for surface protection systems OS 11 a/b and OS 14

- Prepare the substrate preferably using shot blasting, then vacuum thoroughly.
- Prime with **EP 5530**. Application is carried out in an even layer using a trowel, smoothing trowel, a rubber squeegee or an edged scraper. Consumption approx. 0.3 - 0.6 kg/m².
- Alternatively, apply **EP 5520** as primer with a consumption of approx. 0.3 - 0.4 kg/m².
- The fresh surfaces should be scattered openly with natural quartz sand of a grain size of 0.3/0.8 mm to ensure optimum adhesion of the **PU 5550** floating / wearing layer.
- For the further application of the OS 11 a/b or OS 14 system and for roughness levelling, please refer to the **PU 5550** and **PU 5560** product information.

Priming for surface protection system OS 8

- Prime using the pre-filled primer **EP 5530**, consumption approx. 0.3 - 0.6 kg/m².
- Alternatively, **EP 5520** can be used as primer, consumption approx. 0.3 - 0.4 kg/m².
- Optional: open scattering with quartz sand, grain size 0.3/0.8 mm, consumption approx. 0.5 - 1.0 kg/m².
- For the further application of the OS 8 system with wearing layer and top sealer **EP 216 Universal**, please refer to the product information of **EP 216 Universal**.
- For the further application of the OS 8 system with wear coat **EP 5590** or **PU 5560** and top sealer **EP 5570**, please refer to the product information of the wearing layer.

Priming / scratch coat for subsequent coating layers

- Prepare the substrate preferably using shot blasting, then vacuum thoroughly.
- Prime with **EP 5530**. Application is carried out in an even layer using a trowel, smoothing trowel, a rubber squeegee or an offset squeegee. Consumption approx. 0.3 - 0.6 kg/m².
- For producing an even surface, apply a scratch coat with **EP 5530** and quartz sand 0.1/0.3 mm using a smoothing trowel or offset squeegee in a mixing ratio of approx. 1 : 0.2 - 0.5 parts by weight, consumption approx. 0.5 - 0.8 kg/m².
- Important: if a polyurethane coating is subsequently applied, sand the fresh surface with quartz sand, grain size 0.3/0.8 mm. Consumption: 0.5 - 1.0 kg/m².
- Apply the recommended epoxy and polyurethane resin coating according to the stipulations in the respective product inforamtion.

Build-up of scattered coatings

- Prepare the substrate preferably using shot blasting, then vacuum thoroughly.
- Prime with **EP 5530**. Application is carried out in an even layer using a trowel, smoothing trowel, a rubber squeegee or an offset squeegee. Consumption approx. 0.3 - 0.6 kg/m².
- If necessary: apply a scratch coat with **EP 5530** and quartz sand 0.1/0.3 mm in a mixing ratio of approx. 1 : 0.2 - 0.5 parts by weight, consumption of the mixture approx. 0.5 - 0.6 kg/m².
- Important: if a polyurethane coating is subsequently applied, sand the fresh surface with quartz sand, grain size 0.3/0.8 mm. Consumption: 0.5 - 1.0 kg/m².
- Apply the base layer with the recommended epoxy or polyurethane resin binding agent in the required layer thickness. Observe the product information of the respective product.
- When still fresh, scatter the entire surface with 0.3/0.8 mm or 0.7/1.2 mm quartz sand or other scattering material.
- After curing, sweep off the excess sand and vacuum thoroughly until no more grain or sand are being released.
- Apply the recommended top sealer based on the application instructions and spread with the velour roller in crosswise motion, then roll off evenly. Adjust the consumption according to the desired slip resistance. Observe the product information of the recommended sealer.

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 C30/37 (exposure class XD1) or C35/45 (exposure class XD3). The substrate has to have adequately 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 absorbency must be tested. The surface strength must then be at least 1,5 N/mm² (for OS 11a/b and OS 14) and 2.0 N/mm² (for OS 8). 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 DAfStb and TR maintenance directive as well as by the trade associations, e.g. the most recent versions of BEB worksheets KH-0/U and KH-0/S.

Mixing

Combo-packaging will be supplied in the correctly measured mixing ratio. The package of Component A has sufficient volume for the entire packaging unit. Empty all of the hardener compound B and mix immediately. 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. Should quartz sand be added to produce a scratch coat, this must be done immediately after mixing by stirring in. Quartz sand 0.1/0.3 mm is recommended in an additional quantity of approx. 20 - 30 % depending on the quantity to be applied, temperature and flow. For higher layer thicknesses, the addition can be increased up to 50 %.

Recommended mixtures:

Scratch coat:
30.0 kg **KLB-SYSTEM EPOXID EP 5530**
6 - 15 kg quartz sand 0.1/0.3 mm

Processing

Process the material immediately after mixing; the resin is distributed in the area to be worked on and is skimmed in an even layer with a trowel, a smoothing trowel, a rubber squeegee or an edged squeegee. The coating lane must always be pulled overlapping so that the surface is evenly wetted. Consumption should be checked. Redistribute with the roller if necessary. Apply subsequent layers within the recommended time frame. Otherwise, the primer/scratch coat must be sanded off.

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.

Cleaning

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

Storage

Store in dry and if possible, at frost-free conditions. Ideal storage temperature is between 10 °C - 20 °C / 50 °F - 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

CE

KLB Kötztal Lacke + Beschichtungen GmbH
Günztalstraße 25
89335 Ichenhausen, GERMANY

18

EP5530-V1-102025

DIN EN 13813:2003-01

Synthetic resin screed mortar
DIN EN 13813: SR-B2,0-AR0,5-IR6

Fire behaviour	C_{fl}-s1
Emission of corrosive substances	SR
Wear resistance BCA	AR 0,5
Adhesive tensile strength	B 2,0
Impact resistance	IR 6

CE

1119

KLB Kötztal Lacke + Beschichtungen GmbH
Günztalstraße 25
89335 Ichenhausen, GERMANY

18

EP5530-V1-102025

DIN EN 1504-2:2004

Abrasion resistance	complied with
CO_2-permeability	S_D > 50m
Water vapour permeability	Class III
Capillary water absorbtion and water permeability	w < 0,1 kg/m²*h0,5
Compatibility to temperature change	complied with
Resistance to increased chemical excavation	complied with
Resistance to impact	Class I
Tear-test for adhesive strength evaluation	≥ 2,0 (1,5) N/mm²
Fire behaviour	C_{fl}-s1
Grip	Class III

Please consider the latest version of this product information on our website.

KLB KÖTZTAL Lacke+Beschichtungen GmbH
Günztalstraße 25
89335 Ichenhausen, GERMANY
Phone +49 (0) 8223-96 92-0
Fax +49 (0) 8223-96 92-100
www.klb-koetztal.com
info@klb-koetztal.com