

KLB-SYSTEM

PU-BETON 4012 Standfest

Stable 3-component polyurethane mortar coating

Packaging units

Article no.	Packaging	Content (kg)	Units/pallet
AK6304-49	Combi unit	15.05	9



Product characteristics

Mixing ratio parts by weight	A : B : C = 7.5 : 7.5 : 100
Processing time	15 °C / 59 °F : 35 min. 20 °C / 68 °F : 25 min. 25 °C / 77 °F : 20 min.
Processing temperature	Minimum 15 °C / 59 °F – Maximum 25 °C / 77 °F (room and floor temperature)
Curing time (accessibility)	15 °C / 59 °F : 16 - 24 hrs. 20 °C / 68 °F : 10 - 14 hrs. 25 °C / 77 °F : 8 - 10 hrs.
Curing	1 - 2 days for mechanical load at 20 °C / 68 °F 2 days for chemical resistance at 20 °C / 68 °F
Further coatings	After 10 - 14 hours, but not longer than 36 hours at 20 °C / 68 °F
Consumption	2.2 - 2.8 kg/m at side-length or radius of 5 cm
Layer thickness	Starting at 3.0 mm
Colours	Natural, beige, red, green, grey
Shelf life	12 months (originally sealed) – Protect from frost!

Product description

KLB-SYSTEM PU-BETON 4012 Standfest is a high-quality, stable 3-component polyurethane mortar for floor surfaces exposed to hot water and chemicals.

KLB-SYSTEM PU-BETON 4012 Standfest is a system product that is used as a supplement to **KLB-SYSTEM PU-BETON 4006, 4009** and **PU-BETON 4011 Grip** for the production of concave and triangular coving as well as plinths.

KLB-SYSTEM PU-BETON 4012 Standfest is therefore especially suitable for the food processing industry with increased exposure to hot water and wetness, like production areas in breweries, dairy farms, slaughterhouses and butcheries, as well as in areas where resistance to chemicals is required.

KLB-SYSTEM PU-BETON 4012 Standfest consists of reactive resin components and a mineral component, which are carefully aligned and result in a very robust coating. The mortar mixture is laid with a suitable trowel and has a sufficiently long processing time. In case of very uneven floors, **PU-BETON 4012 Standfest** can be used as a mortar to fill larger holes, break-outs, voids, etc.

KLB-SYSTEM PU-BETON 4012 Standfest offers a high mechanical and thermal resistance, and very good resistance to many chemicals, especially to aqueous saline solutions, acids and alkalis, as well as to solvents.

Compared to conventional synthetic resin coatings, **KLB-SYSTEM PU-BETON 4012 Standfest** offers an increased glass transition temperature and cross-linking. This is why the material provides an excellent temperature resistance. Due to the high impact strength, there is good resistance to impact loads.

Yellowing may occur when exposed to UV rays because of the consistency. This will not affect any technical properties of the material though. Polyurethane mortar coatings are functional and their optical appearance may not always be consistent. Differences in texture, shoulders, and fastening grooves may become visible, especially on smooth coatings (R9).

Area of application

- Highly resistant mortar for skirtings or covings, e.g. adjoining coating, respectively floor coating based on **PU-BETON 4009** or **PU-BETON 4006**, for high thermal, chemical, and mechanical resistance. For areas in the food production and food processing industry with special requirements to cleaning (wet coatings), like dairy farms, slaughterhouses, breweries.
- For filling holes and large surface defects with the subsequent coating using **PU-BETON 4009** or **PU-BETON 4006**.

Product features

- stable setting
- rapid-setting
- resistant to hot water
- for repair works
- good processing properties
- very chemically resistant
- PU-Beton system component

Technical data

Solid content	> 99	%	KLB method
Density - Component A+B+C	2.12	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Weight loss	< 1.0	weight-%	after 28 days
Water absorption	< 0.2	weight-%	DIN 53495
Bending tensile strength	10	N/mm ²	DIN EN 196/1
Compressive strength	45	N/mm ²	DIN EN 196/1

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

Tests

- Product is compliant with DIN EN 13813: 2003-01.

Build-up of coats

- Saturated base coat with primer **PU-BETON 4050 Grundierung**, consumption approx. 0.4 - 0.5 kg/m². On walls or vertical surfaces, the primer must be mixed with suspending agent (1.5 to 2 % based on the total amount) to prevent it from running off. Afterwards, also sand the area.
- Use the specially stable **PU-BETON 4012 Standfest** for triangular or concave covings. For a side length or radius of 5 cm: consumption approx. 2.2 - 2.8 kg per running meter. Also suitable for filling larger holes or local separations.
- Apply **PU-BETON 4006** with a spiked coating knife in layers of approx. 6 mm or **PU-BETON 4009** in layers of approx. 9 mm.

