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NANTEN ESD PRIMER

CE



Product description

2-component electrically conductive epoxy primer for Nanten ESD coating systems.

- Used as a primer in Nanten ESD coating systems for areas requiring static electricity control, where the coating must meet the electrical conductivity requirements of IEC EN 61340-5-1 or PSK 2703 standards.
- Provides excellent conductivity, strong adhesion to the substrate, and fast drying.

Applications

- Electronics industry
- Pharmaceutical industry
- Production and assembly areas in the chemical industry
- Hospital operating rooms
- IT server rooms / data centers
- Facilities where static electricity presents a risk

Instructions

Base requirements and coating conditions

The strength class of the concrete must be at least C25/30 and the wear resistance class 3. The relative humidity of the concrete must be below 95% and the surface temperature must be at least +3^{0}C above dewpoint. During the drying of the coating, the temperature of the ambient air, the surface and the coating must be over +15^{0}C and relative humidity must be below 80%.

New concrete floor

Laitance and any uncured cement are removed by either surface grinding or shot blasting. All loose material that could negatively affect adhesion is removed, and cement dust is carefully vacuum-cleaned.

Old concrete floor

Laitance and damaged concrete are removed by grinding or shot blasting. All loose material that could negatively affect adhesion is removed, and the base is carefully vacuum-cleaned. Dirty floors should be washed and rinsed with synthetic detergent before performing any other base treatment work. Any old coat is removed completely.

Priming

Priming is carried out using Nanten HM Epoxy. On damp concrete substrates with a relative humidity above 95%, a moisture-tolerant primer such as Nanten M Primer must be used. The primer must seal all pores in the concrete and form a uniform, dense, and continuous film. Small holes and cracks must be cleaned and filled with epoxy putty made from Nanten HM Epoxy and fine filler sand. If

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necessary, uneven surfaces must be levelled using an epoxy screed. ESD coating systems require an even substrate.

ESD Priming treatment

Copper grounding tapes must be applied according to the installation plan on the cured surface of HM Epoxy. Each room must have two grounding points. The actual primer in Nanten ESD coating systems is the conductive Nanten ESD Primer.

ESD Priming

The mixed material is poured onto the floor in a continuous ribbon and spread with a roller. Conductive ESD quartz sand is broadcast onto the wet primer to improve adhesion of the coating and facilitate the application of the ESD trowel coating. The consumption of ESD Primer must be more than 0.35 l/m^2. The primer coat must be uniform in thickness.

Mixing

Pre-mix Part A and Part B of the ESD Primer separately in their original containers. Then combine the components in a mixing vessel and mix with a low-speed mixer for approximately two minutes, avoiding air entrapment in the mixture.

Spreading rate

Part A: 5 parts by volume
Part B: 1 part by volume
Always mix both components together thoroughly.

Coverage

Consumption approx. 0.35 l/m^2.

Waste handling

Storage and handling of waste
See the separate storage and disposal instructions https://www.fescon.fi/en/material-bank

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Technical information

Colour	Black
Package size	Part A in a 15.5 l metal container, Part B in a 3.1 l plastic container
Storage	+5°C to +25°C, shelf life up to 6 months. Must be stored in a warm location in tightly sealed original containers.
Mixing time	Approx. two minutes
Density	Approx. 1.20 kg/l, ready-to-use mixture
Usage temperature	+15°C...+25°C
Usage time	Poured onto the floor: approx. 15–20 minutes. Working time decreases as temperature rises.
Drying time	Touch-dry after 5 h (+25°C) and 10 h (+15C). Fully dry and ready for overcoating after 12–24 h, depending on temperature.
Adhesion strength	B2.0
Reaction to fire	Efl
Relative air humidity	Below 80% during application and curing of the coating
Thinner	Do not dilute
Method of application	Apply using a rubber squeegee or roller
VOC content	< 240 g/l (ready-to-use mixture)EU VOC 2004/42/ EC (Cat A/j) max. 500 g/l (2010)
GWP A1 raw material	2,76
GWP A2 transport	0,208
GWP A3 manufacturing	0,608
GWP A1-A3	3,58
GWP A4 transport	0,0319
GWP A5 assembly	0,0933
GWP unit	kg CO2e/kg
Method for calculating the GWP value	EPD

Remember to consult the Maintenance Instructions for Coated Floors and the product Safety Data Sheet on our website at www.fescon.fi, or request a copy by calling +358 9 274 7970. Although the technical details provided in this product description are based on our best knowledge and experience, the information above should always be regarded as indicative. The user is responsible for verifying the suitability of the product for the intended application. If the instructions are not followed, the user assumes full responsibility for any resulting damage or consequences. Limitation of liability, product use notes and restrictions: Please familiarize yourself with Fescon Oy's general terms of delivery and the design and work instructions related to the product.