

PUCEM SL

DESCRIPTION:

PUCEM SL is an aromatic, four-component, solvent-free, pigmented self-levelling screed floor based on polyurethane cement. It is renowned for its excellent chemical resistance and mechanical strength, providing a robust, wear-resistant and smooth surface with a long service life.

An Eurostep PUCEM SL floor is fully liquid-tight, making it the ideal solution for demanding environments in the food, chemical and pharmaceutical industries. The system offers outstanding resistance to a wide range of aggressive substances including acids, alkalis, salts, solvents, mineral oils, kerosene, petrol, diesel and brake fluids.

In addition, PUCEM SL demonstrates exceptional heat resistance, withstanding thermal shock and exposure to hot water without compromise. Finally, it is characterized by rapid strength development and excellent flow properties, making it both reliable and practical in use.

CONSUMPTION:

System	Product	Consumption
Primer	PU CEM L	~ 0,3 – 0,5 kg/m ²
Wearing Course	PU CEM SL	4 mm – 7,4 kg/m ²
		6 mm – 11,1 kg/m ²

APPLICATION CONDITIONS:

Substrate Temperature: Minimum 15°C, maximum +25 °C

Ambient temperature: Minimum 10°C, maximum +30 °C

Relative air humidity: Maximum 75% R.H.

Dew point: Beware of condensation!

The temperature of the subfloor and non-hardened material must be at least 3°C higher than the dew point to prevent the risk of condensation formation. The ambient temperature should not fall below +5 °C within the first 24 hours after application. Excessive humidity during early curing stages may cause surface defects, such as white or matte blooming.

APPLICATION:

PAY ATTENTION!

- Always check if you have the correct components.(A, B, filler and pigments)
- Mixing is crucial: adhere strictly to the recommended mixing times, otherwise the chemical reaction will not occur.
- Wear protective clothing and gloves during application.

1. Before applying PUCEM SL, pretreat the substrate with PUCEM L as a primer to seal the pores and prevent pinholes or air bubbles. Always consult the TDS of PUCEM L beforehand.
2. First add the pigment to the A-Component then add the entire content of Component B to Component A.

PROPERTIES:

Solvent-free, Indoor Air Comfort Gold
High impact, shock, and wear-resistant
Excellent thermal resistance
High chemical resistance
Abrasion resistance
Seamless and easy to clean
Impermeable and non-porous

TECHNICAL PROPERTIES:

Density (g/cm ³)	Approx 1,85
Solid Content	100 %
Shore Hardness	> D80
Compressive Strength (N/mm ²)	> 50
Flexural Strength (N/mm ²)	> 18
Processing Time (min.)	+/- 20
Adhesive Strength (N/mm ²)	> 1,5 (Concrete Failure)

PACKAGING:

Component A: 2,5 kg resin
Component B: 2,7 kg hardener
Filler: 14,5 kg
Pigment paste: 0,3 kg
Set: 20 kg

FORM:

Component A: Liquid, white
Component B: Liquid, yellowish to brown
Filler: Powder
Pigment paste: Liquid, colorful

COLORS:

- Light grey
- Grey
- Dark grey
- Light yellow
- Yellow
- Green
- Blue
- Red

- Mix briefly until homogeneous using a Collomix DLX 120 HF or DLX 120 M mixing paddle.
- Add the filler and mix thoroughly at full power for approximately 1 minutes until a smooth, lump-free mixture is obtained.
- Pour the entire mixture onto the substrate and spread it evenly across the area. Always empty the full contents of the bucket at once to prevent premature reaction of any leftover material.
- Immediately roll with a spiked roller to remove trapped air and evenly distribute the material.
- For consistent material consumption on large surfaces: divide the area into sections or strips using tape. This ensures accurate regulation of material usage.
- Once the substrate is fully coated, allow the floor to cure for approximately 12 hours before subjecting it to foot traffic. Always verify that the surface is sufficiently hardened before use.

