

TECHNICAL DATA SHEET

KEMAPUR SL 5000

Self-levelling polyurethane coat



PRODUCT DESCRIPTION

2-component self-levelling polyurethane thick coating, RAL coloured, suitable for concrete floor protection. Fully cured it displays a slightly shiny and elastic surface, which is well mechanical and chemical resistant and is easily cleaned.

Field of use

Usually it is applied in one coat; minimum layer thickness is 1 mm, maximum layer thickness is 3 mm. The second coat is with KEMAPUR C 6000 as final coat if UV stability is necessary. Substrate moisture content shall not be more than 3,5%, measured by the CM method. In case of higher moisture the product should not be installed.

System for final layer in KEMA FLOORSYSTEM's as self-levelling polyurethane coat.

In case of high humidity it can be NOT applied, max content of moisture is 3,5 %, (CM method). For outdoor and indoor use.

Product properties

- Colours: all colours in accordance with RAL chart* (see below)
- Sensitive for high air humidity
- Pot life, 20 minutes at +23 °C (100 g)
- Mixing ratio: A:B=5:1 (w / w)
- For high mechanical loads
- When installing lighter shades there can be slight variations in tone of the color, because of colored B component. We recommend prior consultation with the manufacturer.

PRODUCT DATA

Basic information

Appearance	Two component polyurethane flooring system
Packing	24 kg in steel buckets (20 kg component A and 4 kg component B)
Storage and expiration date	12 months from date of production if stored properly in undamaged original sealed packaging in dry and cool conditions. Date of production is printed on packaging.

Technical data

Type of product	Pigmented Polyurethane Pre-polymer. Solvent based
Density of mix (at 23°)	1,6 g/cm ³
Minimum temperature of processing	+15°C
Ready for foot traffic	2 h (at 23°C)
Final curing time	7 days
Shore D after 7 days	70-75

INSTRUCTIONS FOR USE

Consumption

approx. 1,6-1,7 kg/m² in single coat 1 mm

Base

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. The concrete substrate must be sound and of sufficient compressive strength (minimum 25 MPa) with a average pull off strength of 1.5 MPa (minimum measured value has to be up to 1,0 MPa). Moisture content in substrate has to be up to maximum 3,5% (CM method, concrete mark MB at least 35)

Base preparation

Clean cracks and hairline cracks, of dust, residue or other contamination. Fill all cracks with suitable putty. The next day smoothen the putty surface with a sandpaper or a mechanical grinder. Repairs to the substrate, filling of blowholes/voids and surface levelling can be carried out (if necessary) using appropriate products from the KEMA program (for example KEMAPOX GRUND or KEMAPOX/KEMAPUR FILL products). The concrete or screed substrate has to be primed or levelled in order to achieve an even surface. High spots must be removed by e.g. grinding. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

Mix ratio

A:B=5:1 (rate of components A and B); Dry quartz sand is add regarding the usage

Mix time

Mix together the A and B components. Pour component B into part A and mix until homogenous mixture is reached. When mixing, move the paddle in a circular pattern with an up-and down motion. When third component, dry quartz sand has to be added, mix first A and B considering the proportion and direction for mixing. Then slowly add the aggregate and mix to a uniform consistency. Sand has to be added gradually in steps of 15%. Check with the epoxy manufacturer for aggregate proportions. If smaller quantity of mixture is to prepare, use separate mixing container, which must be clean and free of dirt, oil, grease, or other contaminants. For weighing of smaller amounts use digital weighing machine, with precision +/- 0,01 kg. Consider mix ratio: 2 parts by weight of A component and 1 part by weight of B component. With addition of sand, the elasticity is decreasing.

Mix tool

KEMAPUR must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment.

Installation

KEMAPUR SL 5000 is used as final polyurethane coat onto sufficient prepared substrate. Over concrete can be applied in one or two layers. The second layer is needed if the substrate is very porous and is applied after the first thin coat with KEMAPUR C 6000 has been completely absorbed (after approx. 6 hours at +23°C). Mixed polyurethane coat pour onto prepared substrate and spread equally on substrate with a trowel, roller or brush. It can be applied also with spray technology in that case it should be without sand and it could be diluted with maximum 10% of polyurethane thinner.

Tool

For spreading the trowel, paint roller or brush is to used.

Cleaning of tool

Clean all tools and application equipment with polyurethane solvents immediately after use. Hardened and/or cured material can only be removed mechanically.

Usage time

approx. 1 hour

Coagulation

approx. 7 days

LIMITATIONS

Base temperature

+10°C min./ +30°C max.

Air temperature

+10°C min./ +30°C max.

Material temperature

+15°C min.

Warnings

- Protect fresh install poliurethan resin from freezing, raining and other weather conditions. Use product in temperature more then +10°C.
- For the good quality of the coat the suitable and equable temperature and humidity are very important. In case of high humidity it can NOT be applied!
- Maximum moisture content in substrate can be 3,5% (on concrete with mark MB C30/37, CM method)
- Recommended application temperature above +15°C
- Do not wash surface with water!
- Resins come in two parts, therefore must be mixed in the precise ratio given in the manufacturer's instructions.
- Freshly applied KEMAPUR FINAL 5000 should be protected from damp, condensation and water for at least 24 hours.
- If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO₂ and H₂O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.
- For external applications, apply on a falling temperature. If applied during rising temperatures "pin holing" may occur from rising air.

Recommendation: Remains of the unhardened/unset material have to be removed in accordance with the legislation.

Data source: All technical data in this technical sheet was obtained by laboratory research. Actual data may differ due to different working conditions.

Local restrictions: Due to specific local regulations the installed product can differ from country to country. For exact instructions for use a country specific technical sheet should be obtained.

SAFETY DATA

While dealing with polyurethane, please consider the safety precautions mentioned in the risk and safety phrases. Avoid pollution of the unprotected skin – wash off with warm water and soap, if necessary. Wear protective clothing and use barrier cream before starting your work, please!
See also safety data sheets.

OTHER INFORMATION

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Colours:

Product is available in next colours: RAL 1001, 3009, 3013, 5010, 6001, 7030, 7032, 7035, 7037, 7040, 7047, 8004, 9005, 9010, in one week. Other colours are available by agreement.

LEGAL BASE

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