

Product 02054000 2-comp. PU top coat, antistatic, solvent free, coloured

1 General Data

Fields of application

VIASOL PU-C540 AS is used as flexible, conductive coating for industrial floorings needing a crack-bridging coating and making high demands on conducting electrostatic charges especially for fire and explosion protection areas.

Typical uses are chemical companies, magazines and laboratories with flammable liquids, hospitals and operating rooms.

Product description

VIASOL PU-C540 AS is an antistatic, pigmented, solvent free, low emission ready-to use 2-comp. PU top coating consisting of high quality, hard elastic polyurethane resin.

VIASOL PU-C540 AS in connection with VIASOL EP-E480 becomes a hard elastic, antistatic coating system according to DIN standards DIN 51953 / DIN EN 1081 / DIN IEC 93, which are easy to clean and have a very good resistance against fuels, lubricants, most of solvents and 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 color stable sealer.

VIASOL systems

VIASOL PU-C540 AS is the flexible coating for the VIASOL systems:

VIASOL UNIFLEX conductive

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.

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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Manufacturer:

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(A) Technical Data	
Mixture (A+B)	
1. Solids content	99 %
2. Density (20°C)	1,4 g/cm ³
3. Viscosity (20°C)	2500 - 3500 mPas
4. Packaging size (2-component container)	25 kg (20 kg A + 5 kg B)
5. Colour	VIASOL standard
6. Shelf life (20°C)	12 months in originally closed container
7. Storage	Dry at 10-25°C, avoid direct sunlight

(B) Technical Data	
Cured material	
1. Hardness Shore-D (DIN EN ISO 868)	approx. 65
2. Elongation at break (DIN 53504)	approx. 10%
3. Compressive strength DIN EN 196 /ASTM C109	51 N/mm ²
4. Flexurale strength DIN EN 196 /ASTM C109	59 N/mm ²
5. Resistance to earth (DIN EN 1081)	10 ⁴ - 10 ⁶ Ω



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2 Application methods

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.

VIASOL PU-C540 is applied on top of VIASOL EP-E480. The antistatic top coating VIASOL PU-C540 AS should be applied earliest 12 hours after application of the diluted conductive layer (otherwise danger of foam and bubble formation) but not later than 24 hours after application of the previous coat.

Application

VIASOL PU-C540 AS 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. We recommend the application by equal batch numbers.

The mixture is poured into another container and stirred again briefly. VIASOL PU-C540 AS is poured onto the surface and spread over the entire area using a notched trowel with tooth size no. 25 (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.

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

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 VIASOL EP-C3000 AS SKY the conductive layer VIASOL EP-E1480 or E1400 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

(C) Technical Data

Mixture (A+B)

1. Mixing ratio A : B		100 : 25 (by weight)
2. Working time	12°C 20°C 30°C	approx. 35 min. approx. 25 min approx. 15 min.
3. Application temperature		10–30°C (min. 3 K above dew point)
4. Relative humidity		Max. 85%
5. Material consumption (depending on substrate)		1800 - 2500 g/m ²
6. Foot traffic (20°C)		after approx. 24 hours
7. Following layer (20°C)		within 18–24 hours
8. Fully capable of withstanding stress		
mechanical (20°C)		after 3 days
chemical (20°C)		after 5 days

Distance between the measurements 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

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 conformity declaration.

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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