

Product 01448000      2-comp conductive layer, water-based, solvent free, black

## 1 General Data

### Application

VIASOL EP-E480<sup>VM</sup> is used as a conductive layer for conductive and anti-static top coats. It is recommended to use in clean rooms, electronic production facilities, hospitals, pharmaceutical factories and facilities involving flammable gases and explosives.

### Product Description

VIASOL EP-E480<sup>VM</sup> is a two components water-based, solvent free, conductive layer for use in below conductive coating products and is always applied on a primer.

### Features & Benefits

**Solvent free** – non-flammable

**Low VOC** – complies with environmental requirements

**No odour** – user friendly

**Highly conductive** – good electrical properties

**Excellent adhesion** to concrete and masonry surfaces. Superior anti-static properties complied with EN 1081, EN 61340-4-1

### VIASOL systems

VIASOL EP-E480<sup>VM</sup> is the conductive layer for the VIASOL system:

VIASOL **UNIVERSAL voltex**  
 VIASOL **UNIVERSAL voltex SR**  
 VIASOL **PERM conductive**

#### (A) Technical Data

##### Liquid mixture (A+B)

|   |  |
|---|--|
| 1. Solids content                         | 60%  |
| 2. Density (20°C)                         | 1.12 g/cm <sup>3</sup>   |
| 3. Packaging size (2-component container) | 5.0 kg (4.2 kg A + 0.8 kg B)   |
| 4. Colours                                | Black (matt)   |
| 5. Shelf life / storage                   | 12 months at 10-25°C in unopened in dry condition, always keep from freezing (also during transport) |

#### (B) Technical Data

##### Cured material

|  |  |
|--|--|
| 1. Adhesion strength (DIN ISO 4624)                    | >1.5 N/mm <sup>2</sup> (substrate failure) |
| 2. Resistance to earth (DIN EN 1081, DIN EN 61340-4-1) | < 1 x 10 <sup>3</sup> Ohm (Ω)              |

### 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.

Tel: +603 5131 7777  
 e-mail: [info@viacor.asia](mailto: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/mm<sup>2</sup> minimum.

Repair imperfections (holes and cracks) with an epoxy patching compound such as VIASOL EP-T703<sup>VM</sup> 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.

It is important to ensure that the subfloor is flat before proceeding to commence installation.

VIASOL EP-E480<sup>VM</sup> is always applied on a primer or a levelling layer. For the connection to the earth points use self-adhesive copper tapes min. 50 cm into the surface. We recommend to use per each room min. 2 earth points and for each 100 m<sup>2</sup> one earth point.

The copper tape should be earthed by a qualified electrician.

### 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. Premix both Component A and B thoroughly in the container for a minimum of 2 minutes. Empty component B into component A and mix the material at a speed of 750 rpm (do not mix with hand) for 3 minutes until homogeneous. The inclusion of air in the stirring process must be avoided.

8-10% water can be added to facilitate rolling application. The mixture must be poured into a clean container and must be stirred for another 1 minute. **Constant stir-up during the application to prevent settlement of heavy filler.**

Pour the mixed VIASOL EP-E480<sup>VM</sup> onto the VIASOL surface and spread the the material using a squeegee and back roll it with a roller (short hair mohair roller). Allow to cure for a minimum of 12 hours. Apply the conductive topping before 24 hours.

For cleaning of tools and other contaminations water is used.

### (C) Technical Data

#### Liquid mixture (A+B)

|                               |   |
|-------------------------------|---|
| 1. Mixing ratio A : B         | 4.2 : 0.8 by weight, add 8-10% of water (max. 0.5 l per 5 kg) |
| 2. Working time (25°C)        | approx. 30-40 minutes   |
| 3. Application temperature    | 15 – 25°C (min. 3°C above dew point)                          |
| 4. Rel. humidity when applied | < 80%   |
| 5. Material consumption       | 100 - 110 g/m <sup>2</sup>                                    |
| 6. Foot traffic (25°C)        | after 8-12 hours  |
| 7. Consecutive layer (25°C)   | within 16 - 24 hours  |

#### Note for conductive systems:

Prior to the application of the conductive coating VIASOL EP-C5480 AS<sup>VM</sup> or VIASOL EP-S6480AS<sup>VM</sup>, the conductive layer VIASOL EP-E480<sup>VM</sup> must be measured.

| Area coating system     | No. of measurements (min)           |
|-------------------------|-------------------------------------|
| < 10m <sup>2</sup>      | 1 measurement / m <sup>2</sup>      |
| 10 – 100 m <sup>2</sup> | 10 – 20 measurements                |
| > 100 m <sup>2</sup>    | 10 measurement / 100 m <sup>2</sup> |

Distance between the measurement points at least 50cm. If the required measurement value is not reached, further measurements must be carried out within a radius of 50cm. Else, re-prime with VIASOL EP-E480<sup>VM</sup>.

### Overcoating

If overcoating takes place within 24 hours after application the coating need not be grinded. After that is only possible after grinding and vacuuming it carefully.

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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](http://www.viacor.asia)).

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