

## Flowchem VE ESD Primer

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### Product description

Flowchem VE ESD Primer is a conductive, anti-static, rapid curing, shrinkage compensated and modified vinyl ester resin based primer.

### Features and Key Benefits

- Uniform conductivity
- Fast curing
- Shrinkage compensated
- Easy and fast application
- Excellent adhesion

## Product Information

### Applications

Flowchem VE ESD Primer provides a conductive layer on top of the copper grid installed on the non-conductive Flowchem VE Primer and helps to ensure the ESD performance of Flowchem VE ESD systems.

### Certificates/approvals

CE according EN 13813 (when used as part of complete system)

### Environment and Health

Follow the appropriate Occupational Health and Safety Guidelines applicable to the location where the application is undertaken.

For more information, please refer to the safety datasheets for the individual components.

## Technical Information

### Technical Characteristics (liquid state)

|                                |  |
|--------------------------------|--|
| Appearance                     | A: Flowchem VE ESD Primer Resin - black liquid<br>B: Flowchem VE Accelerator – purple liquid<br>C: Flowchem VE Curing Agent – transparent liquid |
| Mixing ratio at +20°C(A/B/C)   | 100 / 0.3 / 2 by weight  |
| Pot life at +10 / 20 °C        | 90 / 45 min  |
| Density at +23°C (EN ISO 1183) | 1.03 kg/dm <sup>3</sup> (mixed A/B/C)  |
| Min. overcoat time at +20°C    | 2 hours  |

### Technical Characteristics (cured state)

|   |                              |
|---|------------------------------|
| Volume shrinkage at 20°C –<br>Rili4 2.5.3.2.1 | < 0.003%                     |
| Resistance to ground EN IEC<br>61340-4-1      | < 10 <sup>6</sup> Ohm (100V) |

### Colour

Black, gloss

### Packaging

The Flowchem VE ESD Primer components are supplied in the following pack sizes:

- Flowchem VE ESD Primer Resin: in lacquered metal drums of 25 kg.
- Flowchem VE Accelerator: in metal cans of 1 kg
- Flowchem VE Curing Agent: in plastic bottles of 1 kg

### Storage

Store in dry area, in unopened, original containers in temperatures +5 °C to +25 °C. Protected from freezing, out of direct sunlight, moisture or contaminant ingress.

### Shelf-life

Flowchem VE ESD Primer Resin: 6 months from manufacture day when stored correctly in the original, unopened packaging as supplied.

Flowchem VE Accelerator and Curing agent: 9 months from manufacture day when stored correctly in the original, unopened packaging as supplied.

## Usage Guidelines

### Application conditions

|                              |  |
|------------------------------|--|
| Ambient temperature range:   | +5°C - +30°C                           |
| Substrate temperature range: | +5°C - +30°C                           |
| Ambient relative humidity:   | < 95 %                                 |
| Substrate relative humidity  | <4.5 % (Tramex scale or 75% RH BS8203) |

- To ensure best application behaviour of material it is recommended to condition the containers for at least 24 hours in +15 °C - +25 °C prior to application.
- The recommended substrate temperature is 15 - 25°C, but not less than 5°C and more than 30°C.
- **During application and initial curing of product, substrate temperature needs to be at least 3°C higher than dew point temperature.**
- To assess possibility of application outside of these conditions or application temperatures, please consult our Technical Department.
- The styrene in the resin component can be smelt at very low concentrations (from 2 ppm onwards). Follow the appropriate national guidelines.

### Surface Preparation

Substrates must be mechanically prepared to be free of cement laitance, dust, oil and any other contamination, any surface defects and blowholes must be prefilled and levelled.

The substrate pull-off value must be tested to be at least 1.5 MPa and the surface profile / roughness of the concrete must be at least 0.5 mm.

For further details see our "General preparation and application guidelines for Flowchem VE floor protection systems".

### Mixing

Mix the whole drum of Flowchem VE ESD Primer Resin with an electric drill and paddle to disperse any possible settlement.

Weigh out the required quantity and add 0.3% (b/w) of Flowchem VE Accelerator and mix well for 2 min. (Note: the % of the accelerator required can increase at lower temperatures please consult our Technical Department for specific advice).

Add 2% (b/w) of Flowchem VE Curing Agent and continue to mix thoroughly for 2-3 min and then the resin is ready for application.

**Note: Never mix the Accelerator directly with the Curing Agent.**



## Application

Flowchem VE ESD Primer can be applied vertically and horizontally with a lamination roller or brush on the prepared concrete surface sealed with Flowchem VE Primer foreseen with the copper grid.

## Coverage

Normal application rate / consumption on a uniform surface should be approx. 0.35 kg/m<sup>2</sup>.

## Cleaning

Clean using Flowchem VE Equipment Cleaner. **Acetone should be used during the application** to clean the Teflon or Metal deaeration rollers! Not styrene (it will make everything sticky).

## Technical Service

Contact Tremco CPG "Country"

## Guarantee

Tremco CPG "Country" warrants all goods to be free from defects and will replace materials proven to be defective but makes no warranty as to appearance of colour. The information and recommendations herein are believed by Tremco CPG "Country" to be accurate and reliable.