

KÖSTER® KB-Pur 375

Polyurethane based, self-levelling floor coating

Product Description:

KÖSTER KB-Pur 375 is a polyurethane based, 2 component, low viscosity floor coating.

The materials self leveling properties make it easy to apply. In combination with suitable primers like KÖSTER KB-Pox LF-BM, KB-Pox 002 or KB-Pox 008 it is possible to create high quality flooring systems for cementitious substrates with a good visual optic and high resistance.

Characteristics :

- Self-levelling
- Can be filled with sand (30-50 %)
- Readily expels trapped air
- Good chemical resistance
- High mechanical resistance
- Inert and harmless once cured



Technical Data :

Color	Cured material	RAL 7032 standart
Compressive strength	DIN 53454	45/55 N/mm ² with/without sand
Tensile strength	ISO 527	Apr. 8 N/mm ²
Elongation at break	DIN 53504	5-15 %
Shore D hardness	DIN 53505	Apr.60

Mixing ratio	By weight	A:B = 100:20
Pot life	12/23/30 °C	30/20/15 min
Density	unfilled	Apr. 1,50 g/cm ³
Volume solids	%	100
Viscosity	mPa.s	Apr. 2500
Maximum relative humidity of air	%	75 (at 12 °C) 85 (at >23 °C)
Substrate temp	°C	Min 10 / Max 30
Material temp	°C	15-25
Curing time (foot traffic)	12/23/30 °C	24/12/5 hours
Curing time (mechanical resistance)	12/23/30 °C	48/24/12 hours
Curing time (chemical resistance)	12/23/30 °C	5/3/2 days

Applications:

KÖSTER KB-Pur 375 is a multifunctional industrial floor coating which is suitable for use on a concrete and cement screed. For other surfaces please consult us.

The combination of high impact resistance, high compressive strength and good surface optics makes KÖSTER KB-Pur 375 a good and economical system choice for use in production plants, sales areas, warehouses, exhibition halls, garages and showrooms.

KÖSTER KB-Pur 375 is suitable for both new construction and renovation.

Resistant to :

- Diluted acids
- Diluted alkalis
- Aliphatic solvents
- Forklift up to 40N/mm² (4 wheels)



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- Steel work platforms that vibrate

Instructions:

Surface preparation :

Surfaces must be clean, sound and dry. Dust, oil, grease, old coatings, laitance, efflorescence, rust, curing compounds, waxes, form oil and similar contaminations should be cleaned or removed prior to application.

Surfaces must be prepared by mechanical means e.g. Blastrac shot blasting.

Minimum requirements

- Free of cement laitance, dust, oil, fat and other contaminants
- Open textured, absorbent surface
- Pull of strength min 1,5 N/mm²
- Concrete residual moisture max. 4 %

Do not apply on concrete surfaces with rising damp conditions.

Depending on the condition of the substrate the surface must be made non-porous by the application of a primer and/or key coat using KÖSTER KB-Pox LF-BM, KÖSTER KB-Pox 002 or KÖSTER KB-Pox 008, followed by a light sprinkle of clean, dry quartz sand.

Application:

Prior to mixing, the temperature of the components must be between 15 - 25°C. Mix the components in the correct ratio using a suitable low speed electric mixer (300 - 400 rpm) for at least 3 minutes or until a completely homogeneous mixture has been achieved.

Put the mixed material into a clean container and mix again for at least 1 minute more.

KÖSTER KB-PuR 375 can be applied as a pure product or mixed with clean, dry, tempered quartz sand Ø 0.1 - 0.5 mm. The mixing ratio (w/w) will be determined by the type of use/application.

After approx. 5 minutes the applied coating should receive a spiked roller in order to achieve an excellent finish, and also to assist in removing any entrapped air.

Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

System Description :

The following figures are for ambient and surface temperatures of 15 - 23°C. Both high and low temperatures will influence the filler ratio and the consumption per m².

Primer:

KB-Pox LF-BM

Consumption: approx. 0.3 - 0.5 kg/m², lightly sprinkle with clean, dry quartz sand Ø 0.3 - 0.8 mm (approx. 0.5 kg/m²)

Key coat:

KB-Pox LF-BM + quartz sand

Consumption: approx. 0.6 kg/m² resin plus quartz sand, lightly sprinkle with clean, dry quartz sand Ø 0.3 - 0.8 mm (apr. 0.5 kg/m²)

Self-levelling coating:

KB-PUR 375, pebble grey

Consumption: 1,5 - 4,0 kg/m².

System thickness 2 - 3 mm.

Professional maintenance will increase the service life of the flooring system.

UV radiation cause discolouration. If subject to UV protect surface with a suitable UV-resistant top coat.

Consumption :

Minimum 1.5 - maximum 4.0 kg /m².

Packaging :

30 kg set

A component - 25 kg (resin)

B component - 5 kg (hardener)

Mixing ratio is A:B = 100:20 by weight

Cleaning of tools :

Clean polyurethane with a suitable thinner or solvent like Xylene while still wet. Cured material can only be removed mechanically.



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Notes :

- Do not apply on wet or frozen surfaces
- Do not apply on dusting or weak surfaces. If in doubt, perform adhesion test.
- Cold temperatures lengthen and hot temperatures shorten pot life and curing time of material.
- High levels of humidity might prevent proper curing of material.
- Do not add solvents or thinners.
- If in doubt perform adhesion test before application.
- Do not apply on concrete which is fresher than 3-4 weeks.

Storage :

Store in dry conditions and at room temperatures (15-25 °C), in original containers.

Shelf life : 12 months.

Health and Safety :

Avoid inhaling the vapours and contact with skin. Wear suitable protective clothing, gloves and eye / face protection. Adequate ventilation of the working area is recommended. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse

immediately with plenty of water and seek medical advice. When using do not eat, drink, smoke and keep away from sources of ignition. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Material Safety Data Sheet.

Chemical Resistance :

Acetic acid 10 %	Resistant
Ammonia 5 %	Resistant
Boric acid 4 %	Resistant
Chlorine bleach 6 %	Resistant
Citric acid < 10 %	Resistant
Chrome acid 10 %	Resistant
Diesel	Resistant
Disinfectants	Resistant
Formaldehyde 37 %	Resistant
Formic acid 10 %	Resistant
Hydrochloric acid 10 %	Resistant
Hydrogene peroxide 10 %	Resistant
Lactic acid 25 %	Resistant
Nitric acid 10 %	Resistant
Petrol / Super	Short term
Phosphoric acid 25 %	Resistant
Phosphoric acid 50 %	Resistant
Sodium lye 50 %	Resistant
Sulphuric acid 50 %	Resistant
Sulphuric acid 70 %	Short-term
Tested for min. 4 months at 20°C; whether discolouration did occur was not considered.	

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