

FLOORCRETE PU-MF Technical Data Sheet

Product 02456000 4-comp. PU screed, self-smoothing, 3-4 mm, solvent-free, coloured

1 General Data

Fields of application

FLOORCRETE PU-MF is used in situations subject to exposure to high chemical, thermal and mechanical loads such as for example in textile industry, dairy, food & beverage production facilities, warehouse and distribution centers, chemical and pharmaceutical processing plants. It is normally used as a topping on concrete floor at 3 to 4 mm thickness or as wear coat with quartz sand scattered surface up to 5 to 6 mm.

Product description

FLOORCRETE PU-MF is a 4-component, self-smoothing and seamless polyurethane concrete flooring system. It has excellent mechanical and chemical resistance properties. It is resistant to organic acids, dilute mineral acids, vegetable and animal fats, petroleum oils and solvents. It is suitable for use in conditions of a wide temperature range between -5°C to +70°C (3mm); -15 to +70°C (4mm) or as broadcast system up to +90°C (5-6mm). FLOORCRETE PU-MF is not colour stable when exposed to UV and weathering.

Characteristics

- Good chemical resistance
- High impact and abrasion resistance
- High thermal shock resistance
- Anti-Bacterial
- Complies to HACCP requirements
- Self-smoothing
- Fast curing
- Seamless matt smooth finish
- Odorless
- Solvent free
- Wide service temperatures -15°C to +90°C

FLOORCRETE systems

FLOORCRETE PU-MF is the coating for the FLOORCRETE system:

- FLOORCRETE **MF standard**
- FLOORCRETE **MF standard SR**

Manufacturer:

Floorfinder Asia Sdn. Bhd., No. 28, Lorong Sungai Puloh 1A/KU6, Jalan Sungai Puloh, Batu 5 3/4, Kapar, 42100 Klang, Selangor Darul Ehsan, Malaysia, tel: +603 3290 7644, email: info@floorfinderasia.com, www.floorfinderasia.com – A division of VIACOR VISION AG, SWITZERLAND

(A) Technical data	
Liquid mixture (A+B)	
1. Solids content	99 %
2. Density (25°C)	1.9 g/cm ³
3. Viscosity (25°C)	A+B: 500-1000 mPas
4. Packaging size (4-component)	20.175 kg (3 kg A + 3 kg B + 14 kg C + 0.175 kg colour paste)
5. Colour	Green, buff, red, grey, beige, light-grey, sky blue
6. Shelf life	Part A, B, Colour Paste - 9 months in closed original container Part C – 6 months in closed original bag
7. Storage	Dry at 10–30°C, avoid direct sunlight

(B) Technical data	
Cured material	
1. Flexural strength (DIN EN ISO 196/ASTM C109)	>19 N/mm ²
2. Compressive strength (DIN EN ISO 196/ASTM C109)	>45 N/mm ²

Care and maintenance

The lifespan & performance of your resin floor can be extended considerably by adopting a regular cleaning and care programme. We recommend the use of an alkaline based cleaning agent.

Technical support

For system build up possibilities and detailed information relating to the laying of FLOORCRETE products, please refer to the FLOORCRETE System Planner or contact Floorfinder Asia Sdn Bhd directly.

Tel : +603-3290 7644
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2 Application method

Substrate preparation

Concrete substrate shall be firm, clean and dry with a compressive strength of 25 MPa and pull-off strength of 1.5 N/mm² minimum.

New concrete must be allowed to cure for a minimum of 28 days.

Repair imperfections (holes and cracks) with FLOORFINDER EP-T703 combined with quartz sand and make good the grading and levelling where necessary.

Remove surface laitance, contaminants, coating, curing compound and all weak and loose materials. Prepare concrete surface by diamond grinding, scarifying or captive shot blasting to provide the appropriate surface profile for optimum mechanical interlocking.

Cut grooves of 3 mm width and 5 mm depth minimum just inside the perimeter of the area and around drains, columns and protrusions where FLOORCRETE PU-MF will be applied.

