

# KLB-SYSTEM POLYURETHAN

## PU 68 Rapid U



Rapid-setting 2-component polyurethane binding agent and primer for concrete and other substrates. Suitable for repair works and as adhesion primer for the renovation of concrete joints

### Packaging units



Article no.	Packaging	Content (kg)	Units/pallet
AK6156-95	Bucket combo	1.00 kg	240
AK6156-70	Hobbock combo	5.00 kg	45
AK6156-60	Hobbock combo	9.00 kg	45

### Product characteristics

Mixing ratio parts by weight	A : B = 100 : 75
Processing time	10 °C / 50 °F : 25 - 30 min. 20 °C / 68 °F : 10 - 15 min. 30 °C / 86 °F : 5 - 8 min.
Processing temperature	Minimum 5 °C / 41 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F : 90 - 120 min. 20 °C / 68 °F : 60 - 90 min. 30 °C / 86 °F : 30 - 45 min.
Curing	After approx. 1 hour dry at 20 °C / 68 °F 4 - 8 hours until mechanical load at 20 °C / 68 °F 10 - 15 hours until chemical load at 20 °C / 68 °F
Further coatings	After approx. 1 hour, but after 8 hours at the latest at 20 °C / 68 °F
Consumption	Base coat: 0.3 - 0.6 kg/m <sup>2</sup>
Shelf life	12 months (originally sealed) – Protect from frost!

### Product description

Reactive, solvent-free 2-component polyurethane priming and mortar resin for fast repair and renovation of concrete and other mineral substrates. In combination with **KLB-SYSTEM POLYURETHAN PU 466**, the product is used in joint refurbishment. In addition **KLB-SYSTEM POLYURETHAN PU 68 Rapid U** can be used for small area priming of various polyurethane floorings, e.g. **PU 5000 RX**, **PU 420** or **PU 410** etc. **KLB-SYSTEM POLYURETHAN PU 68 Rapid U** is also suitable for selected epoxy resin floorings, like **EP 216 Rapid**. Advantageous is its very fast curing. Surfaces primed with **KLB-SYSTEM POLYURETHAN PU 68 Rapid U** can be further processed/coated after approx. 1 hour.

**Note:** Because of its fast curing the product is especially suitable for priming of small areas. Divide combo if necessary and process quickly. After 15 to 20 min. change roller.

As a binder, it is suitable in combination with mixed sand **KLB-Mischsand 1** for the production of repair mortars which are used for reprofiling, e.g. of substrate break-outs or joints that are subsequently filled with **KLB-SYSTEM POLYURETHAN PU 466**. The fast curing thus makes the renovation of joints possible within one day. **KLB-SYSTEM POLYURETHAN PU 68 Rapid U** cures fast and has a good cross-linking. The primer has very good adhesion and chemical resistance.

#### Area of application

- Use as primer before the grouting of the elastic joint compound **KLB-SYSTEM POLYURETHAN PU 466**, for movement and expansion as well as block joints between accessible concrete slabs in storage and industrial facilities.
- For priming concrete and other mineral substrates.
- Producing rapid-setting reprofiling mortars for the repair of chipping and reprofiling in joint rehabilitation.
- Before grouting with **KLB-SYSTEM POLYURETHAN PU 466** onto cracks and joints that need to be filled flexibly.

#### Product features

- solvent-free
- short reaction time
- quickly reworkable
- very high adhesion
- good resistance to water and chemicals

#### Technical data

Viscosity - Component A+B	Approx. 1900	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 99.8	%	KLB method
Density - Component A+B	Approx. 1.10	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Shore-hardness D	Ca. 75	-	DIN 53505 (after 7 days)

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

#### Suitable coatings

**PU 68 RAPID U** can be coated with the following self-levelling coatings:

**CW 510/CW512, PU 405, PU 410, PU 420, PU 421, PU 425, PU 426, PU 5000 RX, PU 5580, EP 77, EP 200 VF, EP 216 Universal, EP 216 RAPID, EP 220, EP 799 Ableitgrund.**

Note processing!

For other products check the adhesion. By scattering the primer with quartz sand the adhesion can be improved.

