KLB KÖTZTAL
Lacke + Beschichtungen GmbH

KLB-SYSTEM EPOXID
EP 799 Ableitgrund

Electrically highly conductive 2-component epoxy resin base coat, low-emission

Mixing Ratio	Parts by weight	A : B	=	1 : 4
	Parts by volume	A : B	=	1 : 4.2
Processing Time	Temperature	15 °C / 59 °F	20 °C / 68 °F	30 °C / 86 °F
	Time	75 minutes	60 minutes	35 minutes
Processing Temperature		Minimum 15 °C / 59 °F (room and floor temperature)		
Curing Time (Accessibility)	Temperature	10 °C / 50 °F	20 °C / 68 °F	30 °C / 86 °F
	Time	24 - 36 hrs.	18 - 24 hrs.	14 - 18 hrs.
Curing		2 - 3 days at 20 °C / 68 °F for mechanical load		
		7 days at 20 °C / 68 °F for chemical resistance		
Further Coatings		After 14 - 18 hours, but not longer than 48 hours at 20 °C / 68 °F		
Consumption		0.100 - 0.140 kg/m²		
Electrical Conductivity		< 10^5 Ohm		
Test Standard		DIN EN 61340-4-1, DIN EN 61340-5-1/2		
Packaging		Combi-Unit 10 kg		
Colours		Black		
Shelf Life		6 months (originally sealed) – **Protect from frost!**		

Usage and Properties

KLB-SYSTEM EPOXID EP 799 Ableitgrund is a product used in combination. Suitable for electrically conductive coatings. The highly conductive base coat is used as an interlayer applied on cured base or scratch coats with affixed copper bands. The highly diagonally conductance compensates the superposed coatings.

KLB-SYSTEM EPOXID EP 799 Ableitgrund is certified according to the “Indoor Air Comfort Gold” and meets the requirements for a sustainable construction certification according to DGNB (Germany), LEED (United States) or BREEAM (Great Britain). “Indoor Comfort Gold” fulfills the highest requirements in regards to the emission of Volatile Organic Compounds and respects not only the German limits of AgBB or ABG, but also of the emissions regulations of many other European Countries.

KLB-SYSTEM EPOXID EP 799 Ableitgrund consists of an easy to process and economical 2-comp. epoxy resin emulsion which may be applied with a roller. Because of its composition a good interlayer adhesion is achieved and solvents are not in use.

Product Features

- “total solid” according to Giscode (test method of the Deutsche Bauchemie, German construction chemistry association)
- high electric conductivity
- good processing conditions
- economic consumption
- resistant to hydrolysis and saponification
- suitable also for ESD-coatings in combination with other products
- free of deleterious substances against varnish

Testing

External test certificates are available:

- Certified low-emission according to „Eurofins Indoor Air Comfort Gold“. Compliant with AgBB for recreation rooms.
- DIBt®-accredited according to WHG § 63.

Note:
Please ask for the tested system structure!

Area of Application

- As guiding bed in combination with the conductive coatings **KLB-SYSTEM EPOXID EP 200 EL+, KLB-SYSTEM EPOXID EP 785 EL+, KLB-SYSTEM POLYURETHAN 413 EL+, KLB-SYSTEM EPOXID EP 285 EL+, KLB-SYSTEM EPOXID EP 233 EL+.**
- For conductive, industrially used areas with medium mechanical load, e.g. production areas, stacking grounds in many economic sectors.
- For areas in the electrical-/electronic-industry in combination with special sealing also for ESD-areas.
- For areas with requirements to explosion protection to prevent electrostatic charging.

