

Product 01454800 2-comp EP top coating, water-based, conductive, vapour-permeable, low emission

1 General Data

Fields of application

VIASOL EP-C5480 AS^{VM} 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^{VM} 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 and young concrete.

Product description

VIASOL EP-C5480 AS^{VM} 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^{VM} produces tough, joint-free, non-porous floor coatings which are capable of withstanding heavy vehicular and pedestrian traffic.

The coating is easy to clean exhibits a high level of resistance to fuels and lubricants, most solvents and chemicals. This product shows good UV stability and weather resistance compared to traditional epoxy systems.

Features & Benefits

High solids – durable; higher DFT

Advanced resin system – tough, versatile, easy to apply

Low VOC emission

High water vapor permeability – does not blister in situation subject to moisture and humidity

Water impermeable – waterproof

Low / no odor – environmentally friendly

Solvent free – non-flammable and non-toxic

Highly conductive – good electrical properties

VIASOL systems

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

VIASOL^{PERM} conductive

Care and maintenance

The lifespan & performance of your waterproofing system can be extended considerably by adopting a regular cleaning and care programme.

(A) Technical Data

Liquid mixture (A+B)

1. Solids content	80 %
2. Density (20°C)	1.74 g/cm ³
3. Viscosity (20°C)	Approx. 4000 mPas
4. Packaging size (2-component container)	32 kg (28.6 kg A + 3.4 kg B)
5. Colours	VIASOL standard others on request
6. Shelf life	12 months in closed original container
7. Storage	Dry and frost-free at 10–30°C, avoid direct sunlight

(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)	75
6. E-module	7000 N/mm ²
7. Surface	Silky matte
8. Conductivity (DIN EN 1081) (DIN EN 61340-4-1)	≤ 10 ⁶ Ω (Rg) ≤ 10 ⁹ Ω (Rg)

Manufacturer:

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2 Application method

Substrate preparation

The substrate must be clean and free of dust and loose particles. VIASOL EP-C5480 AS^{VM} is applied directly onto the conductive layer VIASOL EP-E480^{VM}. The top coat must be applied within the recoating interval of the previous layer. Before application of the VIASOL EP-C5480 AS^{VM}, the conductive layer VIASOL EP-E480^{VM} has to be tested and met the requirement.

Application

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.

Component B has to be fully emptied into the A-component container. Mix the material 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. The mixture shall be poured into a different container and stirred for 1 minute. We recommend the application using equal batch numbers.

VIASOL EP-C5480 AS^{VM} 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 a uniform layer thicknesses, the tooth rows of the spatula must be regularly replaced. Afterwards the use of a spike roller is recommended.

Provide good ventilation to ensure the relative humidity must not exceed 80% to allow an appropriate drying of the coating.

For the cleaning of tools and other contaminations water is used.

(C) Technical Data

Liquid mixture (A+B)

1.	Mixing ratio A : B	100 : 12 by weight (kg)
2.	Working time (25°C)	approx. 25 min. (25°C) approx. 20 min. (30°C)
3.	Application temperature	15 – 25°C (min. 3°C above dew point)
4.	Material consumption	2.2 – 2.8 kg/m ²
5.	Following coating (20°C)	within 24 hours
6.	Cure time to withstand:	
	Foot traffic (25°C)	after 12 – 16 hours
	Mechanical stress (25°C)	after 7 days
	Chemical stress (25°C)	after 28 days

Overcoating

The surface shall be overcoated within 24 hours. Overcoating after 36 hours requires a grinding and cleaning of the coating.

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 Asia Sdn Bhd directly.

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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.asia).

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