Primer

Apply FLOORCRETE PU-SC at a consumption rate of approx. 1 – 1.7kg/m² as a scratch coat and allow to cure 12 to 16 hours before applying FLOORCRETE PU-MF. If the surface is porous, a second coat of primer may be necessary.

Application

Before starting the application, the material temperature must be close to the site conditions.

Dispense the colour paste into component A. Mix to disperse the colour paste (1 minute) until homogeneous using a helical mixer at a speed of 350-600 rpm. For application in low temperature situation (below 20°C), accelerator can be added into component A with suggested amount before colour paste and mix (1 minute) until homogeneous.

Add component B and mix (1.5 to 2 minutes) until homogeneous.

(C) Technical data		
Liquid mixture (A+B)		
1. Mixing ratio A : B Mixing ratio A : B : C : CP	1: 1 by weight (kg) 3 : 3 : 14 : 0.175 (kg)	
2. Addition of accelerator to use at low temperature:		
	≤ 20°C	0.1% (3 g in 3 kg A)
	≤ 15°C	0.2% (6 g in 3 kg A)
	≤ 10°C	0.3% (9 g in 3 kg A)
3. Working time (25°C)	Approx. 20-25 minutes	
4. Application temperature	10 – 30°C (min. 3°C above dew point)	
5. Material consumption (PU mortar)	1.9 kg/m ² per mm 5.7 – 7.6 kg/m ² for 3 – 4 mm	
6. Overcoating (25°C)	within 12 – 24 hours	
7. Cure time to withstand:		
Foot traffic	after 12 – 20 hours	
Heavy traffic	after 2 days	
Exposure to chemical	after 7 days	

Add component C gradually to the mix with the mixer running. Move the mixer around from side to side and top to bottom and scrap the sides of the mixing vessel to ensure thorough mixing, until homogeneous (2 – 3 minutes).

Transfer the mixture to another clean container and mix for 1 minute.

Pour the wet mix on the prepared floor. Spread over the floor area at the nominated thickness (3-4 mm) using a pin rake or notched trowel.

Ensure to maintain continuity of wet material between pours (max. 5 – 7 minutes). While wet, roll the surface with a spiked roller to remove entrapped air.

For cleaning of tools and other contaminations FLOORFINDER SO-X10 tool cleaner is used.

Overcoating

Overcoating should be carried out within 24 hours after application of FLOORCRETE PU-MF. If longer than 24 hours, it is necessary to lightly grind the surface before over-coating is carried out.

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3 Further information

CE-Mark



CE-Mark according to EN 13813

EN 13813: 2003-01, Screed material and floor screeds - Screed materials - Properties and requirements is the basis for requirements for floor screeds used in indoor flooring constructions. Resin coatings and sealer are also subject to this norm.

Details see CE-conformity mark and conformity declaration.

Warnings and precautions

Information relating to the safe handling of this product can be found in the Material Safety Data Sheet. Local regulations concerning the safe handling of epoxy resin based coating materials must be observed.

Suitable protective clothing including suitable eye protection must be worn.

Disclaimer

All information in this technical data sheet is based on our current knowledge and experience. This does not release the applicator from performing their own tests as many application factors, beyond our control, affect the application of our product. No guarantee of characteristics or suitability for a special purpose can be derived from this information. All present data, descriptions, drawings, photos, ratios, weights etc. are subject to change without prior notice and do not represent contracted characteristics of the product.

Due to different materials, sub-bases and working conditions, no guarantee of an application result or any liability claims can be derived from these details or from an unwritten technical advice except for liability claims based on:

-damage to life, body or health resulting from a negligent violation of obligations or a deliberate or negligent violation of obligation of a legal representative or assistant and

-if we are charged with intention or gross negligence.

The user has to test the products for their intended use. The user is responsible for following existing laws and orders and for observing third party trademark rights.

As all Floorfinder data sheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue (see www.floorfinderasia.com).

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