Build-up of Coats

- Apply a base coat and scratch coat for a planar surface.
- Glue **KLB-Kupferbänder** copper bands for discharge in an imagined grid-pattern in place into the room – every 6 - 8 m, up to 1 - 2 m. Earth connection by an electrician according to VDE-regulations.
- Apply a cross-conductible coat **EP 799 Ableitgrund,** consumption approx. 0.100 - 0.140 kg/m².
- Depending on the demand to the product and substrate apply a conductive wear layer with **EP 200 EL+, EP 785 EL+, PU 413 EL+, EP 285 EL+, EP 233 EL+.**

Substrate

The substrate to be coated has to be levelled, dry, free of dust, has to have adequate tensile and compressive strength, and be free from weakly-bonded components or surfaces. Materials impairing adhesion, such as grease, oil and paint residues must be removed using suitable methods. Please refer to the advice issued by the trade associations, e.g. the current edition of BEB-worksheets KH-0/U and KH-0/S as well as the product information for the recommended base coats, like **EP 30, EP 50, EP 51 RAPID S,** and **EP 52 Spezialgrund.** The surface to be coated should be prepared mechanically, preferably by shot-blasting. The prepared surface has to be primed accurately, saturated, and free of pores. Estimating the substrate according to the necessary sealed state may be difficult, so a scratch coat is recommended for smoothing the surface. The conductive coating must be applied in an even thickness that is why it is mandatory to prepare the substrate thoroughly. The substrate should already be planar after the scratch coat has been applied. Apply the guiding bed after affixing the copper bands within the recommended processing time of the base coat.

Mixing

Combi-trading units will be supplied in the correctly measured mixing ratio. Component B has sufficient volume for the entire trading unit. Decant component A into the hardener component B. Blend with a slow speed mixer (200 - 400 r/pm) for at least 2 - 3 minutes, for a material that is homogeneous and free of streaks. To avoid mixing errors it is recommended to principally empty the mixed resin/hardener coating into a clean container and mix briefly once again. To achieve an optimum consistency water may be added, up to 10 % after mixing.

Processing / Handling

Apply the guiding bed on the surface immediately with a roller after mixing. Watch for an even consumption. Apply evenly thin and economical on the prepared substrate. To avoid soiling of the walls it is recommended to apply the black guiding bed in a distance of 5 - 10 cm. Before applying the conductive coating observe a sufficient curing period of 12 - 24 hours. Floor and air temperature must not fall below 15 °C / 59 °F and humidity must not exceed 75 %. The difference in floor and room temperature must be less than 3 °C / 37.4 °F so the curing will not be disturbed. If a dew-point situation occurs regular curing may be disturbed and spotting may occur. Curing time applies to 20 °C / 68 °F. Lower temperature may increase, higher temperature may decrease the curing and processing time. If working conditions are not complied with, deviations in the described technical properties and conductance may occur in the end product.

Cleaning

To remove fresh contamination and to clean tools use water immediately. Clean with thinner **VR 24** if necessary. Hardened material can only be removed mechanically.

Storage

Store in dry and at frost-free conditions. Ideal storage temperature is between 10 °C - 20 °C / 50 °F - 68 °F. Bring to a suitable working temperature before application. Tightly re-seal opened containers and use the content as soon as possible.

Special Remarks

The product is subject to the hazardous material-, operational safety-, and transport-regulations for hazardous goods. Refer to the DIN-Safety Data Sheet and the information on the labelled containers!

GISCODE (05/2018 modification): RE 55

Indication of VOC-Content:
(EG Regulation 2004/42)
Maximum Permissible Value 140 g/l (2010,II,i/wb):
Ready-for-use product contains < 140 g/l VOC.

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DIN EN 13813:2003-01

Synthetic resin screed mortar
DIN EN 13813: SR-B1.5-NPD-NPD

Fire behaviour	E_{fl}-s1
Emission of corrosive substances	SR
Wear resistance BCA	NPD
Adhesive tensile strength	B 1.5
Impact resistance	NPD

NPD = No Performance Determined

Technical Data*

Viscosity	Components A + B	1200	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid contents		> 40	%	KLB-Method
Density	Components A + B	1.08	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Bleeder resistance		10^5	Ohm	DIN EN 61340-4-1 / -5-1/2

(* Values achieved in sampling are average values. Variation in product specification is possible.)

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Certified according
to ISO 9001.