KLB KÖTZTAL
Lacke+Beschichtungen GmbH

KLB-SYSTEM EPOXID
EP 296 RAPID

NEW QUALITY

Rapid-setting, very opaque, coloured 2-component epoxy resin top sealer for scattered coatings

Packaging units

Article no.	Packaging	Content (kg)	Units/pallet
AL1266-50	Bucket combo	12.00	30
AL1266-30	Hobbock combo	30.00	12

Product characteristics

Mixing ratio parts by weight	A : B = 5 : 1
Mixing ratio parts by volume	A : B = 3 : 1
Processing time	10 °C / 50 °F : 30 - 40 min. 20 °C / 68 °F : 10 - 15 min. 30 °C / 86 °F : 8 -10 min.
Processing temperature	Min. 5 °C / 41 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F : 12 - 16 hrs. 20 °C / 68 °F : 5 - 6 hrs. 30 °C / 86 °F : 3 - 4 hrs.
Curing	12 - 24 hours for mechanical load at 20 °C / 68 °F 4 days for chemical resistance at 20 °C / 68 °F
Further coatings	After accessibility, but not longer than 36 hours at 20 °C / 68 °F
Consumption	0.65 - 1.2 kg/m² as top sealer
Colours	KLB-Standard Colours – see chart. Other colours upon request!
Shelf life	12 months (originally sealed)

Product description

KLB-SYSTEM EPOXID EP 296 RAPID is a high-quality 2-component epoxy resin coating compound with binding agents, suitable as pigmented top sealer for producing slip-resistant scattered coatings.

It is usually applied on base layers scattered with natural quartz sand over the entire surface for producing slip-resistant and porefree floors. After mixing, apply the ready-to-use sealer with a rubber coating knife onto the sanded layer. Distribute evenly with a roller. The product is easy to handle and convenient to work with.

The coating material is available in different grades of reactive adjustment. Besides the regular curing **KLB-SYSTEM EPOXID EP 296 Kopfsiegel**, the rapid-setting **KLB-SYSTEM EPOXID EP 296 RAPID** is especially beneficial for reconstruction works as EP 296 RAPID can be mechanically loaded again after only approx. 6 hours at 20 °C / 68 °F.

KLB-SYSTEM EPOXID EP 296 RAPID results in optically appealing, textured, glossy, and porefree surfaces. The coating is resistant to abrasion and chemicals, such as to different solvents, diluted acids and bases, water, oil, grease, salt, and their solutions. Coatings applied according to our specifications offer short-term resistance up to approx. 80 °C / 176 °F in wet areas and up to approx. 120 °C / 248 °F in dry areas. The coatings can be produced in different slip-resistance grades depending on the requirements.

Note: epoxy resin coatings are subject to slight colour deviations that may become visible when using pale colours and the rapid-setting version.

Area of application

- Slip-resistant scattered coatings, especially for wet areas in the food processing industry.
- For factory, storage, and work areas.
- For transportation and parking areas.
- For plain-coloured coatings with a non-porous surface, in various slip-resistance grades depending on the structure.

Product features

- Total Solid according to GISCODE (test method «Deutsche Bauchemie»)
- hard and wear-resistant
- abrasion-resistant
- especially for slip-resistant coatings
- good interlayer adhesion
- coloured, glossy surfaces
- resistant to water and chemicals
- rapid-setting
- can be loaded quickly
- high covering power

Technical data

Viscosity - Component A+B	2000 - 2500	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 99	%	KLB method
Density - Component A+B	1.53	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Water absorption	< 0.2	weight-%	DIN 53495
Shore-hardness D	78	-	DIN 53505 (after 7 days)
Abrasion (Taber Abraser)	60	mg	ASTM D4060 (CS10/1000)

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

Build-up of coats

Slip-resistant coating R11/12

- Apply a base coat, e.g. using **EP 51 Rapid S**, consumption 0.3 - 0.4 kg/m².
- If required: apply a scratch coat with **EP 51 Rapid S** and mixed sand **KLB-Mischsand 2/1** (mixing ratio approx. 1 : 0.8 parts by weight)
- Apply the base coat with e.g. **EP 216 Rapid** or **EP 99 Rapid** in layers of 1.5 - 2.0 mm and scatter the whole surface with fire-dried quartz sand, grain size 0.3/0.8 mm or 0.7/1.2 mm..
- After curing, sweep off the excess sand and vacuum thoroughly until no more grain or sand are being released.
- Apply **EP 296 RAPID** with a rubber squeegee, then distribute evenly using a velours roller in a crosswise motion. Consumption 0.560 - 0.800 kg/m². It is mandatory to adhere to the consumption quantities for obtaining the required degree of slip-resistance.

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. Observe the information issued by the trade associations, e.g. the most recent versions of BEB worksheets KH-0/U and KH-0/S as well as the notes provided in the product information for the recommended base coats, like **EP 50, EP 51 RAPID S** or **EP 52 Spezialgrund**. 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. Base coats may not be left open for more than 2 days or must be scattered with quartz sand. **EP 296 RAPID** is generally used on fully sanded substrates. Surfaces must be free of excess sand and must not be soiled before applying the top sealer. Wear clean shoes and work clothes.

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. Partial quantities need to be weighed out in the right mixing ratio. To prevent mixing errors, empty ("repot") the entire resin/hardener mixture into a clean container and mix it once again briefly.

Processing

After the base coat has cured, remove any excess sand from the surface by sweeping and vacuuming. If the surface is to have a lower roughness, it can additionally be lightly sanded over. Place portions of the fresh mixture over the floor. For partial withdrawals, stir briefly in between. Pull it off evenly with a rubber coating knife. Ensure an even application and avoid ponding. Rigid scrapers create smoother covering surfaces, while soft trowels create rougher surfaces. To ensure a uniform surface and prevent the formation of "bald" patches, back roll with a velours roller. The product can also be applied with a roller in criss-cross strokes, resulting in an increased roughness. In order to work seamlessly, always work “fresh-in-fresh” and define work areas before starting.

When using **EP 296 RAPID**, floor and air temperature must not fall below 5 °C / 41 °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 poblems and spotting to occur. Exposure to water should be avoided during the first 7 days. 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 **VR 24** or **VR 33** immediately. Hardened material can only be removed mechanically.

Separate cleaning and care recommendations are available for cleaning floors produced with KLB coatings and sealers.

Storage

Store in dry and 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: RE55

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
FRG-89335 Ichenhausen

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DIN EN 13813:2003-01

Synthetic resin screed mortar
DIN EN 13813: SR-B1.5-AR0.5-IR7

Fire behaviour	B_{fl}-s1
Emission of corrosive substances	SR
Wear resistance BCA	AR 0.5
Adhesive tensile strength	B 1.5
Impact resistance	IR 7

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