

## 1. Product Description

**StenCoat® 2EP HC** is a two-component epoxy-based conductive coating. It can be used as an intermediate or topcoat material for seamless conductive or antistatic coatings. It has high surface and volume conductivity and can be used as a charge dissipator.

It is resistant to moisture, fuels, oils, inorganic acids and diluted bases. **StenCoat® 2EP HC** prevents dusting and wetting and increases the surface's resistance to water.

## 2. Uses

**StenCoat® 2EP HC** is used on factory floors, in fuel storage facilities, and in areas where flammable gases, explosive materials or sensitive electronic materials are processed, manufactured, handled or stored to create a floor that prevents static-electricity buildup. It is preferred in areas where high-build antistatic coatings are needed or where static electricity discharge must be very fast.

**StenCoat® 2EP HC** can also be used as a paint on metal surfaces.

Static charge buildup in the paint poses a risk to occupational safety, especially during painting operations in areas where flammable and explosive gases are present, such as inside fuel tanks. Using a conductive paint ensures that charges are transmitted to ground as soon as they reach the surface.

## 3. Application

### 3.1. Surface Preparation

Application surfaces must be clean and dry. Surface temperature must not exceed 40 °C. In applications where static electricity will be grounded and on metal surfaces, the primer **StenAst® 2EP HC** is used.

**StenAst® 2EP** is used for seamless floor systems where static electricity will be dissipated, on porous surfaces such as concrete. The time periods specified in the user manual of the primer used must be observed.

### 3.2. Application

It is recommended to condition the materials at 20-30 °C for one day before application. During application, surface and air temperature must be at least 10 °C and the temperature must not drop below 10 °C for 24 hours following the application. **StenCoat® 2EP HC** is ready for application when components A and B are mixed.

The components are packaged so that one container of each yields the correct mixing ratio. In cases where a complete package will not be used, the package must be weighed and proportioned; the mix ratio stated on the package must be observed. Then component B is added into the container of component A and they are mixed for 3-4 minutes at 300-500 rpm.

The mixed material must be poured into another container and transferred to the application area; pouring directly onto the application surface from the mixing pot must be avoided. Mixed material must be used within the pot life, and thickened material must not be thinned and reused. **StenCoat® 2EP HC** is applied with a notched trowel or roller.

The application is carried out in one or two coats, with 700-1500 g per m<sup>2</sup> per coat. For conductive and antistatic floor applications, after one coat is applied, it is recommended to place the copper tape on the material while it is still

## Conductive Epoxy Coating

### Highlights

- High conductivity
- Self-levels and gives an even appearance
- Solvent-free
- Suitable for thick coatings
- Important for occupational safety in areas containing flammable and explosive materials such as fuel tanks
- Easy to clean
- Long-lasting



liquid, and to apply the second coat onto this system after 2-8 hours. Grounding resistance and surface resistance measurements must be made at least 7 days after the system is installed.

### 3.3. Cleaning

Equipment used can be cleaned with **StenSolver EP** at the end of the job.

### 4. Safety

Applicators and supervisors must read the Safety Data Sheet (SDS) carefully and follow the instructions provided. Emptied packages must be disposed of in compliance with relevant regulations and laws. The application must be carried out by skilled workers under the supervision of experts and the applicators must use all personal protective equipment required for the worksite and the task such as goggles, mask and gloves.

### 5. Storage

Storage temperature must be between 5 and 30 °C. Packages must not be exposed to direct sunlight. Under these conditions, the material will retain its properties in unopened containers for 12 months from the production date.

Low temperatures may cause crystallization of the product; in this case, the product can be used after being warmed to +20 °C and homogenized. After prolonged storage, the product must be stirred thoroughly before use.

### 6. Disclaimer

This document is provided for general information and is based on **Stenkim®**'s laboratory data and field experience at the time of publication. **Stenkim®** reserves the right to revise this information without prior notice.

**Stenkim®** warrants that its products conform to the stated specifications on delivery. The buyer is responsible for determining the product's suitability for the intended purpose and for all conditions of transport, storage, application, and use. **Stenkim®** accepts no liability for results obtained under conditions outside its control. **Stenkim®**'s liability under this warranty is limited to replacement of non-conforming product and excludes any consequential or indirect damages.



## 7. Technical Data

| Property                                          | Method                         | Result                                       |
|---------------------------------------------------|--------------------------------|----------------------------------------------|
| Base Polymer                                      |                                | Two-Component Epoxy                          |
| Solids Content (by weight)                        |                                | 100%                                         |
| Color                                             |                                | Catalog                                      |
| Density                                           |                                | 1.48 ± 0.05 g/cm <sup>3</sup>                |
| Hardness (Shore D)                                | EN ISO 868                     | D73-83                                       |
| Application Thickness (per coat)                  |                                | 1000 µm                                      |
| Antistatic Behavior                               | EN 1081                        | Class I (10 <sup>4</sup> -10 <sup>6</sup> Ω) |
| Electrical Resistance (between electrodes, 90 cm) | IEC 61340-4-1                  | < 5 × 10 <sup>5</sup> Ω                      |
| Electrical Resistance (to ground)                 | IEC 61340-4-1                  | < 5 × 10 <sup>5</sup> Ω                      |
| Adhesion Strength                                 | EN 1542 (on concrete)          | ≥ 1.0 N/mm <sup>2</sup>                      |
| Abrasion Resistance                               | ASTM D 4060 CS17/1000 rev/1 kg | < 3000 mg                                    |
| Impact Resistance                                 | EN ISO 6272-1                  | ≥ 20 Nm (No Damage)                          |
| Pot Life @20 °C                                   | EN ISO 9514                    | 45 ± 15 minutes                              |
| Tack-free Time @20 °C                             |                                | 2 hours                                      |
| Full Cure Time                                    |                                | 3 days                                       |
| Cure Time for Chemical Resistance                 |                                | 7 days                                       |
| Shelf Life                                        |                                | 1 year                                       |
| Packaging                                         |                                | 20 kg sets                                   |

**Stenkim®** reserves the right to make changes to the values in this table at any time. *CE: CE marked in accordance with EN 1504-2 (PR-C) (DoP STN-PRC-2EPHC-0001).*