SUBSTRATE PREPARATION:

It is important to saw-cut the substrate along gutters and walls to ensure that PUCEM SL anchors securely to the substrate.

Always prime with PUCEM L. Without primer, excessive resin absorption into the substrate can occur, which reduces the flow and self-levelling properties of PUCEM SL and creates bubbles in the cured floor.

The substrate must be structurally sound and sufficiently resistant to compression, with a minimum compressive strength of 25 N/mm² and an adhesive tensile strength of at least 1.5 N/mm². It must be clean, dry, and free from dirt, oil, grease, and any other contaminants.

Concrete substrates shall be mechanically prepared, for example by abrasive blast cleaning or scarifying, in order to remove cement laitance and to achieve an open-textured surface. Weak concrete and loose cementitious leveling layers must be completely removed, and any surface defects such as blowholes and voids must be repaired.

Prior to application, all dust, loose particles, and friable material must be thoroughly removed from every surface, preferably using a brush and/or an industrial vacuum cleaner.

REMARKS:

Do not apply on substrates with rising damp. Suitable for application on green concrete. After application, protect the surface from moisture, condensation, and water for at least 24 hours at +20 °C.

Process all mixed material immediately, otherwise the flow will decrease rapidly.

Always use material from the same batch number to ensure uniform and consistent color.

If heating is required, do not use gas, oil, paraffin, or other fossil-fuel heaters, as they release large amounts of CO₂ and water vapor that can negatively affect the finish. Only use electrically powered hot-air blowers when heating is necessary.

Switch off underfloor heating during application. After 48 hours, the temperature can be gradually increased. Ensure the room is closed off from direct sunlight by taping off windows. Sunlight can overheat the floor, causing surface defects and disturbances.

PUCEM floors are formulated with an aromatic binder. While this binder provides exceptional strength and wear resistance, it is sensitive to UV exposure and will discolour over time. The degree of colour change varies depending on the pigment used.

Relative Degree of Discolouration

From strongest to least colour change, the expected ranking is:

- Light Grey and Grey** – strongest discolouration
- Light Yellow and Blue** – pronounced discolouration
- Green and Yellow** – moderate discolouration
- Dark Grey and Red** – highest colour stability, minimal discolouration

APPLICATIONS:

- Food industry
- Chemical industry
- Pharmaceutical industry
- Dairy plants
- Company kitchen
- Beverage industry

CURING TIME:

Processing Time at 20 °C	Ca 20 minutes
Walkable at 20°C	Ca 12 hours
Fully Cured at 20°C	24 hours

SHELF LIFE:

Up to 12 months from the production date in original, sealed, unopened, and undamaged packaging, stored dry between +5°C and +30°C.

Exposure to direct sunlight or other intense heat sources causes large temperature fluctuations in the stored material, which can lead to condensation and/or separation. Products may only be used once the temperature is uniform, otherwise inconsistencies and poor performance may occur.

HEALTH AND SAFETY:

For information and advice on the safe handling, storage, and disposal of chemical products, users should refer to the most recent safety data sheet, which contains physical, ecological, toxicological, and other safety-related information.

VALUE BASE:

All technical data stated in this technical data sheet is based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LEGAL NOTICE:

The information provided here, particularly the recommendations regarding the application and end use of Eurostep products, is given in good faith and reflects our current knowledge and experience. It applies only to products that are correctly stored, handled, and applied under normal conditions in accordance with Eurostep's recommendations.

However, variations in materials, substrates, and actual site conditions mean that no warranty of merchantability or fitness for a particular purpose, nor any liability arising from any legal relationship, can be derived from this information, written recommendations, or other advice provided.

It is the responsibility of the user to test the suitability of the product for the intended application and purpose. Eurostep reserves the right to alter the properties of its products at any time. Proprietary rights of third parties must be respected.

All orders are subject to our current terms of sale and delivery. Users must always refer to the latest issue of the relevant technical data sheet, available on request.

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technical advice, please contact:**

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