- Scatter completely with fire-dried quartz sand of a grain size 0.3/0.8 mm or 0.7/1.2 mm. After curing, sweep off and vacuum thoroughly until no more sand is released.
- Apply **PU-BETON 4080 Kopfsiegel** with a rubber squeegee and roll with a velour roller in crosswise motion. Consumption approx. 0.650 - 0.900 kg/m². Work fast and seamless.

It is mandatory to stay within the recommended consumption for the slip resistance grade.

Substrate

The substrate to be coated must be even, non-slip, sufficiently resistant to tension and compression, clean as well as be free from weakly-bonded components or impurities. Materials impairing adhesion such as grease, oil and paint residues should be removed with suitable measures. Suitable substrates are concrete C25/30 or cement screed CT-C30-F5-V60 bonded. Other substrates are not or not generally suitable. If necessary, ask for a consultation. The substrates must have a sufficiently high strength for the intended use. The substrates to be coated must be prepared mechanically, preferably by shot-blasting. The surface strength must then be at least 1.5 N/mm². For anchoring the coating, anchoring grooves are to be provided at the end edges, passages, etc. These should be approx. 6 to 10 mm deep and wide. For concrete, the moisture content must not exceed 6 CM-%. 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 as well as the notes provided in the product information for the recommended base coat **PU-BETON 4050 Grundierung**. On areas with increased thermal exposure, use only **PU-BETON 4050 Grundierung**. The prepared area must be saturated, pore-free and primed carefully. If the substrate has not been primed to be pore-free, bubbles and pores can develop in the coating due to air rising from the substrate. If required, scatter openly with fire-dried quartz sand 0.7./1.2 mm. In case of doubt, we recommend testing on a trial surface.

Product components

PU-BETON 4012 Standfest consists of the following components:

1 packaging unit **PU 4012** Component A: 1.000 kg
1 packaging unit **PU 4012** Component B: 1.000 kg
1 packaging unit **PU 4012** Component C: 13.000 kg
1 packaging unit Pigment 0.050 kg

Total quantity: 15.050 kg

Mixing

Combo-packaging will be supplied in the correctly measured mixing ratio. Only in the present mixture of the three components can the described processing and material properties be achieved. At first, the liquid binding agent components (components A + B) are emptied into a proper container and blended with a slow speed mixer (200 - 400 r/pm) for at least 1 minute until a homogeneous, streak-free compound forms. Mixing in component C should be carried out with a compulsory mixer for a consistent mortar quality. Add the premixed binding agent into the compulsory mixer, then add component C. Mix homogeneously for approx. 3 minutes at 20 °C / 68 °F. Lower temperature may increase, higher temperature may decrease the mixing times.

Note: pay attention to consistent mixing times. Process complete packaging units only! Inaccurate mixing ratios will lead to useless results. Do not mix more than two packaging units per application.

Processing

Distribute the mortar mixture immediately without any delay. Spread the mixture evenly over the prepared surfaces and shape it into the desired form using a suitable trowel. Then compact and smooth with a little pressure. Always work "fresh-in-fresh" to avoid any shoulders. Seal with **PU-BETON 4080 Kopfsiegel** within 48 hours after the covings have hardened.

Floor and air temperature must not fall below 15 °C / 59 °F and humidity should be at 40 to 85%. The difference in floor and room temperature must remain less than 3 °C / 3 K / 5.4 °F so that curing will not be disturbed. If a dew-point situation arises, regular curing may be disrupted with hardening problems and spotting to occur. The specified hardening times apply for 20 °C / 68 °F. Lower temperature may increase; higher temperature may decrease the curing and processing times. If working conditions are not complied with, the technical properties of the end product may deviate from the description.

Cleaning

To remove fresh contamination and to clean tools and equipment, use **VR 28** 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 at frost-free conditions. Ideal storage temperature is between 15 - 20 °C / 59 - 68 °F. Bring to a suitable working temperature before application. Process complete units only!

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: PU40

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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PU4012-V1-022013	
DIN EN 13813:2003-01	
Synthetic resin screed mortar DIN EN 13813: SR-B1.5-AR0.5-IR8	
Fire behaviour	E _f -s1
Emission of corrosive substances	SR
Wear resistance BCA	AR 0.5
Adhesive tensile strength	B 1.5
Impact resistance	IR 8



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.