#### Substrate

The substrate must be dry, free of dust, sufficiently resistant to tension and compression as well as be free from weakly-bonded components. Materials impairing adhesion such as grease, oil, paint residues, cement or other weakly-bonded or loose parts should be removed beforehand with suitable measures.

As substrate underneath coatings, we recommend at least concrete of strength grade C25/30 according to DIN EN 206. Cement screeds must comply with at least grade CT-C30-F5 according to DIN EN 13813. For other substrates, please seek advice from us. The surface strength must be at least 1.5 N/mm<sup>2</sup>. When the product is used as primer/binding agent, the substrate must be permanently suitable for absorbing the expected loads in the block joint area and underneath coatings. Application on mastic asphalt is not recommended. The substrates to be coated should be prepared mechanically, preferably by shot blasting.

Prepare joint edges mechanically, if necessary by chiseling or cutting and made dust-free. The broken surface is primed and, when required, reprofiled with mortar for the subsequent elastic block joint. When renovating cracks, open them conically and vacuum them out.

For concrete and cement screeds, the moisture content must not exceed 4,5 CM-%. The possibility of moisture ingress from the rear must be permanently excluded. The

reprofiling of joints may require special procedures. Please consider our recommendations or, if necessary, seek technical advice from us. Observe the information issued by the trade associations, e.g. the most recent versions of BEB worksheets KH-0/U and KH-0/S.

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## Mixing

Combo-packaging will be supplied in the correctly measured mixing ratio. The package of Component A has sufficient volume to contain the entire packaging unit. Empty all of the hardener compound B into the resin. Blend with a slow speed mixer (200 - 400 r/pm) for at least 1 - 2 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.

### Producing mortars:

1 kg **PU 68 Rapid U**  
8 - 10 kg of mixed sand **KLB-Mischsand 1**

Before adding any additives, the binding agent must be premixed, only then is added the supplement. The amount of mixed sand depends on the necessary consistency and stability. Instead of mixed sand **KLB-Mischsand 1** for mortars **that are not used for reprofiling block joints**, it is alternatively possible to use a mixture of one part by weight each of fire-dried quartz sand with a grain size of 0.1/0.3 mm and 0.3/0.8 mm.

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## Processing

### Priming of block joints:

Process the material with a velours roller in an evenly sealed coat on the substrate. Avoid puddles. If the recoating window (8 hours) is exceeded or if subsequent recoating with repair mortar is to be carried out, scatter the primer loosely and openly with quartz sand 0.7/1.2 mm. **Note:** to improve adhesion, approx. 5 - 10% of thinner **VR 28** can be added to **PU 68 Rapid U** for low-absorbent substrates.

### Priming before coatings:

Process the material with a 6mm velours roller or smoothing trowel in an evenly sealed coat on the substrate. Avoid puddles. For highly absorbent surfaces a second layer of priming is recommended. If the recoating window (8 hours) is exceeded, scatter the primer loosely and openly with quartz sand 0.3/0.8 mm.

### Repair mortar:

The mortar can be applied on a wet, but also on a scattered, dry primer. For this purpose, the freshly mixed mortar is immediately spread on the repair surface, smoothed and compacted. Always apply connections fresh in fresh. Floor and air temperature must not fall below 5 °C / 41 °F and humidity should not exceed 75 %. The material to be processed must be at room temperature during processing. 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 adhesion may be disrupted with cross-linking disorders and spotting to occur. Exposure to water should be avoided during the first 24 hours. The specified hardening times apply for 20 °C / 68 °F. Lower temperature and humidities of under 40% may increase; higher temperature and humidities of over 70% may decrease the curing and processing times. If working conditions are not complied with, the end product's technical properties may deviate from the description.

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## Cleaning

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

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**Storage**

Store in dry and at 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: PU10

**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**

	
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PU68-V1-012021	
DIN EN 13813:2003-01	
Kunsthazestrichmörtel DIN EN 13813: SR-B1,5	
Brandverhalten	E <sub>r</sub> -s1
Freisetzung korrosiver Substanzen	SR
Verschleißwiderstand BCA	NPD
Haftzugfestigkeit	B 1,5
Schlagfestigkeit	NPD

NPD = No Performance Determined (Kennwert nicht festgelegt)



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