

Product 01458000 2-comp. EP advanced resin top coat, vapour permeable, low VOC

1 General Data

Fields of application

VIASOL EP-C580^{VM} is recommended for use as a protective topping on concrete in situations subject to medium and high mechanical stresses as in production facilities, warehouse/logistic centres and shopping malls. It is especially suitable for situations where the concrete substrate is exposed to high moisture and humidity.

Product description

VIASOL EP-C580^{VM} is a coloured, two-component, advanced water-based self-smoothing floor topping that is designed to withstand heavy vehicular traffic. It provides a tough, hard wearing, seamless surface that is easy to clean and is resistant to fuels, oils and most solvents and chemicals.

VIASOL EP-C580^{VM} exhibits good UV stability and weather resistance compared to traditional epoxy systems.

Features & Benefits

High solids – durable; higher DFT

Advanced resin system – tough, versatile, easy application

Low VOC emission

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

Good adhesion to concrete and most building material and other coating or topping systems

Water impermeable – waterproof

Low / no odor – environmentally friendly

Solvent free – non-flammable and non-toxic

VIASOL systems

VIASOL EP-C580^{VM} is used as a vapor permeable topping for the VIASOL system:

VIASOL**PERM**

VIASOL**PERM SR**

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 (25°C)	approx. 1.76 g/cm ³
3. Viscosity (25°C)	approx. 4000 mPas
4. Packaging size	28 kg (25 kg A + 3 kg B)
5. Colours	VIASOL standard
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 C190)	16 N/mm ²
2. Compressive strength (DIN EN 196 / ASTM C190)	55 N/mm ²
3. Adhesive strength (DIN ISO 4624)	> 2.5 N/mm ² (concrete failure)
4. Abrasion resistance (DIN 53754 / ASTM D1044)	80 mg/1000 cycles (Taber CS 10 wheel)
5. Shore D hardness (DIN 53506 / ASTM D2240)	80
6. Value of water vapour resistance (DIN 5261523/50-95)	μ = 4000
7. E-modulus	7000 N/mm ²
8. Surface	Silky matt

Technical support

For system build up possibilities and detailed information relating to the installation of VIASOL products, please refer to the VIASOL System Planner or contact VIACOR Asia Sdn Bhd directly.

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e-mail: info@viacor.asia

Manufacturer:

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2 Application method

Substrate preparation

The substrate must be firm, clean, dry and have a pull-off strength of 1.5 N/mm² minimum.

The product can be used on green concrete.

Repair imperfections (holes and cracks) with an epoxy patching compound such as VIASOL EP-T703^{VM} where necessary.

Remove surface laitance, contaminants, coating, curing compound and all weak and loose materials.

Prepare substrate by Captive Shot Blasting or Diamond Grinding to provide the appropriate surface profile for optimum mechanical interlocking.

Application

Priming

Apply VIASOL EP-P285^{VM} Primer at the consumption rate of min. 0.2 kg/m² by roller.

Allow to cure for a minimum of 8 hours but not longer than 24 hours before the application of VIASOL EP-C580^{VM}

Applying VIASOL EP-C580^{VM}

Before starting the application, the material temperature must be close to site conditions.

Mix Component A for 2-3 minutes.

Empty contents of Component B (Hardener) into Component A (Base Resin). Mix with a suitable mixer at a speed of 500 rpm to avoid incorporating excessive air into the mixture. Mix for 2-3 minutes.

Transfer the mixture into another clean container and mix for 1-2 minute.

Pour VIASOL EP-C580^{VM} onto the prepared surface and spread in the nominated thickness using a notch trowel or pin rake following which use the spike roller over the spread surface. To achieve uniform thickness, the spreader tool must be checked regularly and replaced.

Provide good ventilation to ensure that the relative air humidity does not exceed 80% during application and curing as it will inhibit evaporation of water and affect cure.

To achieve improved cleaning properties, apply a coat of polymer wax or seal the surface with a clear coat of VIASOL EP-S684^{VM}.

For cleaning of tools and other contaminations use water.

(C) Technical data

Liquid mixture (A+B)

1. Mixing ratio A : B	100 : 12 by weight (kg)
2. Working time	approx. 25 min. (25°C) approx. 20 min. (30°C)
3. Application temperature	10 – 30°C (min. 3°C above dew point)
4. Material consumption	1.8 – 2.3 kg/m ²
5. Following coating (25°C)	within 24 hours
6. Cure time to withstand:	
Foot traffic (25°C)	24 hours
Heavy Traffic (25°C)	7 days
Exposure to chemicals (25°C)	28 days

Overcoating

The second application can be applied within 24 hours without grinding. If longer, the surface has to be grinded before over-coating.

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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.

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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