

## KLB-SYSTEM POLYURETHAN

### PU 9018 Flex Color

Coloured, light-stable and weather-resistant 1-component polyurethane coating for balconies and patio areas

#### Packaging units



Article no.	Packaging	Inhalt	Units/pallet
PU6802-50	Bucket	12.00 kg	45
PU6802-60	Bucket	6.00 kg	75

#### Product characteristics

Mixing ratio parts by weight	Ready for processing!
Processing time	No pot life!
Processing temperature	Minimum 15 °C / 59 °F (room and floor temperature)
Curing time (accessibility)	18 - 24 hours at 20 °C / 68 °F
Curing	2 - 3 days until mechanical load at 20 °C / 68 °F 7 days until chemical load at 20 °C / 68 °F
Further coatings	After 18 - 24 hours, but after 48 hours at the latest at 20 °C / 68 °F
Consumption	0.400 - 0.550 kg/m <sup>2</sup> for each application (minimum 2 layer application)
Colours	Pebble grey (approx. RAL 7032), Agate grey (approx. RAL 7038), other colours upon request!
Shelf life	6 months (originally sealed)

#### Product description

**KLB-SYSTEM POLYURETHAN PU 9018 Flex Color** is a pigmented single component polyurethane sealer containing solvents, which also hardens in thicker layers due to air humidity. **KLB-SYSTEM POLYURETHAN PU 9018 Flex Color** results in a visco-plastic film offering increased consistency and good abrasion resistance, as well as stability to weather and light.

Due to these good properties, **KLB-SYSTEM POLYURETHAN PU 9018 Flex Color** is suitable for patios, balconies, and other exterior areas. **KLB-SYSTEM POLYURETHAN PU 9018 Flex Color** may be combined with **KLB-SYSTEM POLYURETHAN PU 9010 Flex** for decorative **partiColor®-Chips** (flakes) scattered coatings.

**KLB-SYSTEM POLYURETHAN PU 9018 Flex Color** is suitable for base, levelling and top coats. The coating is flexible and crack-bridging; therefore especially usable for substrates susceptible to increased deformation due to temperature, e.g. exterior concrete areas. Slip-resistant coatings are principally recommended for weathered exterior areas. When coating balconies and patios, observe the details like connections, water drainage, declines and more.

The cured coating offers a bright gloss, outstanding resistance to weathering, light, and chalking. Because the sealer is visco-plastic, the material is crack-bridging and flexible even at low temperatures. The material offers sufficient resistance to chemicals like water, saline solutions, mineral oils, diluted acids and bases.

**Note:** surfaces coated with **KLB-SYSTEM POLYURETHAN PU 9018 Flex Color** should not be used as parking areas for cars. **KLB-SYSTEM POLYURETHAN PU 9018 Flex Color** is not permanently resistant to tire imprints or abrasion. Sealing tiles is not recommended. The product contains solvents, but is very rich in solids.

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#### Area of application

- Single coloured, multiple layer coatings for exterior balconies and patios.
- Use as pigmented base coat scattered with **partiColor®-Chips** (flakes) and the transparent finish sealer **PU 9010 Flex** top coat.
- Suitable as base coat for slip-resistant coloured sand scattered coatings with the non-pigmented finish sealer **PU 9010 Flex**.

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#### Product features

- viscoplastic
- resistant to weather
- resistant to abrasion and wear
- ready-to-use
- for new buildings and renovations
- colour-stable
- light-stable
- coloured surface

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#### Technical data

Viscosity	1100	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 72	%	KLB method
Density	1.04	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Tensile strength	23.5	N/mm <sup>2</sup>	DIN EN ISO 527
Elongation at break	245	%	DIN EN ISO 527
max. tear resistance	39	N/mm <sup>2</sup>	DIN 53515
Shore-hardness D	65	-	DIN 53505 (after 28 days)
Abrasion (Taber Abraser)	30	mg	ASTM D4060 (CS10/1000)
Gloss level	80 - 90 (20 °)	-	DIN 67530

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

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#### Build-up of coats

##### Base layers for subsequent coatings

- **PU 9018 Flex Color**, diluted with 5 - 10 % of thinner **VR 28** can be used as base coat right onto the sufficiently planar substrate. Mix the thinner **VR 28** thoroughly with **PU 9018 Flex**. Consumption approx. 0.250 - 0.300 kg/m<sup>2</sup>.
- Alternatively, level uneven substrates for a planar surface!
- Apply a base coat using **EP 52 Spezialgrund**, consumption 0.300 - 0.400 kg/m<sup>2</sup>. In case of new concrete or substrates at risk of osmosis, the suitability of the covering must be checked and additional measures may be necessary.
- For an adequately levelled substrate, apply a scratch coat using **EP 52 Spezialgrund**.

