



## KLB-SYSTEM POLYURETHAN PU 806 E - Wall

Light-stable and solvent-free 2-component polyurethane matt sealer with increased opacity as finish sealer on walls and ceilings

### Packaging units



Article no.	Packaging	Content (kg)	Units/pallet
AK6516-50	Combi unit	12.00	60
AK6516-70	Combi unit	6.00	90

### Product characteristics

Mixing ratio parts by weight	A : B = 100 : 11
Mixing ratio parts by volume	A : B = 100 : 10
Maturing time	<b>After mixing, wait at least 10 minutes, then blend once again for 1 minute (we urgently recommend complying to this)</b>
Processing time	10 °C / 50 °F : 180 min. 20 °C / 68 °F : 120 min. 30 °C / 86 °F : 50 min.
Processing temperature	Minimum 10 °C / 50 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F : 14 - 18 hrs. 20 °C / 68 °F : 12 - 14 hrs. 30 °C / 86 °F : 8 - 12 hrs
Curing	Dust-dry after 2 - 3 hours at 20 °C / 68 °F 2 - 3 days for mechanical load at 20 °C / 68 °F 7 days for chemical resistance at 20 °C / 68 °F
Further coatings	After 12 - 18 hours, but not longer than 48 hours at 20 °C / 68 °F
Consumption	Approx. 0.100 - 0.120 kg/m <sup>2</sup>
Layers	1 - 2 coats depending on the colour
Layer thickness	(for a 2-coat application) 0.100-0.150 mm
Colours	KLB-Standard Colours – see chart. Other colours upon request!
Shelf life	12 months (originally sealed) – <b>Protect from frost!</b>

### Product description

**KLB-SYSTEM POLYURETHAN PU 806 E - Wall** is a low-emission, coloured 2-component polyurethane sealer with increased opacity. The sealer is used for matt sealing of smooth, pore-free and jointless wall and ceiling coatings which have been created with **KLB-SYSTEM EPOXID EP 652 W**.

Alternatively, **KLB-SYSTEM POLYURETHAN PU 806 E Clean - Wall** is available as 2-component polyurethane sealer designed to offer preventive protection against bacterial contamination. This assists the production of permanently hygienic surfaces, even between the necessary cleaning and disinfection cycles.

**Note:** the processing information and the technical data of **KLB-SYSTEM POLYURETHAN PU 806 E Clean - Wall** do not differ from the standard product.

**KLB-SYSTEM POLYURETHAN PU 806 E - Wall** is characterised by good processability and high opacity. When sealing wall or ceiling coatings with the same

or similar colour shade, one sealing layer is usually sufficient to achieve uniform colour coverage. If the substrate to be sealed differs in colour shade and/or brightness, several sealing layers may be necessary.

The sealer belongs to the KLB product category **KLB-SYSTEM POLYURETHAN PU 805 E/PU 806 E** which makes these products low-emission and resistant to yellowing.

The products are certified according to the "Indoor Air Comfort Gold" and meet the requirements for a sustainable building certification according to DGNB, LEED or BREEAM. The "Indoor Air Comfort" product certification sets the highest requirements for the emission of volatile organic compounds and meets not only the German requirements of AgBB or ABG, but also the emissions regulations of many other European countries.

With its colour-stable properties, **PU 806 E - Wall** is particularly suitable for the final sealing of epoxy resin coatings. The sealer has good adhesion to various substrates and can therefore also be used - after adhesion testing - on old coatings..

**PU 806 E - Wall** has a good resistance to many chemicals such as diluted alkalis and bases or aqueous solutions. Seek advice if necessary!

**Note:** **PU 806 E** is recommended for the coloured sealing of KLB floor coverings. In areas with high and frequent wet exposure and also with chemicals, solvent-based sealers would be more appropriate.

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## Area of application

- **PU 806 E - Wall** is additionally used as a coloured matt sealer for ceilings, walls, and vertical surfaces.
- Use as matt sealer for wall coatings made of **EP 652 W**.
- For decorative coatings on walls and ceilings with a high demand on the optical appearance, e.g. wet rooms, bath rooms, etc.

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## Product features

- high covering power
  - for walls, ceilings and vertical surfaces
  - matt and optically appealing surfaces
  - very high adhesion
  - Total Solid according to GISCODE
  - water vapour-diffusible
  - abrasion-resistant
  - environmentally friendly
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#### Technical data

Viscosity - Component A+B	Approx. 800 - 1500	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 40	%	KLB method
Density - Component A+B	1.15	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Abrasion (Taber Abraser)	< 13	mg	ASTM D4060 (CS10/1000)
Flashpoint	Not flammable	-	DIN 51755
Gloss level	20 - 40 (85°)	-	DIN 67530
Diffusion resistance rate	7500	-	DIN EN ISO 12572
Diffusion equivalent air layer thickness Sd	(0.1 mm) 0.75	m	DIN EN ISO 7783-2

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

#### Included in systems

- **System N2 KLB DECOR LOW-VOC WALL PU**

Please visit our website to get more information about our KLB systems: [www.klb-koetzal.com](http://www.klb-koetzal.com)

#### Suitable coatings

The following self-levelling coatings can be sealed with **PU 806 E - Wall**:

##### **EP 652 W.**

With other coatings, adhesion must be tested. The adhesion can anyway be improved by grinding the surface.

