

KLB-SYSTEM EPOXID

EP 799 WHG



Highly electrically conductive two-component epoxy resin primer for the creation of electrically conductive coatings for WHG applications

Packaging units

Article no.	Packaging	Content (kg)	Units/pallet
AK2719-50	Bucket combo	10.00 kg	30



Product characteristics

Mixing ratio parts by weight	A : B = 1 : 4
Mixing ratio parts by volume	A : B = 1 : 4,2
Processing time	15 °C / 59 °F : 75 min. 20 °C / 68 °F : 60 min. 30 °C / 86 °F : 35 min.
Processing temperature	Minimum 15 °C / 59 °F (room and floor temperature)
Curing time (accessibility)	15 °C / 59 °F : 22 - 28 hrs. 20 °C / 68 °F : 18 - 24 hrs. 30 °C / 86 °F : 14 - 18 hrs.
Curing	2-3 days until it is able to withstand mechanical loads at 20 °C / 68 °F 7 days until it is able to withstand chemical loads at 20 °C / 68 °F
Further coatings	After 14 - 18 hours, but not longer than after 48 hours at 20 °C / 68 °F
Consumption	0.100 - 0.140 kg/m ²
Packaging	Combi-Unit 10 kg
Colours	Black
Shelf life	6 months (originally sealed) – Protect from frost!

Product description

KLB-SYSTEM EPOXID EP 799 WHG is a composite product used to produce electrically conductive floor coatings and coverings. **KLB-SYSTEM EPOXID EP 799 WHG** is suitable for use in explosion-protected areas in accordance with the Water Resources Act. The highly conductive base coat is applied as an intermediate layer onto a cured primer or scratch coat after the copper tapes have been bonded in place. The high transverse conductivity ensures good charge equalisation of the overlying coating.

KLB-SYSTEM EPOXID EP 799 WHG consists of a two-component EPOXID resin emulsion that can be applied easily and sparingly with a roller. Its composition ensures good interlayer adhesion. No solvents are used.

Area of application

- As a base coat in combination with the conductive coating **KLB-SYSTEM EPOXID EP 280 WHG**. Please refer to the relevant product information. Seek advice if necessary.
- Electrically conductive, commercial-grade surfaces subject to moderate mechanical stress, e.g. production areas and storage areas in many sectors of industry.

- In areas with explosion protection requirements to prevent static build-up.

Product features

- high conductivity
- Total Solid according to GISCODE
- consistent to hydrolysis and saponification
- free of deleterious substances against varnish
- very economical
- good processing properties
- building authority approval according to DIBt®

Technical data

Viscosity - Component A+B	1200	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 40	%	KLB method
Density - Component A+B	1.08	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Electrical resistance	< 10 ⁵	Ohm	DIN EN 61340-4-1 DIN IEC 61340-5-1/2

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

Included in systems

- [System B2 - KLB PROTECT WHG CONDUCTIVE EP](#)

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

Tests

External test certificates are available for the following results:

- In a system with DIBt® approval in accordance with Section 63 of the WHG.
- Fire behaviour classification in combination with **EP 280 WHG** in accordance with DIN EN 13501-01:2010-01: B_{fl}-s1
- Slip-resistant loose-lay flooring in combination with **EP 280 WHG** can be manufactured in accordance with DIN 51130 and BGR 181 to R11/V4.
- B2 outgassing test for cleanrooms within the system
- Product complies with DIN EN 13813: 2003-01.

Note:

Please enquire about the tested system build-up!

Build-up of coats

- Inspect the substrate and shot-blast it.
- Prime with **EP 55**; coverage approx. 0.3 to 0.4 kg/m².
- Optional scratch coat with **EP 55 / KLB-Mischsand 2/1** = 1 : 0.8 parts by weight. Coverage approx. 0.5–1.0 kg/m² of mixture.
- Adhere **KLB copper strips** for connection to the earthing point in a grid pattern every 6 to 8 m, extending approx. 1 to 2 m into the room. Earthing connection to be carried out by an electrician in accordance with VDE regulations.
- Apply a transversely conductive layer using approx. 0.100 to 0.140 kg/m² of **EP 799 WHG**.
- Trowel on the conductive top coat of **EP 280 WHG** using a notched trowel (**RS4** or **Pajarito 48**), consumption approx. 2.5 kg/m². De-air using a spiked roller.

Substrate

The substrate to be coated must be level, dry, dust-free, sufficiently resistant to tensile and compressive stresses, and free from poorly adhering components and

flaking. Substances that reduce adhesion, such as grease, oil and paint residues, must be removed beforehand using appropriate measures. The guidelines issued by the relevant trade associations, e.g. BEB worksheets KH-0/U and KH-0/S, in their current versions, as well as the instructions in the product information for the recommended KLB primers, such as **EP 55**, must be observed. The substrates to be coated must be prepared mechanically, preferably by shot blasting. The prepared surface must be primed thoroughly, generously and without any pores. Substrates are often difficult to assess in terms of the required lack of porosity; for this reason, and also to smooth the substrate, the application of a scratch coat is recommended. Conductive coatings must be applied in a uniform layer thickness; therefore, careful substrate preparation is essential. The conductive layer is applied after the copper tapes have been bonded, within the recommended working time of the primer.

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. To achieve an optimum consistency, water may be added, up to 10 % after mixing.

Processing

Apply the conductive layer on the surface with a roller immediately 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 conductive layer in a distance of 5 - 10 cm. Before applying the dissipative coating, observe a sufficient curing period of 12 - 24 hours. Floor and air temperature must not fall below 15 °C / 59 °F and humidity should not exceed 75 %. The difference in floor and room temperature must remain less than 3 °C / 3K / 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 - also regarding conductivity.

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 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 140 g/l (2010,II,j/wb): Ready-for-use product contains < 140 g/l VOC.

CE marking

	
KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 FRG-89335 Ichenhausen	
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EP799-V1-022013	
DIN EN 13813:2003-01	
Synthetic resin screed mortar DIN EN 13813: SR-B1.5-NPD-NPD	
Fire behaviour	E _f -s1
Emission of corrosive substances	SR
Wear resistance BCA	NPD
Adhesive tensile strength	B 1.5
Impact resistance	NPD

NPD = No Performance Determined



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