

VIASOL EP-C5480 AS Technical Data Sheet

Product 01054800 2-C EP top coating, water-based, conductive, vapour-permeable, low emission

1 General Data

Application

VIASOL EP-C5480 AS is used as vapour-permeable and electrically conductive top coat for industrial floorings capable of resisting to medium and high mechanical stress. Application fields are all explosion and fire protection areas. VIASOL EP-C5480 AS can be used on all sorts of substrates but is especially suitable for increased substrate humidity and for sub bases sensible to humidity such as for example

- magnesite and anhydrite screeds
- cementitious screeds when humidity is to be expected
- fresh concrete

Product Description

VIASOL EP-C5480 AS is a coloured, electrically conductive, water-based, low emission, ready-to-use two-component coating based on high-grade epoxy resin. VIASOL EP-C5480 AS produces tough, joint-free, non-porous floor coatings which are capable of withstanding heavy vehicular and pedestrian traffic.

VIASOL EP-C5480 AS applied on the conductive layer VIASOL EP-E480 results in electrically conductive flooring systems in accordance with DIN EN 1081 and DIN EN 61340. The coating is easy to clean exhibits a high level of resistance to fuels and lubricants, most solvents and chemicals.

Compared to traditional epoxy systems this product shows good UV stability and weather resistance.

Properties

- water vapour permeable
- low emission and solvent free
- good self-leveling and de-aerating
- mechanical resistant
- conductive accord. EN 1081 / EN 61340 ff
- very good UV and colorstability

VIASOL systems

VIASOL EP-C5480 AS is used as vapour permeable top coat for the VIASOL system:

VIASOL **PERM 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.

Manufacturer:

VIACOR Polymer GmbH, Graf-Bentzel-Str. 78, D-72108 Rottenburg, fon +49/7472-949990, info@viacor.de, www.viacor.de

(A) Technical Data

Liquid mixture (A+B)

1. Solids content	88 %
2. Density (20°C)	1.74 g/cm ³
3. Viscosity (20°C)	Approx. 5000 mPas
4. Packaging size (2-component container)	36 kg (33 kg A + 3 kg B)
5. Colours	VIASOL standard others on request
6. Shelf life / storage	12 months at 10–25°C, always keep from freezing (also during transport)

(B) Technical Data

Cured material

1. Flexural strength (DIN EN 196 / ASTM C 190)	16 N/mm ²
2. Compressive strength (DIN EN 196 / ASTM C 109)	55 N/mm ²
3. Adhesive strength (DIN ISO 4624)	> 2.5 N/mm ² (concrete failure)
4. Abrasion resistance (DIN 53754 / ASTM D 1044)	80 mg/1000 cycles (Taber CS10 wheel)
5. Shore-D-hardness (DIN 53505 / ASTM D 2240)	80
6. Value of water vapour resistance (DIN 52615 - 23/50-95)	μ = 4000
7. E-module	7000 N/mm ²
8. Surface	Silky mat
9. Resistance to earth (DIN EN 1081, DIN EN 61340-4-1)	< 10 ⁶ Ohm

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.

Tel: +49/7022-21790-0
e-mail: info@viacor.de

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2 Processing Instructions

Please refer also to our general application guideline.

Substrate Preparation

The substrate must be clean and free of dust and loose particles. VIASOL EP-C5480 AS is applied directly onto the conductive layer VIASOL EP-E480. The top coat must be applied within the recoating interval of the previous layer.

Processing

The product is delivered in ready-to-use 2-component containers in the exact mixing ratio. Before starting the application, the material temperature must be close to the temperature of air and substrate. After opening the A-component container, it must be stirred for 2 to 3 minutes. The entire contents of the B-component are emptied into the A-component container and both are stirred for minimum 3 minutes using a suitable electrical stirrer (we recommend to use a double paddle mixer). The inclusion of air in the stirring process must be avoided. Then the mixture should be poured into a different container and stirred again minimum 1 minute. We recommend the application by equal batch numbers.

VIASOL EP-C5480 AS is poured onto the surface and spread in the desired thickness over the entire area using a serrated spatula no. 48 or no. 78 from Polyplan (layer thickness control). To achieve uniform layer thicknesses, the tooth rows of the spatula must be regularly replaced. Afterwards the use of a spike roller is recommended.

The relative humidity must not exceed 85% to allow appropriate drying of the coating.

For cleaning of tools and other contaminations water is used.

Overcoating

If overcoating takes place within 36 hours after application the coating need not be grinded. After that is only possible after grinding and vacuuming it carefully.

(C) Technical Data

Liquid mixture (A+B)

1. Mixing ratio A : B	100 : 9 (parts by weight) 100 : 13,6 (parts by vol.)
2. Processing time (20°C)	approx. 40 minutes
3. Processing / material / ambient temperature:	15 – 25°C (min. 3°C above dew point)
4. Rel. humidity when applied	< 85% (at 20°C)
5. Material consumption	3200 – 4000 g/m ²
6. Can be walked on (20°C)	after 12 – 16 hours
7. Consecutive layer (20°C)	within 12 - 36 hours
8. Fully capable of withstanding mechanical stress (20°C) chemical stress (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: 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 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 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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