



PC[®] 5283/SL/TES

Self-levelling epoxy casting floor

1. Description

PC[®] 5283/SL/TES is a solvent-free 3-component epoxy casting floor.

2. Applications

- Protection of concrete or screed by means of a seamless PC[®] 5283/SL/TES epoxy casting floor.
- Excellent floor for production, packaging, maintenance and storage areas in the chemical and pharmaceutical industry, food and drink industry, hygienic environments, laboratories and hospitals, nuclear installations, etc.

3. Characteristics

- PC[®] 5283/SL/TES is a seamless self-levelling epoxy casting floor with high mechanical characteristics and good chemical resistance.
- PC[®] 5283/SL/TES is supplied in RAL 7004 (other RAL colours are available on request).
- An anti-slip effect can be achieved by painting the PC[®] 5283 SL/TES with PC[®] 5283/SL/TOP or PC[®] 5283/NV and then scattering quartz in this top layer (roughness can be varied by varying the grain size of the quartz scattered). This top layer can then be sealed again with PC[®] 5283/SL/TOP or PC[®] 5283/NV.

4. Technical Data

- A-component (resin)
 - Colour: available in any color
 - Viscosity (20°C): 16400 mPas
 - Density: 1.58 kg/dm³
- B-component (hardener)
 - Colour: available in any color
 - Viscosity (20°C): 234 mPas
 - Density: 1.04 kg/dm³
- Density of mixture: ± 1.93 kg/dm³
- Pot life (20°): 90 minuten
- Mixture ratio (weight): 10 kg A / 2.25 kg B / 10 kg C
- Consumption: ± 2.0 Kg/m², depending on the surface
- Pressure resistance (EN 13892-2):
 - After 24 h at 20°C: 66 N/mm²
 - After 7 d at 20°C: 103 N/mm²
- Bend strength (EN ISO 178, after 7 d at 20°C): 44.4 N/mm²
- Tensile strength (EN 527, after 7 d at 20°C): 23,5 N/mm²
- Elongation at break (EN 527, after 7 d at 20°C): 2.62%
- Elastic modulus (EN 527, after 7 d at 20°C): 5260 N/mm²
- Abrasion resistance BCA(EN 13892-4): maximum penetration depth is 20 µm
- Impact resistance (EN ISO 6272-2): 1.86 Nm

- Hardness
Shore D (24 h, 20°C): 80
Shore D (7 d, 20°C): 89
- Bond strength (EN 13892): 3.6 N/mm² (concrete fracture) with the use of PC[®] 5001/T as primer.
- Hardening time: The time to wait for placing e.g. an aliphatic polyurethane top coating PC[®] 6283 TOP 2K Mat type on **PC[®] 5283/SL/TES** is at least 24 hours at 20°C. The time stated is reduced at higher and increased at lower temperatures.
- Application temp.: minimum 10°C, maximum 30°C (both ambient and underground)
- Shelf life: 12 months after the production date in the original, unopened and undamaged packaging, stored in a dry place between 10°C and 30°C.
- Load-bearing: at 20°C after 3 days fully mechanically load-bearing/ at 30°C after 2days / at 10°C after 7 days.

5. Chemical resistance

The samples were immersed in the chemicals for 18 days at 20°C.

Product	Result
Benzene	OK
Dichloormethane	Not OK
Tetrahydrofurane	Not OK
Diethylether	OK
Sulpheric acid 20%	OK
Sulpheric acid 40%	Sp. contact OK
Sulpheric acid 98%	Not OK
NMP	Not OK
Toluene	OK
Nitric acid 20%	OK
Nitric acid 40%	Sp. contact OK
Nitric acid 68%	Not OK
Acetone	Sp. contact OK
Methanol	OK
Hydrochloric acid 37%	OK
Phosphoric 40%	OK
Phosphoric 85%	Sp. contact OK
Ethanol	OK
Acetic acid	Not OK
Formic acid	Not OK
Ethylbenzene	OK
NaOH 50%	OK
Xylene	OK
Dieseloil	OK
BZA	OK
Synthetic oil	OK
Pine oil	OK
Jeffsol EC 50	OK
Propylene carbonate	OK
Gasoline	OK
Ethylene Glycol	OK
Saturated solution of ammonium nitrat	OK

- Sporadic contact means that spilled product must be cleaned within 4 hours with plenty of water.
- OK means that the integrity and physical characteristics remain the same. However a discoloration of the surface can appear under the influence of the chemicals.

6. Recommendation for installation

- The concrete must be dry (substance quantity < 3%), free from grease and with bearing capacity and at least 1 month old. The substrate must have sufficient pressure strength available of a minimum 25 N/mm² with a minimum tensile strength of 1.5 N/mm².
- Remove dirt adhesion, cement efflorescence or loose parts with spraying or make it dust free using another effective method.
- Apply an adhesive layer with PC[®] 5001/T.
- Mix the A and B component. Add the C component and mix with a slow turning mixer until a uniform mass is obtained.
- Pour the mixture over the floor on the hardened primer PC[®] 5001/T or on the scraped layer PC[®] 5284 FILLER and spread with a glue spatula until the desired thickness is obtained. Then ventilate with a pin-roll.
- After hardening the topcoat PC[®] 5283/SL/TES/TOP or PC[®] 5283/NV can be applied with a roller after which it can be scattered with quartz.
- Any dilatation joints present in the surface may not be removed but must preserve their function. After finishing the floor fill the dilatation joints with a kit suitable for this.
- Placing an epoxy flooring system is only enduring if the base is free from damp tension by means of a suitable sealing film (polyethylene or similar).
- Avoid condensation: the soiltemperature must be at least 3°C above the dew point. Apply the system only in surroundings where the relative humidity < 80%.
- Protect the Floor against water and humidity during 24 hours after application of the floor. During this time humidity can cause a white colour at the surface or a sticky surface, which influences the bond strength of the next layer. In some cases this layer will have to be mechanically removed. A lower application temperature increases the possibility that this phenomenon occurs.

7. Dimensions and weights

- A component: 10 kg or 25 kg
- B component: 2.25 kg or 5.625 kg
- C component: 10 kg or 25 kg
- Weight of mixture: 22.25 kg or 55.625 kg

8. Cleaning

Unhardened product can be removed using PC[®] 5900.

9. Precautions

- Avoid contact with eyes and skin
- Wear protective goggles, gloves and overall
- See safety sheet for more information
- Ensure that the products do not come into contact with or are mixed with water or damp.



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EN 13813 SR-C100-F4-AR0.2-B3.6-IR2
Synthetic resin floor screed material

Compressive strength	C100
Flexural strength	F4
Wear resistance BCA	AR0.2
Modulus of elasticity	E5
Bond strength	B3.6
Impact resistance	IR2
Reaction to Fire	Euroclass F
Release of corrosive substances	SR