KLB-SYSTEM POLYURETHAN
PU 485 Flex

Solvent-free, non-pigmented 2-component polyurethane resin for producing transparent top layers on elastic coatings such as PU 410 or PU 405. To be used for partiColor®-Metalize effect floors and partiColor® glitter optics.

Packaging units

Article no.	Content (kg)	Units/pallet
AK6944-92	1.00	240
AK6944-50	10.00	30

Product characteristics

Mixing ratio parts by weight	A : B = 100 : 85
Mixing ratio parts by volume	A : B = 100 : 83
Processing time	10 °C / 50 °F: 30 - 35 min. 20 °C / 68 °F: 20 - 25 min. 30 °C / 86 °F: 10 - 15 min.
Processing temperature	Minimum 10 °C / 50 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F: 24 - 36 hours 20 °C / 68 °F: 14 - 18 hours 30 °C / 86 °F: 8 - 12 hours
Curing	3 days until mechanical load at 20 °C / 68 °F 7 days until chemical load at 20 °C / 68 °F
Further coatings	After 14 - 18 hours, but after 48 hours at the latest at 20 °C / 68 °F
Consumption	1.2 - 2.0 kg/m² per application
Colours	Non-pigmented
Shelf life	12 months (originally sealed)

Product description

KLB-SYSTEM POLYURETHAN PU 485 Flex is a non-pigmented, elastic 2-component polyurea resin for producing glossy and transparent clear resin layers on elastic polyurethane coatings, such as **KLB-SYSTEM POLYURETHAN PU 410, KLB-SYSTEM POLYURETHAN PU 405, KLB-SYSTEM POLYURETHAN PU 425** and others. The sealer is elastic, largely light-stable and has excellent mechanical properties.

Highly decorative effect coverings can be created by adding **partiColor®-Glitter** or **partiColor®-Metalize** pigments to the binding agent.

The coatings are elastic and offer a high walking comfort. They are able to withstand pedestrian traffic or light loads and can also be applied onto mastic asphalt or other suitable, also deformable, substrates.

The resin has a good resistance to common cleaning and household chemicals. Applications are preferably indoors.

Area of application

- Decorative coverings with glossy, transparent clear resin surface on a light-stable polyurethane resin coating in a single colour, with chips-scattering or marbled by wiping technique.
- As elastic polyurethane binding agent for the resination of flexible rubber granulate floors.
- Coverings with print inserts of selected fabric prints
- For unique coverings, such as with partiColor®-Metalize or partiColor®-Glitter
- Decorative coatings in the commercial area with light loads.

Product features

- non-pigmented, glossy
- solvent-free
- transparent
- elastic
- only slightly yellowing
- free of deleterious substances against varnish

Technical data

Viscosity - Component A+B	800 - 1200	mPas	DIN EN ISO 2811-2 (23 °C / 73.4 °F)
Solid content	approx. 100	%	KLB method
Density - Component A+B	approx. 1.08	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Water absorption	< 0.2	% w/w	DIN 53495
Breaking strain	approx. 82	%	DIN EN ISO 527-3
Shore-hardness A	Ca. 72	-	DIN 53505 (after 7 days)
Abrasion (Taber Abraser)	approx. 22	mg	ASTM D4060 (CS10/1000)

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

Build-up of coats

Decorative coverings with transparent clear resin layer onto PU 410/PU 405

- Apply the necessary coatings in accordance with the product information of **PU 410** or alternatively, **PU 405**. As recommended, the product can be used as single-coloured coverings, scattered with partiColor®-Chips (flakes), and with wiping technique.
- After 14 - 48 hours, **PU 485 Flex** can be applied as clear resin layer.
- The application is done with a notched trowel (**Toothed blade S6**), consumption 1.2 - 1.6 kg/m². Ventilate with a **metal needle roller** (item no. WZ4100-26) when still fresh.
- Optional matt sealer: apply **PU 805 E** in crosswise motion with the velours roller, consumption approx. 0.120 - 0.160 kg/m². Alternatively, a top sealer of **PU 811 E** can be applied, consumption approx. 0.160 - 0.200 kg/m².

Substrate

In general: the substrate to be coated must be even, dry, dust-free, sufficiently resistant to tension and compression, and free of weakly bonded components or surfaces. Materials reducing adhesion, e.g. grease, oil and paint residues, must first be removed with suitable measures. The notes given in the product information of the recommended KLB primer for the respective build-up must be observed.

Application as a transparent resin layer

Applying a transparent, glossy resin layer requires the installer to take particular care, as any type of soiling will be visible. The freshly coated area must not be walked on or made dirty before **PU 485 Flex** is applied. The coating can be applied

as a top layer within the recommended time frame for a final coating onto the recommended products. The surface should only be walked on by the coating installer, wearing clean, light-coloured shoes and clean clothing.

PU 405 or **PU 410** are suitable as base layers for **PU 485 Flex**. Please observe the product information of both products for detailed processing instructions when priming mineral substrates.

Usually, further coating or sealing work is carried out immediately after the previous application without intermediate use.

Mixing

If the binding agent components are packed individually, they should be weighed out exactly in the specified mixing ratio. 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 of the binding agent. Empty the entire contents of hardener compound B into the resin package. Blend the binder with a slow speed mixer (200 - 400 rpm) for approx. 1 - 2 minutes until a homogeneous, streak-free compound forms. To prevent mixing errors, it is recommended that the entire resin mixture is emptied (“repotted”) into a clean container and mixed once again briefly.

Processing

Process the freshly stirred material immediately after mixing. To do so, spread the material in portions on the substrate and distribute with the recommended toothed trowel until an even layer has been created. When still fresh, ventilate with a **metal needle roller** (item no. WZ4100-26). To work seamlessly, always work “fresh-in-fresh”.

Floor and air temperature must not fall below 10 °C / 50 °F and humidity must not exceed 75 %. The material to be applied must be at room temperature during application. Within the recommended processing conditions, the floor temperature may be a maximum of 3 °C / 3K / 5.4 °F colder than the ambient room air temperature to exclude a dew point on the surface to be coated and the fresh coating. Otherwise, regular curing will not be possible with hardening problems and foaming to occur. Technical properties might deviate. Do not work in strong sunlight or on strongly heated surfaces.

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. During curing, the recommended working conditions must be ensured. Otherwise, the technical properties of the end product may deviate from those specified.

Please note: decorative coverings must be applied very carefully. Special installation instructions are available for this.

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.

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. Observe the DIN safety data sheet and all identification information on the container label!

GISCODE: PU40

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

CE

KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 FRG-89335 Ichenhausen	
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PU485Flex-V1-012022	
DIN EN 13813:2003-01	
Synthetic resin screed mortar DIN EN 13813: SR-B2.0-AR0.5-IR10	
Fire behaviour	E_{fl}-s1
Emission of corrosive substances	SR
Wear resistance BCA	AR 0.5
Adhesive tensile strength	B 2.0
Impact resistance	IR 10

Please consider the latest version of this product information on our website.