

Product 02456010 5-comp. conductive PU screed, self-smoothing, 2-3mm, coloured

1 General Data

Fields of application

FLOORCRETE PU-MF ESD is recommended for use as an anti-static surface coating for industrial floors with high demands in terms of electrostatic discharge, especially in explosion proof areas and fire protection zones. It is normally used as a topping on concrete floor at 2 -3 mm thickness.

Product description

FLOORCRETE PU-MF ESD is a 5-component, anti-static, medium duty 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. FLOORCRETE PU-MF ESD is not colour stable when exposed to UV and weathering.

Characteristics

- Conductive
- Excellent chemical resistance
- High impact/abrasion resistance
- Self-smoothing
- Fast curing
- Seamless matt smooth finish
- Odorless
- Wide service temperatures -15°C to +70°C
- Solvent free

FLOORCRETE systems

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

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)	
Solids content	99 %
Density (25°C)	1.77 g/cm ³
Viscosity (25°C)	A+B: 500-1000 mPas
Packaging size (5-component)	16.45 kg (A+B+C+D) = 16kg Colour Paste = 0.175kg X2
Colour	Green oxide, oxide red, yellow oxide, sky blue, grey
Shelf life	9 months in closed original container
Storage	Dry at 10–30°C, avoid direct sunlight

(B) Technical data	
Cured material	
Adhesive strength (DIN ISO 4624)	> 1.5 N/mm ² (concrete failure)
Resistance to earth (DIN EN 61340-4-1)	≤ 10 ⁹ Ω

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
 e-mail: info@floorfinderasia.com



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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 ESD will be applied.

Application

Apply an epoxy primer such as FLOORFINDER EP-P210 by roller to the prepared surface. If the surface is porous, a second coat of primer may be necessary. Alternatively, apply FLOORCRETE PU-SC at a consumption rate of approx. 1 – 1.7 kg/m² as a scratch coat and allow to cure 12 to 16 hours.

FLOORCRETE PU-MF ESD is poured onto the conductive layer FLOORFINDER EP-E480. The conductive coating layer FLOORCRETE PU-MF ESD must be applied no later than 24 hours after the previous layer has been laid.

Application

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

Dispense the colour paste and component D into component A. Mix to disperse the colour paste (1 minute) until homogeneous using a helical mixer at a speed of 350 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.

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 using a pin rake or notched trowel.

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(C) Technical data

Liquid mixture (A+B)

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)
Working time (25°C)	Approx. 10-15 minutes
Application temperature	10 – 30°C (min. 3°C above dew point)
Material consumption (PU mortar)	3.6 -5.4 kg/m ²
Overcoating (25°C)	within 12 – 24 hours
Cure time to withstand:	
Foot traffic	after 12 – 20 hours
Heavy traffic	after 2 days
Exposure to chemical	after 7 days

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.

Note for conductive systems:

To check the conductivity values are the assessment report "Conductive coatings for industrial floors" of the German Construction Chemicals Association recommended.

Note: Prior to application of the conductive coating Pour the wet mix on the prepared floor. Spread over the floor area at the nominated thickness using a pin rake or notched trowel. FLOORCRETE PU-MF ESD the conductive layer FLOORFINDER EP-E480 must be measured.

Area coating system	Number of measurements
< 10 m ²	1 measurement / m ²
10 – 100 m ²	10 – 20 measurements
> 100 m ²	10 measurements / 100 m ²

Distance between the measurement points at least 50 cm. If the required measurement value is not reached, further measurements must be carried out within a radius of 50 cm.

Overcoating

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