##### Smooth coating with low slip-resistance

- Base coat (see above).
- For in-between layer and top coat use **PU 9018 Flex Color**. Apply with a velour roller, consumption 0.400 - 0.550 kg/m<sup>2</sup>.

##### Pigmented polyurethane exterior coating scattered with partiColor®-Chips (flakes)

- Base coat (see above).
- Apply the pigmented base coat **PU 9018 Flex Color** with a velour roller, consumption 0.400 - 0.550 kg/m<sup>2</sup>.
- Scatter the wet coating evenly with **partiColor®-Chips 1** or **partiColor®-Chips 3** (flakes). Consumption: 0.010 - 0.050 kg/m<sup>2</sup>.
- Apply the non-pigmented top coat **PU 9010 Flex** with a velour roller, consumption 0.400 - 0.550 kg/m<sup>2</sup>.

#### Slip-resistant scattered coating for exterior areas

- Base coat (see above).
- Prime with **EP 52 Spezialgrund** on cement substrate (exterior areas). Apply base coat twice on new concrete and substrates susceptible to osmosis – without scattering.
- Apply the base coat using **PU 9018 Flex Color**, consumption approx. 0.400 - 0.550 kg/m<sup>2</sup>. Subsequently scatter completely with coloured sand, grain size 0.3/0.8 mm in excess.
- Sweep off any excess grain after 24 hours. Grind and vacuum off if necessary.
- Resinate the surface with a coating knife using **PU 9010 Flex**, consumption approx. 0.400 - 0.550 kg/m<sup>2</sup>. Afterwards, use a velour roller for the desired slip resistance grade.
- Repeat sealing for further smoothing if necessary.

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#### 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. For concrete, moisture content must not exceed 4.5 CM-%, remaining residual humidity. The possibility of moisture ingress from the rear must be permanently excluded. In case of new substrates or those in contact with soil, there is a risk of osmosis bubbles forming. The suitability under the given conditions must be clarified. Observe the information issued by the trade associations, e.g. the most recent versions of BEB worksheets KH-0/U and KH-0/S as well as the notes provided in the product information for the recommended KLB base coats. Dry substrates can also be primed directly with **PU 9018 Flex Color** if the following coats are applied with **PU 9018 Flex Color**. The substrates to be coated should be prepared mechanically, preferably by grinding or blasting. The prepared area must be saturated, pore-free and primed carefully.

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#### Mixing

Stir the material before application and apply directly when sealing. If necessary, e.g. for priming work, **PU 9018 Flex Color** can be added with 5 to 10 % with KLB thinner **VR 28**. Apply diluted material immediately.

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#### Processing

**Sealing:** apply the mixed material in even layers on the prepared surface using a lint-free and solvent-resistant velour roller. Keep within the recommended amount of consumption for each single layer.

Floor and air temperature must not fall below 15 °C / 59 °F and humidity should not exceed 75 %. The floor temperature has to be 3 °C / 3 K / 5.4 °F above the dew-point so as not to impede the curing process. If a dew-point situation arises, regular curing will not be possible with hardening problems and discolourations (whitening, etc.) to occur. Do not work in strong sunlight or on strongly heated surfaces, as the working time will be greatly reduced and bubble formation is possible. Polyurethane coatings are sensitive to moisture when fresh, so the humidity specifications must be strictly observed. The coating of dew-damp substrates and the use of damp sand as well as sweat lead to foaming of the material and must be avoided. Exposure to water must be avoided within the first 5 - 10 hours due to the temperature. 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. Exposure to water and chemicals should be avoided within the first 7 days.

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#### Cleaning

To remove fresh contamination and to clean tools, use thinner **VR 28** 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 working temperature before application. Tightly re-seal opened containers and use the content as soon as possible. Material offers only a limited shelf life. Opened container cures within a couple of days completely.

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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!

GISCODE: PU50

**Indication of VOC-content:**

(EG-Regulation 2004/42) Maximum Permissible Value 500 g/l (2010,II,i/lb): Ready-for-use product contains < 500 g/l VOC.



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

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