#### Tests

External test certificates are available:

- Certified as low-emission according to Eurofins "Indoor Air Comfort Gold". Compliant with AgBB for recreation rooms.
- Suitable for use in foodstuffs according to § 31 para. 1, German Food and Feed Code (german law LFGB).

##### **Note:**

Please ask for the tested system build-up!

#### 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 trade associations, e.g. the most recent versions of BEB worksheets KH-0/U, KH-0/S and KH-2. The sealer is typically applied as the last layer when creating a floor covering. It is therefore necessary to ensure that the previous layer is not already soiled. The optimum time for sealing is reached when the previously applied epoxy resin layer has hardened to a sufficiently stable film, but is not yet cured completely. In standard systems, this is the case after 18 hours at the earliest and after 72 hours at the latest at 20 °C / 68 °F air and soil temperature. If sealers are applied later, a trial surface must be applied and tested to check that sufficient adhesion is achieved. Old surfaces must be cleaned and mechanically prepared if necessary. If old synthetic resin substrates are being sealed, it is necessary to check that sufficient adhesion is achieved. If in doubt, we recommend processing a sample area.

## Mixing

Combo-packaging will be supplied in the correctly measured mixing ratio. Before use, bring component A to processing temperature and shake well, then empty the contents into a clean, oval bucket. 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.

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## Maturing time

**Important to improve results: wait at least 10 minutes (for pre-reaction), then blend once again.**

To obtain optimum technical properties, **PU 806 E - Wall** must be mixed 10 minutes before processing. Mix again briefly to ensure complete homogenisation, then process.

**Processing time max. 2 hours at 20 °C / 68 °F (see chart "Processing time").**

**Note:** end of pot life is not visible!

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## Processing

As with all reactive resin systems, processing should take place immediately after mixing using a lint-free velours roller. Typically, work areas are divided up beforehand to avoid duplicate application and haphazard overlapping. Otherwise, an uneven surface appearance and streaking might appear. For larger areas, it is recommended that 2 or more people carry out the application. One or more persons apply the material in one direction, while another person distributes the fresh sealing material in a crosswise motion (90° angle). Use a 50 cm wide roller on larger surfaces for the final re-rolling. The distribution roller should be saturated/wetted with material and only be used for distribution, never for application. Always work "fresh-in-fresh" and ensure optimum distribution of the material. Apply only enough so that excess material does not run down the wall.

Floor and air temperature must not fall below 10 °C / 50 °F and humidity should not exceed 75 %. The recommended climate conditions must be maintained during curing and drying. 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 drying and cross-linking will not be possible, with hardening problems and spotting to occur. Exposure to water and chemicals should be avoided during the first 7 days. 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 those specified.

**Note:** long or improper storage can lead to film formation inside the bucket. In this case, we recommend sieving the sealer. **KLB-Eimersieb 15L** (Art. N. WZ7050-01) is ideal for this purpose, as it enables quick sieving and thus a good sealing result

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## Cleaning

To remove fresh contamination and to clean tools, use water immediately. Hardened material can only be removed mechanically.

Separate cleaning and care recommendations are available for cleaning the sealed floor surfaces. To ensure intercoat adhesion, water-based sealers may be grouted with KLB products after 7 days at the earliest (at 20 °C / 68 °F).

**Note:** in special cases - especially with vibrant colours - the cleaning might cause a loss of colour. This can be avoided by applying an additional transparent sealing, e.g. **PU 805 E**.

#### Storage

Store in dry and frost-free conditions. Ideal storage temperature is between 10 - 20 °C / 50 - 68 °F. Do not store above 35 °C / 95 °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: W1/DD

#### 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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PU806E-Wall/PU806EClean-Wall-V2-062015	
DIN EN 13813:2003-01	
Synthetic resin screed mortar DIN EN 13813: SR-B1.5-AR0.5-IR16	
Fire behaviour	E <sub>f</sub> -s1
Emission of corrosive substances	SR
Wear resistance BCA	AR 0.5
Adhesive tensile strength	B 1.5
Impact resistance	IR 16

#### VOC content

The product complies with the high requirements to low VOC contents, as required for sustainable construction. Therefore, these values exceed by far the European Union directive 2004/42/EG (decopaint directive).

	Limit value	Actual content	
Decopaint Directive 2004/42/EG - Component A	< 140	10,8	g/l
Decopaint Directive 2004/42/EG - Component B	< 140	0	g/l
DGNB - Components A + B	< 3	0,8	%
Klima:aktiv - Components A + B	< 3	0,8	%
LEED - Components A + B	< 100	9,8	g/l
Minergie ECO(R) - Components A + B	< 1 (< 2)	0,8	%

(According to the decopaint directive, single components are used for the calculation. For the quality rating systems for sustainable construction, the mixture of both components in the correct mixing ratio is the determining factor.)



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-koetzal.com](http://www.klb-koetzal.com). In addition, our "General Terms and Conditions" apply.