

Product 01300500 2-C-EP coating, self-levelling, solvent-free, high fillable, coloured

1 General Data

Fields of application

VIASOL EP-C3005 is used as a high fillable, self-levelling coating for industrial floors with high demands in mechanical and hygienic terms.

Areas of application are found in all branches e.g. high-bay warehouses, stores, power stations, laboratories, production sites etc.

In addition VIASOL EP-C3005 is used as wear coat for with quartz sand broadcasted anti-skid coatings.

Product description

VIASOL EP-C3005 is a pigmented, high fillable (depending on layer thickness and filler up to 1:1.5), solvent-free 2-component coating compound of high-grade epoxy resin. VIASOL EP-C3005 produces filled with oven dried quartz sand fillers, tough, joint-free, non-porous floor coatings which are easy to clean and exhibit a good level of resistance to fuels and lubricants, most solvents and many chemicals. Exposure to chemicals may lead to optical discoloration that will not affect the technical usability of the flooring (see chemical resistance list).

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.

Properties

- solvent-free (total solid)
- high fillable ($\leq 1 : 1.5$) with oven dried quartz sand
- self-leveling, joint-free
- mechanical and chemical resistant
- good abrasion resistance

VIASOL systems

VIASOL EP-C3005 is used as coating for the following VIASOL systems:

VIASOL **UNIVERSAL**
VIASOL **UNIVERSAL SR**
VIASOL **UNIVERSAL high-impact**

and for many other systems.

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

Liquid mixture (A+B)

1. Solids content	>99 %
2. Density (20°C)	1.17 g/cm ³ (unfilled) (1.62 g/cm ³ 1:1 filled)
3. Viscosity (20°C)	900 – 1100 mPas
4. Packaging size (2-component container)	28 kg (20 kg A + 8 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)	40 N/mm ² (filled)
2. Compressive strength (DIN EN 196 / ASTM C 109)	70 N/mm ² (filled)
3. Adhesive strength (DIN EN ISO 4624)	> 2.5 N/mm ² (concrete failure)
4. Abrasion resistance (DIN EN ISO 5470-1)	<55 mg/1000 cycles (Taber CS10 wheel)
5. Shore-D-hardness (DIN EN ISO 868)	82 (filled)



Manufacturer:

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2 Application method

Please refer also to our general application guideline.

No handling of silicon containing substances or other products interfering with the reaction in the application area before and during application until the curing of the liquid resin.

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 to the intended evenness VIASOL EP-C3005 is applied directly onto the primer or an EP-levelling layer. We recommend to broadcast this layers just defined with QS. The top coat VIASOL EP-C3005 should be applied within the recoating interval of the previous layer.

Application

The product is delivered in ready-to-use 2-component containers in the exact mixing ratio. The A-component must be stirred for at least 2–3 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-C3005 can be filled, depending on the layer thickness, the filler and the material and ambient temperature, with oven dried quartz sand (e.g. VIASOL QNV0 or GEBA) in a mixing ratio 1:0.5 – 1:1.5, the material properties should be tested depending on applied thickness and ambient conditions (temperature).

Recommendation for adding filler at 20°C:

Filler VIASOL QNV0 approx. 1:1 – 1:1.5

Filler Geba (e.g. Dorfner) approx. 1:0.7 – 1:1

VIASOL EP-C3005 is poured onto the surface and spread over the entire area using a serrated spatula (e. g. Polyplan tooth size no. 25 - 48 or Multitool S5 – S3). To achieve uniform layer thicknesses, the tooth rows of the spatula must be regularly replaced. The fluid coating can be rolled with a spiked roller, as required. The operative wears spiked shoes to walk on the still wet coating.

When processing an anti-skid system, oven dried quartz sand is broadcasted in the fresh material or in self-levelling layers decorative colour flakes can be spread in within the processing time.

(C) Technical Data

Liquid mixture (A+B)

1. Mixing ratio A : B	100 : 40 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 self levelling coating anti-skid with QS broadcast	900 – 2000 g/m ² resin 800 – 1500 g/m ² resin
5. Foot traffic (20°C)	after approx. 24 hours
6. Consecutive layer (20°C)	within 12 – 24 hours
7. Fully capable of withstanding stress mechanical (20°C) chemical (20°C)	after 7 days after 28 days

We recommend for high filling grades to apply the self-levelling coating just on defined broadcasted surfaces and to de-aerate the fresh coating with a spike roller.

Note: Depending on the used quartz sand, filling grad and colour of the quartz sand it may lead to changes in the original colour tone of the coating material.

For cleaning of tools and other contaminations VIASOL SO-X10 tool cleaner is used.

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.

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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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).