

Product 02400500 2-comp.-PU top coating, self-levelling, high fillable hard-elastic, low emission

1 General Data

Fields of application

VIASOL PU-C4005 is used as high fillable, tough hard coating for concrete and cementitious substrates as well as bituminous screeds, mastic asphalt and other industrial substrates that require a crack-bridging coating with good chemical and mechanical properties. When applied at a thickness of 2 mm the crack-bridging abilities are up to 0.5 mm (static, 20°C) depending on filler content.

Typical uses are industrial floorings in productions, storage areas, shopping malls and work shops.

Product description

VIASOL PU-C4005 is a pigmented, high fillable and ready-to use, hard-elastic, low emission and solvent free two-component PU self-levelling coating. It fulfils the requirements of German AgBB, the standard for low emission in construction products.

Coatings made from VIASOL PU-C4005 are wear resistant, jointless and easy to clean. The product shows good chemical resistance against oils, lubricants and many other chemicals.

In general, aromatic polyurethane resins are not colour stable if exposed to UV light or under influence of weathering. We recommend to apply a colour stable seal coat.

Features

- statically crack bridging
- tough hard
- low odour
- low emission

VIASOL systems

VIASOL PU-C4005 is the flexible coating for the VIASOL systems:

- VIASOL **UNIFLEX**
- VIASOL **UNIFLEX SR**
- VIASOL **UNIFLEX CUISINE**

Care and maintenance

For a long-term preservation of the properties of resin floors, we recommend a regular cleaning and care programme. For further details see our VIASOL Care and Maintenance Guide. Before first use we recommend to perform a basic cleaning and initial care.

(A) Technical Data

Mixture (A+B)	
1. Solids content	99 %
2. Density (20°C)	1.16 g/cm ³ (unfilled) 1.55 g/cm ³ (1 : 0.8 filled)
3. Viscosity (20°C)	1000 - 1400 mPas
4. Packaging size (2-component container)	28.5 kg (20 kg A + 8.5 kg B)
5. Colour	VIASOL standard
6. Shelf life	12 months in originally closed container
7. Storage	Dry at 10-25°C, avoid direct sunlight

(B) Technical Data

Cured material	
1. Tensile strength (DIN EN 196/ASTM C109)	24 N/mm ²
2. Shore D hardness (DIN EN ISO 868)	ca. 69



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 refer also to our general application guideline.

Substrate Preparation

The substrate must be clean and free of dust and loose particles. All traces of contaminants such as oils, fats, greases, paint residues, chemicals, algae and laitance should be removed.

Depending on the desired evenness of the final coating VIASOL PU-C4005 is applied directly to the primer e.g. VIASOL EP-P210 or to a VIASOL PU-C4005 based levelling layer. The coating VIASOL PU-C4005 must be applied no later than 24 hours after the application of the previous coat.

Application

VIASOL PU-C4005 is supplied in 2-component containers in the right mixing ratio. The A-component must be stirred for at least 1–2 minutes. Then the entire content of the B-component is emptied into the A-component container and the two components are mixed until homogeneous using a suitable electric stirrer (for at least 2–3 minutes). The inclusion of air in the mixing process is to be avoided. The mixture is poured into another container and briefly stirred again. We recommend the application by equal batch numbers.

VIASOL PU C4005 can then, depending on filler quality, to the layer thickness and the material and the ambient temperature in the ratio 1: 0.5 - 1: 0.8, be filled with dry silica sand (e.g. VIASOL QNV0, GEBA.). Thereby is depending on the desired layer thickness and the prevailing installation conditions to check (temperature) before starting to work and using filler.

Recommendation for the addition of fillers at 20 ° C:

Filler VIASOL QNV0 about 1: 0.5 - 1: 0.8

Filler Geba (e.g. Dorfner) about 1: 0.4 - 1: 0.7

VIASOL PU-C4005 is poured onto the surface and spread over the entire area using a notched trowel with tooth size no. 25 or 48 (Polyplan) or S5 or RS4 (Multitool) (check application thickness). We recommend to roll the still liquid coating with a metal spiked roller (e. g. Multitool) to ensure optimal de-foaming. The applicator wears spiked shoes for this operation which enable him to walk in the freshly applied coating.

Anti-skid surfaces can be obtained by broadcasting the still liquid coating with an aggregate such as corundum. It is possible to add up to 80% of silica sand (VIASOL QNV0).

For cleaning of tools and other dirt VIASOL SO-X12 cleaner is recommended.

(C) Technical Data

Mixture (A+B)

1.	Mixing ratio A : B	100 : 42.5 (by weight)
2.	Working time	12°C approx. 30 min. 20°C approx. 20 min 30°C approx. 10 min.
3.	Application temperature	10–30°C (min. 3 K above dew point)
4.	Relative humidity	max 85%
5.	Material consumption (depending on substrate) levelling layer unfilled filled up to 1 : 0.6 (part of binder filled) coating mind. 1.5mm filled up to 1 : 0.8 (part of binder filled)	per mm: approx. 1160 g/m ² approx. 1470 g/m ² (approx. 920 g/m ²) approx. 1550 g/m ² (approx. 860 g/m ²)
6.	Foot traffic (20°C)	after approx. 24 hours
7.	Following layer (20°C)	within 12–24 hours
8.	Fully capable of withstanding stress mechanical (20°C) chemical (20°C)	after 5 days after 7 days

Overcoating

It is not necessary to abrade the surface if the following coat is applied within 24 h. After 24 h, the application can only take place after a careful grinding of the surface.

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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 declaration of performance (dop).

Decopaint-Guidelines (EU 2004/42/EG)

The maximum allowable VOC content for Product Category IIA j Type Lb products (in the ready to use state) is:

Stage II (from 2010) < 500 g/l VOC

In the ready to use state, this product contains less than 500 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 trade mark rights.

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

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