

Product 01054000 2-C EP top coating, conductive, self levelling, solvent-free, coloured

1 General Data

Fields of application

VIASOL EP-C540 AS is used as a conductive surface coating for industrial floors with high demands in terms of electrostatic discharge, especially in explosion proof areas and fire protection zones.

Areas of application are chemical plants, places where organic (flammable) solvents are stored and surrounding areas, hospitals, operating theatres and others.

Product Description

VIASOL EP-C540 AS is a pigmented, ready-to-use, solvent-free 2-component coating compound of high-grade epoxy resin. VIASOL EP-C540 AS used with the conductive layer VIASOL EP-E480 produces tough, electrically conductive coatings according to DIN EN 1081 / DIN EN 61340-5-1, which are easy to clean and exhibit a good level of resistance to fuels and lubricants, most solvents and many chemicals.

In general, epoxy resins are not colour stable if exposed to UV light or under influence of weathering. We recommend to apply a colour stable sealer.

VIASOL Systems

VIASOL EP-C540 AS is used as a self-levelling coating and as wear coat for the following VIASOL systems:

VIASOL **UNIVERSAL voltex**
VIASOL **UNIVERSAL voltex SR**

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 with initial care for conductive floorings.

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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(A) Technical Data	
Liquid mixture (A+B)	
1. Solids content	98 %
2. Density (20°C)	1.60 g/cm ³
3. Viscosity (20°C)	2800–3800 mPas
4. Packaging size (2-component container)	25 kg (21 kg A + 4 kg B)
5. Colours	VIASOL standard, other colours upon request
6. Shelf life	24 months in closed, original container
7. storage	Dry at 10–25°C avoid direct sunlight

(B) Technical Data	
Cured material	
1. Flexural strength (DIN EN 196 / ASTM C 109)	45 N/mm ²
2. Compressive strength (DIN EN 196 / ASTM C 109)	73 N/mm ²
3. Adhesive strength (DIN EN ISO 4624)	> 2.5 N/mm ² (concrete failure)
4. Abrasion resistance (DIN EN ISO 5470-1)	78 mg/1000 cycles (Taber CS10 wheel)
5. Shore-D-hardness (DIN EN ISO 868)	83
6. Resistance to earth (DIN EN 1081) (DIN EN 61340-4-1)	10 ⁴ – 10 ⁶ Ω ≤ 10 ⁹ Ω

Manufacturer:

VIACOR Polymer GmbH, Graf-Bentzel-Str.78, D-72108 Rottenburg, Tel: +49 7472 94999-0, info@viacor.de, www.viacor.de

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2 Application method

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 EP-C540 AS is poured onto the conductive layer VIASOL EP-E480. The conductive coating layer VIASOL EP-C540 AS must be applied no later than 24 hours after the previous layer has been laid.

Application

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 EP-C540 AS is poured onto the surface and spread over the entire area using a serrated spatula (tooth size no. 25) (layer thickness control). The fluid coating must be rolled with a spiked roller, as required. The operative wears spiked shoes to walk on the still wet coating.

For cleaning of tools and other contaminations VIASOL 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 VIASOL EP-C540 AS 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

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

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..

(C) Technical Data

Liquid mixture (A+B)

1. Mixing ratio A : B	100 : 19 by weight
2. Working time (20°C)	20–25 min.
3. Application temperature	10–30°C (min. 3 K above dew-point)
4. Material consumption	1600 – 2000 g/m ²
5. Foot traffic (20°C)	after approx. 24 hours
6. Following coating (20°C)	within 12–24 hours
7. Fully capable of withstanding stress mechanical (20°C) chemical (20°C)	after 7 days after 28 days

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3 Further information

CE-Mark



CE Mark according to EN 13813

EN 13813 "Screed material and floor screeds – properties and requirements" specifies requirements for screed material for use in floor construction internally. Resin flooring and sealer coats are also covered by this standard.

For details see CE mark and Declaration of Conformity.

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).