



THREE-COMPONENT HIGH-STRENGTH POLYURETHANE AND CEMENT-BASED MORTAR WITH HIGH RESISTANCE TO CHEMICALS FOR COATING INDUSTRIAL FLOORS IN LAYERS FROM 6 TO 9 MM THICK.



PRODUCT DESCRIPTION

PU Floor 3C is a formula made from cement, selected aggregates and polyurethane resin. PU Floor 3C complies with standards applied in the foodstuffs sector: EN 1186, EN 13130 and pr CEN/TS 14234, as well as the Decree of Consumer Goods that represents the conversion of European directives 89/109/EEC, 90/128/EEC and 2002/72/EC regarding contact with foodstuffs. PU Floor 3C is used to create seamless coatings from 6 to 9 mm thick characterized by high resistance to chemicals such as acids, basic solutions, grease, saline solutions, hydrocarbons, etc. A 9 mm thick coat of PU Floor 3C has excellent resistance to thermal shocks of up to +120°C, such as when steam cleaning is carried out. The in-service temperature for a 9 mm thick coating of PU Floor 3C varies from -40°C to +120°C in dry environments and up to +100°C in wet environments. Thanks to its high mechanical strength and resistance to abrasion, PU Floor 3C is suitable for floors subjected to heavy traffic. Coatings made from PU Floor 3C are easy to clean and have a rough, non-slip finish.

FIELD OF APPLICATION

- Coating floors in the chemical and pharmaceutical industries.
- Coating floors in the foodstuffs industry.
- Coating floors in the dairy products industry.
- Coating floors in wineries, breweries and beverage industry in general.

SUITABLE SUBSTRATES

Concrete.

LIMITATIONS

- Do not apply on concrete within 10 days of pouring.
- Do not dilute with solvent or water.
- Do not apply on crumbling substrates.
- Do not apply on substrates with oil or grease stains or stains in general.
- Do not apply on substrates that have not been prepared according to specification.
- Do not mix partial quantities of the components. The product may not harden correctly.
- Do not expose the mixed product to sources of heat.
- Do not apply on ceramic substrates or stone in general.
- PU Floor 3C coatings change color if exposed to sunlight but no effect on per-

formance.

- The coating may also change color if it comes into contact with aggressive chemicals.
- Remove aggressive chemicals as soon as possible if they come into contact with PU Floor 3C.
- Use suitable specific cleaning equipment and detergent to clean the coating.
- Protect coatings from water for at least 24 hours after application.
- The temperature of the substrate must be at least 3°C higher than the dew-point temperature.

APPLICATION PROCEDURE

A) Preparation of the substrate

The surface of concrete floors must be dry, clean and sound and have no crumbling or detached areas. The compressive strength of the concrete used for the substrate must be at least 25 N/mm² and its tensile strength must be at least 1.5 N/mm². The strength of the substrate must also be suitable for its final use and the types of load to which it will undergo. The level of moisture in the substrate must be a maximum of 4% and there must be no capillary rising damp. The surface of the floor to be treated must be prepared with a suitable mechanical process to remove all traces of dirt, cement laitance and crumbling or detached portions, and to make the surface slightly rough and absorbent. Before applying the product remove all dust from the surface with a vacuum cleaner. Any cracks must be repaired by filling them with Epoinject, while any deteriorated areas in the concrete must be repaired epoxy mortar. Apply primer as is or mixed with Quartz 0.5 on the substrate after it has been prepared as specified with a straight trowel or a rake. Immediately after applying primer, lightly broadcast the surface while still wet with Quartz 0.5 at a rate of 0.5 kg/m²; we ad-

vice against exceeding this consumption rate. Make sure there are no open pores in the surface of the substrate, otherwise air bubbles could escape and form small craters or pinholes in the self-leveling finishing coat.

B) Preparing the product

Pour component A into a large, clean container and, after mixing it, add component B and mix again with an electric mixer at low speed until it is completely blended. Then add PU Floor 3C powder coloring agent slowly and gradually and then slowly and gradually add all the content of component C and continue mixing until an even colored mix is obtained. We recommend a specific low speed mortar mixer for this operation, such as a vertical mixer or a mixer with static blades and a rotating mixing drum. Apply the mix within the pot life. Higher surrounding temperatures will reduce the pot life of the mix, while lower temperatures will increase its pot life.

C) Applying the product

Pour PU Floor 3C on the surface of the floor and spread it out evenly with a smooth or notched trowel with "V" shaped. Using a notched trowel allows the thickness of the layer and the consumption rate of the product to be controlled more easily. Go over the surface with a spike roller several times while the product is still wet to even out the thickness of the coat and to remove any air entrained into the product during mixing.

COVERAGE / CONSUMPTION

The consumption is approximately 1.5-2 kg/m² at 1 mm thickness.

PACKAGING

PU Floor 3C is supplied in:

- 2.5 kg buckets Comp. A
- 2.5 kg buckets Comp. B
- 20 kg buckebagts Comp. C

SHELF LIFE-STORAGE

Original sealed bags of this product are guaranteed to be of first quality for 24 months if stored off of the ground in a dry area. High humidity will reduce the shelf life of the bagged product.

SAFETY INSTRUCTION

PU Floor 3C component B irritates the eyes, skin and respiratory system. It is harmful if inhaled and may cause irreversible damage if used for long periods. It may also cause sensitisation if inhaled or if it comes in contact with the skin.

PU Floor 3C component C contains cement that when in contact with sweat or other body fluids causes irritating alkaline reactions and allergic reactions to those predisposed. It can cause damage to eyes. When applying the product it is recommended to use protective clothing, gloves, goggles and a safety mask to protect the respiratory system and to work only in well-ventilated areas. If the product comes in contact with the eyes or skin, wash immediately with plenty of water and seek medical attention.

PU Floor 3C component A is hazardous for aquatic life. Do not dispose of the product in the environment. For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet. **PRODUCT ONLY FOR PROFESSIONAL USE.**

TECHNICAL DATA

Product identity

TECHNICAL DATA (typical values)

	component A	component B	component C
Colour:	RAL colour	straw yellow	powder
Consistency:	liquid	liquid	grey
Density (g/cm ³)	1.05	1.05	1.4
Viscosity at +23°C (mPa s)	5500	300	

Application data (at +23°C and 50% R.H.)

Mixing ratio	2.5	2.5	20 by weight
Color of mix	different		
Consistency of mix	viscous		
Viscosity of mix at +23°C (mPa-s)	2200		
Density of mix (kg/m ³)	1,400		
Workability time at +20°C	30 mins.		
Application temperature	+8 to +35°C		

Final performances

Hardening time at +23°C and 50% R.H	
- dust dry:	3-5 hours
- set to foot traffic	24 hours
- complete hardening time:	7 days
Shore D hardness (DIN 53505) after 7 days at +23°C and 50% U.R.	75
Compressive strength after 7 days (EN 196-1) (N/mm ²)	52
Flexural strength after 7 days (EN 196-1) (N/mm ²)	20
BCA resistance to wear: EN 13892- 4	< 5 µm
Adhesion strength: EN 13892- 8; 2004	3.90 N/mm ²
Impact strength: EN ISO 6272	20 Nm

WARNING

Danger. Contains Portland Cement: Chromium VI < 2 ppm within the validity period of the product. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. P261 Avoid breathing dust. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF IN CONTACT WITH YOUR SKIN: Wash with plenty of water/... P305 + P351 + P338 IF IN CONTACT WITH YOUR EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/ doctor/...



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