

# KLB-SYSTEM POLYURETHAN

## PU 882

Transparent 2-component polyurethane sealer for silky gloss, fine-textured surfaces

### Packaging units



Article no.	Packaging	Content (kg)	Units/pallet
AK6501-50	Bucket combo	10.00	30
AK6501-30	Hobbock combo	30.00	12

### Product characteristics

Mixing ratio parts by weight	A : B = 3 : 1
Mixing ratio parts by volume	A : B = 100 : 30
Processing time	10 °C / 50 °F : 70 min. 20 °C / 68 °F : 60 min. 30 °C / 86 °F : 35 min.
Processing temperature	Minimum 10 °C / 50 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F : 24 - 36 hrs. 20 °C / 68 °F : 18 - 24 hrs. 30 °C / 86 °F : 14 - 18 hrs.
Curing	2 - 3 days for mechanical load at 20 °C / 68 °F 7 days for chemical resistance at 20 °C / 68 °F
Further coatings	After curing, 18 - 24 hours at the earliest, but not longer than 48 hours at 20 °C / 68 °F
Consumption	0.150 - 0.180 kg/m <sup>2</sup> for each application
Layers	Usually 1 layer on same-coloured coatings
Colours	Non-pigmented, textured, satin finish
Shelf life	12 months (originally sealed)

### Product description

**KLB-SYSTEM POLYURETHAN PU 882** is a solvent-based 2-component sealer, very resistant to abrasion, forming silky gloss surfaces. **KLB-SYSTEM POLYURETHAN PU 882** is transparent whereas **KLB-SYSTEM POLYURETHAN PU 883** is available as pigmented alternative in different colour tones.

The sealer results in a fine-grained, silk-gloss surfaces, which can be produced with suitable short-floor rollers. **KLB-SYSTEM POLYURETHAN PU 882** is used to produce uniform, silk-gloss surfaces on decorative commercial floors. When using the transparent **KLB-SYSTEM POLYURETHAN PU 882**, decorative flakes **parti-Color®-chips** may be added.

The sealer can be applied onto polyurethane and epoxy resin coatings - the time window for application of the respective product combination must be observed. In case of polyurethane coatings that are susceptible to yellowing, an opaque sealing layer should be applied, such as with **KLB-SYSTEM POLYURETHAN PU 883**. Transparent sealers can be used with more colour-insensitive, darker colours.

**KLB-SYSTEM POLYURETHAN PU 882** is made from high-quality raw materials. The sealer is low in yellowing and thus mainly used in areas with decorative requirements.

On industrial surfaces exposed to stresses from material handling equipment, thin-layered sealers can be rubbed off by braking action, so it must be checked in each individual case if it makes sense to use the sealer. The product offers resistance to diluted acids and alkalis or salt solutions as well as short-term exposure to solvents. Polyurethane sealing products do not have adequate resistance to tyres and long exposure may therefore leave an imprint. In such cases, either use suitable underlays made of acrylic glass or cardboard or switch to epoxy resin sealers like **EP 705 E** or **EP 706 E**.

**PU 882** contains solvents and is thus subject to the hazardous goods regulations.

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#### Area of application

- **PU 882** is suitable as silk-gloss sealer on epoxy resin coatings in commercially and industrially used areas with decorative demands, e.g. coatings scattered with **partiColor®-chips** (flakes).
- As silk-gloss sealer for polyurethane coatings like the yellowing-resistant **PU 410**, but also for standard coatings like **PU 420** or **PU 421** - but also with the transparent **PU 882** for different scatterings.

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#### Product features

- silky-gloss
- containing solvents
- finely structured
- easily wear-resistant
- low-grade yellowing
- free of deleterious substances against varnish

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#### Technical data

Viscosity - Component A+B	Approx. 170	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 61.5	%	KLB method
Density - Component A+B	1.05	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Water absorption	< 0.2	weight-%	DIN 53495
Abrasion (Taber Abraser)	< 45	mg	ASTM D4060 (CS10/1000)
Gloss level	40 - 70 (85°)	-	DIN 67530

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

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#### Suitable coatings

The following self-levelling coatings can be sealed with **PU 882**:

**EP 200 VF, EP 202, EP 213, EP 213 RAPID, EP 216 Universal, EP 216 RAPID, EP 220, PU 405, PU 410, PU 420, PU 421, PU 425 Comfort.**

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

## Tests

External test certificates are available:

- Slip-resistance grade R11 in combination with RHX 75 possible, according to DIN 51130 and BGR 181.
- Classification of the fire behaviour in combination with **PU 410** according to DIN EN 13501-01:2010-01: C<sub>fl</sub>-s1.

### Note:

Please ask for the tested system build-up!

