



KLB-SYSTEM POLYURETHAN

PU 1900

Very fast-setting 2-component polyurethane special resin for the quick renovation of cracks in screeds and for bonding structural elements

Packaging units

Article no.	Packaging	Inhalt
AK1003-97	Combo packaging	0.50 kg



Product characteristics

Mixing ratio parts by weight	A : B = 100 : 100
Mixing ratio parts by volume	A : B = 100 : 130
Processing time	10 °C / 50 °F: 12 minutes 20 °C / 68 °F: 10 minutes 30 °C / 86 °F: 5 minutes
Processing temperature	Minimum 10 °C / 50 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F: approx. 50 minutes 20 °C / 68 °F: approx. 40 minutes 30 °C / 86 °F: approx. 25 minutes
Curing	Approx. 40 minutes until mechanical load at 20 °C / 68 °F
Further coatings	After curing
Consumption	Grout volume approx. 1.25 kg/l
Shelf life	6 months (originally sealed) – Protect from frost!

Product description

KLB-SYSTEM POLYURETHAN PU 1900 is a very reactive, universal 2-component polyurethane special resin for the quick renovation of screed cracks, for closing joints and for bonding profiles, rails and more.

KLB-SYSTEM POLYURETHAN PU 1900 adheres to clean, absorbent substrates, such as concrete, cement screed, calcium sulphate screed, etc. The low viscosity of the resin means it penetrates pores, cracks and capillaries well, ensuring good adhesion and a force-fit connection after curing. Thanks to its particularly good penetrative properties and wettability, the product is suitable for critical substrates and extremely tolerant to moisture.

KLB-SYSTEM POLYURETHAN PU 1900 reacts very quickly, and additional layers can be applied after a short time. The primer (e.g. epoxy resin primers, among others) required for the subsequent layer can be applied to the cured resin. **KLB-SYSTEM POLYURETHAN PU 1900** therefore enables the quick renovation of cracks, as well as the installation of components (rails, profiles, etc.) without significant delay before the priming, coating, or covering work begins. When applied correctly, a range of different subsequent coverings can be used. By adding quartz sand **KLB-Quarzsand 0.1/0.3 mm** based on the width of the crack, cracks can be filled and closed.

Area of application

- For closing screed cracks, contraction joints and sections of screed.
- As a quick-curing repair resin.
- For bonding metal rails, profiles, angles, and much more.
- On screeds and concrete.
- For bonding concrete and filling cracks and hollow layers.
- For force-fit injections on concrete.
- In combination with mixed sand KLB-Mischsand 5/1, quartz sand KLB-Quarzsand 0.1/0.3 mm or 0.3/0.8 mm. For closing wide, rigid joints (> 10 mm).
- Quick-renovation mortar for small areas when mixed with KLB 1

Product features

- very rapid-setting
- all-purpose use
- consistent to hydrolysis and saponification
- high penetration
- can be filled with fire-dried quartz sand
- good interlayer adhesion

Technical data

Viscosity - Component A+B	950	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Density - Component A+B	1.25	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Weight loss	0.3	weight-%	after 28 days
Water absorption	0.2	weight-%	DIN 53495
Bending tensile strength	(1:5 with KLB 1) 5	N/mm ²	DIN EN 196/1
Compressive strength	(1 : 5 with KLB 1) 20	N/mm ²	DIN EN 196/1
Adhesive tensile strength	> 1.5	N/mm ²	DIN EN 1542
Shore-hardness D	64	-	DIN 53505 (after 7 days)

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

Substrate

The substrate must be even, dry, dust-free, sufficiently resistant to tension and compression, and free of weakly bonded components or surfaces. Materials reducing adhesion, such as grease, oil and paint residues, must first be removed with suitable measures. The substrates to be coated must be prepared mechanically by (diamond) grinding. The surface strength must be minimum 1.5 N/mm².

Mixing

The fast-curing material consists of 2 plastic bottles and is supplied in coordinated 0.5 kg packages. The package of Component A has sufficient volume to contain the entire packaging unit. Unscrew the top of both bottles and empty the contents of the small one containing Component B into the opening of the bottle containing Component A. Close the larger bottle (Component A) again and shake thoroughly for 2 minutes. The knife can be used to cut open the spray nozzle. Apply the material directly from the spray bottle immediately after mixing. Premix the resin before adding any additives. The quantity of sand mixture added depends on the required consistency and stability.

Processing

Closing cracks, contraction joints and sections of screed:

Existing cracks must be vacuumed out with a powerful vacuum cleaning system. If necessary, it can be cut open with a cutting disc to aid impregnation. Vacuum off

contraction joints and sections of screed with a vacuum cleaning system. If necessary, the edges of the joint can be prepared further by cleaning them with the cutting disc. It is important that the cracks are as dry and free from dust as possible.

The freshly mixed material is processed by saturating the crack directly from the spray bottle. The material should ideally fill the entire crack. The crack can be filled multiple times until it is saturated with **PU 1900**. When closing very wide joints, approx. 50 - 100% of mixed sand **Mischsand 5/1**, quartz sand **Quarzsand 0.1/0.3 mm** or **Quarzsand 0.3/0.8 mm** can be added.

After a duration of approx. 15 - 25 minutes, **PU 1900** will set stable. This is the ideal time to scrape off any excess material with a trowel or a knife so that the closed joint is even.

Subsequent layers can be applied, depending on the temperature, after a curing time of approx. 25 - 50 minutes.

Bonding metal parts, angles and stone:

In order to position end profiles, angles etc., a zigzag beading the width of the profile is applied to the intended substrate. The parts to be bonded must be placed in and secured to the adhesive bed immediately. Here, too, can excess material be scraped off with a trowel or a knife after a curing time of approx. 15 - 25 minutes. Depending on the temperature, further processing can take place after approx. 25 - 50 minutes.

Use for injections:

Grout using a suitable injection press immediately after the product has been mixed. If cracks are grouted, use injection packers and cover the entire exposed crack with paste over a width of 10 cm along the crack. Start grouting from the deepest side. At the last packer, check the filling for resin leakage. After approx. 30 minutes, a subsequent injection process can be carried out. The packer and insulation can be removed the following day. Hollow layers are filled by drilling and grouting multiple times.

The floor and air temperatures must not fall below 0 °C / 32 °F and the humidity must not exceed 75%. The difference between the floor and room temperatures should be 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. 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 the working conditions are not complied with, the technical properties of the end product may deviate from those specified.

Cleaning

To clean fresh contamination and to clean tools, use **VR 28** or **VR 40** immediately after use. Hardened material can only be removed mechanically.

Storage

Store in dry and frost-free conditions. Ideal storage temperature: 15 - 25 °C / 59 - 77 °F. Bring to a suitable working temperature before application. Tightly re-seal opened packages and use up the content within 1 to 3 days.

Special remarks

This 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: 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.



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.