

VIACRETE PU-HF^{FF} Technical Data Sheet

Product 02455000 5-comp. PU screed, trowel applied 6-12 mm, solvent-free, coloured

1 General Data

Fields of application

VIACRETE PU-HF^{FF} is used in situations with exposure to high chemical, very high thermal and very high mechanical stress as for example in dairy, food & beverage production facilities, warehouse & distribution centers, chemical and pharmaceutical processing plants. It is normally used as a light to medium textured mortar coating in 6 to 12 mm layer thickness on concrete floors and cementitious substrate.

Product description

VIACRETE PU-HF^{FF} is a 5-component, flowable and seamless polyurethane concrete flooring system. It has excellent mechanical and chemical resistance properties and very high thermal resistance. 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 wide range temperature between -40°C to +100°C (6 mm); -45°C and +120°C (9-12 mm). Exposed to UV and wealthering VIACRETE PU-HF^{FF} is not color stable.

Features & Benefits

- Very good chemical resistance
- Very high impact and abrasion resistance
- Very high thermal shock resistance
- Wide application temperature -45°C to +120°C
- Hygienic surface
- Complies to HACCP requirements
- Odorless, non-tainting to food
- Solvent free
- Low emission certified

VIACRETE systems

VIACRETE PU-HF^{FF} is the topping for the VIACRETE system:

VIACRETE^{HF} *high temp*^{FF}

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.

Manufacturer:

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

(A) Technical data	
Liquid mixture (A+B)	
1. Solids content	99 %
2. Density (25°C)	2.17 g/cm ³
3. Viscosity (25°C)	A+B: 500-1000 mPas
4. Packaging size (5-component)	36.175 kg (3 kg A + 3 kg B + 14 kg C + 16 kg D + 0.175 kg colour paste)
5. Colour	Green, buff, red, grey, cream, light grey, sky blue
6. Shelf life	9 months in closed original container
7. Storage	Dry at 10–30°C, avoid direct sunlight

(B) Technical data	
Cured material	
1. Hardness Shore D	D 84 (28d)
2. (EN ISO 868)	
3. Flexural and strength (DIN ISO 196/ASTM C109)	> 15 N/mm ²
4. Compressive strength (DIN ISO 196/ASTM C109)	> 58 N/mm ²
5. Fire classification (EN 13501-1)	Bfl-s1

Technical support

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

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2 Application method

Please note our general processing guideline for VIACRETE systems. VIACRETE systems should only be processed by trained personnel.

Substrate preparation

The substrate must be load bearing, clean and dry and free from separating agents. Application of silicone-containing substances before and during the application of coating must be avoided. The adhesive strength must be at least 1.5N/mm². The substrate quality should be monolithic reinforced concrete with min. C25/C30 according to EN 206-1, (expect light weight concrete), or min CT-C30-F4 in case of cement screeds in the composite, minimum layer thickness 25mm, for other substrate see our general application guidelines for VIACRETE PU concrete systems.

Repair imperfections (holes and cracks) with VIASOL EP-T703^{FF} 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 keying.

Cut grooves of 6 mm width and 8 mm depth minimum just inside the perimeter of the area and around drains, columns and protrusions where VIACRETE PU-MF^{FF} will be applied. Apply VIACRETE PU-MF^{FF} (using only 8 kg instead of 14 kg of Filler C Component) at a consumption rate of approx. 1kg/m² as a scratch coat and allow to cure 12 to 16 hours before applying VIACRETE PU-HF^{FF}. 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.

Add the colour paste into component A. Mix to disperse the colour paste (1 minute) until homogeneous using electrical mixer at a speed of 300 rpm. Add component B and mix (1.5 to 2 minutes) until homogeneous. Add component C gradually to the mix with the mixer running. Only then is component Filler D added and mixed until homogeneity is achieved (min 3 min).

To ensure a homogeneous mixture, scarp out the walls and bottom of the mixing container if necessary and mix in unmixed material. When using smaller mixing vessels, repot and mix again (1 min). The mixing times are to be kept the same for all mixtures in order to avoid differences in colour shades.

(C) Technical data

Liquid mixture (A+B)

1. Mixing ratio A : B Mixing ratio A : B : C : D : CP	1: 1 by weight (kg) 3 : 3 : 14 : 16 : 0.175
2. Working time (25°C)	approx. 10-15 minutes
3. Application temperature	10 – 30°C (min. 3°C above dew point)
4. Material consumption (PU mortar)	2.3 kg/m ² per mm ~13.8 kg/m ² for 6 mm ~20.7 kg/m ² for 9 mm ~27.6 kg/m ² for 12 mm
5. Overcoating (25°C)	within 12 – 24 hours
6. Cure time to withstand: Foot traffic Heavy traffic Exposure to chemical	after 12 – 20 hours after 2 days after 7 days

*At low temperatures and low humidities (<40% relative humidity), the curing times and thus the times for recoating and walkability are delayed.

Apply the fresh mixture by means of a screed box or a suitable squeegee to the desired layer thickness (6 - 12 mm), smooth with a trowel or screed blade if necessary and re-roll with a short-pile paint roller (6 - 8 mm). Multiple re-rolling should be avoided in order to maintain the slip resistant surface.

Ensure a continuous supply of material and incorporation within 5 – 7 minutes. The surface should not be walked on with nail shoes, the re-rolling must be done from the side line of the application! For cleaning of tools and other contaminations use VIASOL SO-X10 tool cleaner.

Overcoating

It is not necessary to over coat the unsanded surface. If reworking is necessary, this must be carried out after 24 hours at the latest. After 24 hours, it is necessary to lightly grind the surface or use a suitable adhesion primer before reworking.

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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 trade mark rights.

As all Floorfinder data sheets are updated on a regular basis it is the users responsibility to obtain the most recent issue (see www.floorfinder.com.my).

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