

Product 02554000 3-comp. PU scratch primer and levelling layer, 0.5 – 2 mm, solvent-free,

1 General Data

Fields of application

VIACRETE PU-SC is used as scratch primer and / or levelling layer and is applied to prepared concrete substrates prior to coating with VIACRETE systems. It seals and smooths the prepared concrete, thus preventing displaced air from the concrete causing defects in the surface of the floor. It is the primer of choice for use with VIACRETE MF standard, VIACRTE MF standard SR and other VIACRETE floors and vertical applications.

Product description

VIACRETE PU-SC is a 3-component, self-smoothing and seamless polyurethane concrete flooring system. It has excellent mechanical and chemical resistance properties. It is used as primer and levelling coat below VIACRETE systems. Exposed to UV and weathering VIACRETE PU-products are not color stable.

Characteristics

- good adhesion to cementitious substrates
- high impact and abrasion resistance
- high thermal shock resistance
- wide service temperatures depending on system
- complies to HACCP requirements
- odorless, non-tainting to food
- solvent free
- low emission
- pore filling

VIASOL systems

VIASOL PU-SC is the content for the VIACRETE systems:

VIACRETE *MF standard*
VIACRETE *MF standard SR*
VIACRETE *HF high-temp*

or other systems if necessary.

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.

(A) Technical data

Liquid mixture (A+B)

1. Solids content	99 %
2. Density (23°C)	1.65 g/cm ³
3. Viscosity (23°C)	1,700 mPas
4. Packaging size (4-component)	37 kg (8.0 kg A + 8.0 kg B + 21 kg C)
5. Colour	colorless, nature
6. Shelf life	9 months in closed original container 6 month comp. C
7. Storage Protect from frost!	Dry at 10–30°C, avoid direct sunlight

(B) Technical Data

Cured material

1. Flexural strength (DIN EN ISO 196/ASTM C109)	>18 N/mm ²
2. Compressive strength (DIN EN ISO 196/ASTM C109)	>38 N/mm ²
3. Hardness Shore-A (EN ISO 868)	approx. D 68 (28d)
4. Fire classification (EN 13501-1)	Bfl-S1 in VIACRETE MF standard or SR
5. Water absorption coefficient (EN 1062-3)	w < 0,01 kg/m ² h ^{0.5}



Technical support

For system build up possibilities and detailed information relating to the laying of VIASOL products, please refer to the VIASOL System Planner or contact VIACOR Polymer GmbH directly.

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2 Application method

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

Substrate preparation

Concrete substrate shall be firm, clean and dry with a surface pull of strength of minimum 1.5 N/mm². The substrate quality should be a monolithic reinforced concrete with min. C25/30 according to EN 206-1, (except lightweight concrete), or cement screeds in the composite, minimum CT-C30-F4, minimum layer thickness 25 mm, for other substrate see our general application guidelines for VIACRETE PU concrete systems.

Repair imperfections (holes and cracks) with VIASOL 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 keying. We recommend a surface roughness of min. 0.4 mm.

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 VIACRETE PU-SC will be applied. VIACRETE can be laid on 7-day old concrete (w/c ratio max. 0.48) (this to a residual moisture content of approx. 6-8% (CM)) or on 2 - 3 days old polymer-modified cement screed. For permanent rising water, please contact our technical service. Detailed information you can find in the VIACRETE application guidelines.

Primer

Apply the primer or scratch coat VIACRETE PU-SC with a squeegee or metal trowel and finish by roller to the prepared surface. The consumption is approx. 0.8 – 1.2 kg/m² depending on the surface roughness. If the re-coating interval must be exceeded sprinkle VIASOL QS 0.3-0.8 mm quartz sand lightly (approx. 600 g/m²) while the primer is still wet. For VIACRETE PU-HF we recommend a broadcasting with QS 0.6-1.2 mm to make application easier.

Levelling or scratch coat

VIACRETE PU-SC can be used as levelling layer up to 2 mm by using notched trowel or squeegee. Consumption rate is 1.9 kg/m² per mm.

Application

Before starting the application, the material temperature must be close to the site conditions but should have min. 10°C. Mix component A short to disperse (1 minute) until homogeneous, add Component B and mix (1.5 to 2 minutes) until homogeneous using an electric stirrer with a speed of min. 300 rpm.

(C) Technical data

Liquid mixture (A+B)

1.	Mixing ratio A : B Mixing ratio A : B : C	1: 1 by weight (kg) 8.0 : 8.0 : 21 (kg)
2.	Working time (23°C)	approx. 10-15 minutes
3.	Application temperature:	10 – 30°C (min. 3°C above dew point)
4.	Permitted rel. air humidity*	min. 40 % - max. 90 %
5.	Material consumption (PU mortar)	1.65 kg/m ² per mm 1.7–3.5 kg/m ² for 1-2 mm
6.	Over coating (23°C)	within 12 - 24hours
7.	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.

Pour the mixture in a **compulsory mixer (min. 50 kg capacity)** and add component filler C gradually to the mix with the mixer running, until homogeneous (min. 3 minutes).

For smaller areas use a mixing pail and a double stirrer (min. 40 kg capacity). For these smaller areas, we recommend to pour the mixed material in another pail and mix short (1 minute) again to avoid mixing errors.

If necessary, scrap the sides and the bottom of the mixing vessel of the compulsory mixer to ensure thorough mixing.

Pour the wet mix on the prepared floor. Spread over the floor area with a flat trowel, a rake or a hard squeegee at the nominated consumption rates for scratch primer (0.8 – 1.2 kg/m²) or for levelling (1.65 kg/m² per mm) max. 2 mm are recommended.

Ensure to maintain continuity of wet material between pours. While wet, roll the surface with short pile roller or for levelling layers a spiked roller to remove entrapped air, this is recommended for thicker layer thickness e.g. levelling layers.

Subsets cannot be mixed because only complete sacks of filler may be processed.

For cleaning of tools and other contaminations, VIASOL SO-X14 tool cleaner is used.

Over coating

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

Manufacturer:

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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.

Deco paint-Guidelines (EU 2004/42/EG)

The maximum allowable VOC content for Product Category IIA j Type wb products (in the ready to use state) is:
Stage II (from 2010) < 140 g/l VOC

In the ready to use state, this product contains less than 140 g/l VOC.

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 VIACOR data sheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue (see www.viacor.de or contact us directly).