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## Build-up of coats

Decorative polyurethane coating openly scattered with **partiColor®-chips 3** (flakes)

- Apply one of the recommended KLB base coats, like **EP 50**, **EP 51 RAPID S** or **EP 52 Spezialgrund**. Consumption approx. 0.3 - 0.4 kg/m<sup>2</sup>.
- Apply a scratch coat with **EP 50**, **EP 51 RAPID S**, or **EP 52 Spezialgrund** and mixed sand **KLB-Mischsand 2/1**. Scatter openly with quartz sand 0.3 - 0.8 mm, consumption 0.5 - 1.0 kg/m<sup>2</sup>. Sweep off any excess sand before the wear layer. Not mandatory for subsequent epoxy resin coatings.
- Apply the wear layer using **PU 410** or **PU 420**, **EP 216 Universal**, or **EP 220**. Consumption approx. 2.0 - 2.8 kg/m<sup>2</sup>, depending on the product.
- Scatter with **partiColor®-chips 3** (flakes), approx. 0.050 - 0.100 kg/m<sup>2</sup>, depending on the requested visual appearance.
- Seal with **PU 882**. Consumption 0.150 - 0.180 kg/m<sup>2</sup>.

Decorative polyurethane coating densely scattered with **partiColor®-chips 1** (flakes)

- Apply one of the recommended KLB base coats, like **EP 50**, **EP 51 RAPID S**, or **EP 52 Spezialgrund**. Consumption approx. 0.3 - 0.4 kg/m<sup>2</sup>.
- Apply a scratch coat with **EP 50**, **EP 51 RAPID S** or **EP 52 Spezialgrund** and mixed sand **KLB-Mischsand 2/1**. Scatter openly with quartz sand 0.3 - 0.8 mm, consumption 0.5 - 1.0 kg/m<sup>2</sup>. When coating mastic asphalt, apply a layer of **PU 420**, **PU 421**, or **PU 410**. Sweep off any excess sand before the wear layer.
- Apply the wear layer using **PU 410** or **PU 420**, **EP 216 Universal**, or **EP 220**. Consumption approx. 2.0 - 2.8 kg/m<sup>2</sup>, depending on the product.
- Scatter densely with **partiColor®-chips 1** (flakes), consumption 0.150 - 0.180 kg/m<sup>2</sup>.
- Seal with **PU 882**. Consumption 0.150 - 0.200 kg/m<sup>2</sup>.

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## Substrate

The substrate to be coated must be dry and free from any dirt. 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 48 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, hardened layers may be subsequently sealed because of the good adhesion of the material. Required is an accurate cleaning and grinding of the entire surface. If old synthetic resin substrates are being sealed, it is necessary to check that sufficient adhesion is achieved.

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## 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

after having stirred up the single components. 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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## Processing

As with all reactive resin systems, processing should take place immediately after mixing using a lint-free and solvent-resistant velours sealing roller. Typically, work areas are divided up beforehand to avoid duplicate application and haphazard overlapping. Otherwise, an uneven surface appearance and streaking might appear. Solvent-based sealers should be applied at the recommended temperatures without direct sunlight or draughts. 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). The sealer must be textured with the short-floor or fine-textured roller. This means that immediately after application, the surface texture remaining on the floor is visible. The distribution must be carried out until a satisfactory, even surface is visible. 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. For sealing, keep within a coordinated work rhythm – criss-cross rolling may not be carried out too late. On large areas, this should be done directly on the surface, wearing blunt nail or football shoes. Always work "fresh-in-fresh" and ensure optimum distribution of the material. Avoid ponding, otherwise fogging may occur.

**Important:** when using epoxy resin or polyurethane coatings, a sufficiently long curing time must be allowed before applying the sealer. At least 18 hours must be waited at room temperature. Longer waiting times are quite possible, but at a maximum of 48 hours. The use of **PU 882** can be recommended on the following epoxy resin coatings: **EP 99, EP 100 VS, EP 174, EP 175, EP 175 Spezial, EP 200 VF, EP 213, EP 216 Universal, EP 220**. If unknown coatings are to be sealed, preliminary tests must be carried out to check adhesion.

Floor and air temperature must not fall below 10 °C / 50 °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 and cross-linking will not be possible with hardening problems 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.

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## Cleaning

To remove fresh contamination and to clean tools, use thinner **VR 28** or **VR 33** immediately after use. Hardened material can only be removed mechanically.

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

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## 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 contents as quickly as possible.

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### 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! PU 882 contains solvents. Please advise your client that there might be an unpleasant odour when sealing. Note: Ensure sufficient ventilation and observe the fire protection measures specified in the safety data sheet.

GISCODE: PU50

### 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

			
1119		KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 FRG-89335 Ichenhausen	
KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 FRG-89335 Ichenhausen		13	
13		PU882-V1-022013	
PU882-V1-022013		DIN EN 13813:2003-01	
DIN EN 1504-2:2004		Synthetic resin screed mortar DIN EN 13813: SR-B1.5-AR0.5-IR14	
Surface protection products-coating DIN EN 1504-2: ZA.1d,ZA.1f,ZA.1g		Fire behaviour	C <sub>fr</sub> -s1
Abrasion resistance	complied with	Emission of corrosive substances	SR
CO <sub>2</sub> -permeability	SD > 50m	Wear resistance BCA	AR 0.5
Water vapour permeability	Class III	Adhesive tensile strength	B 1.5
Capillary water absorption and water permeability	< 0.1 kg/m <sup>2</sup> *h0.5	Impact resistance	IR 14
Resistance to increased chemical excavation	complied with		
Resistance to impact	Class II		
Tear-test for adhesive strength evaluation	> 1.5 N/mm <sup>2</sup>		
Fire behaviour	C <sub>fr</sub> -s1		



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