CLASS EPX-160

ESD Water-Based Epoxy Conductive Surface Primer

BENZKİM

Product Overview

Solvent-Free Antistatic Epoxy Primer, Conductive Primer, is a two-component, solvent-free primer that is applied with a roller over copper tapes installed on the floor prior to the application of electrically conductive and antistatic floor coatings. This process results in a uniform electrically conductive layer on the floor. It is a 100% solids, epoxy resin-based, solvent-free primer that incorporates black carbon as a key component.

Application Domains

- For preparing damp or freshly poured concrete surfaces prior to waterproofing applications,
- For priming absorbent surfaces such as cement and epoxy-based screeds, plasters, glossy finishes, and exposed concrete,
- For priming various non-absorbent surfaces, including glass, wood, steel, and aged ceramics.
- As a preliminary measure in environments where low VOC levels are essential, such as hospitals, pharmaceutical facilities, and food processing establishments.
- As a preparatory step prior to the application of new coatings over existing epoxy and polyurethane floor finishes.
- As a preliminary step before applying new coatings to recently installed surfaces that have surpassed the curing period,
- It serves as a protective coating for concrete and plaster surfaces.

Technical Specifications

Types	TS EN 1504-2/April 2008 Principle 5 (PR): 5.1 Physical Resistance / Surface Enhancement Coating Application C
Intensity	1,20 g/cm^3
Flashpoint	>98 °C
Mixture of Life	45 minutes / 25°C
Interfloor Waiting Time	12 seconds / 25 °C
Water-Based Primer DENSITY (20°C) B.COMP	12 seconds / 25 °C
Drying Duration	75 – 80 – (Coast)
Mechanical Strength	7 days
Electrostatic Reaction	Ground resistance Rg < 10^6 ohms (IEC 61340-4-1). The average ground electrostatic response resistance is $10^4 \leq Rg \leq 10^6$ ohms (IEC 61340-4-1). A minimum distance of 50 cm should be maintained between conductivity measurement points on the ground. If any points yield insufficient results during measurement, additional measurements must be conducted within a 50 cm radius of those points. Ground conductivity test measurements (< 35 mA (IEC 61340-4-1)) are considered acceptable values within the measurement area. Raw material (DOW: DER 331 EL).

Advantages

- It offers protection against corrosion and demonstrates resistance to alkalis and basic acids.
- It remains impervious to fungi and bacteria.
- It is resistant to sunlight as it is unaffected by UV rays.
- It exhibits strong adhesion to the surface to which it is applied and demonstrates resistance to aging.
- It is resistant and impermeable to water, acidic solutions, saline solutions, grease, and petroleum.

Surface Preparation

The application area must be meticulously cleaned of dirt, oil, rust, and other contaminants. Concrete surfaces should be dry and free of debris. Primer should not be applied to old and deteriorated surfaces (those that are worn, loose, or have lost their mechanical integrity) without appropriate repairs. The concrete must be fully cured and entirely dry.

Technical Data Sheet
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Mixture

In two-component packages, the mixture is calibrated according to the specified mixing ratio (Component A: resin, Component B: hardener). The ready-to-use material is achieved by thoroughly mechanically mixing these two components. The entire quantity of component B is added to component A simultaneously, and the mixture should be stirred at a low speed (300-400 rpm) using an appropriate attachment until it reaches a homogeneous consistency. To guarantee uniform distribution of the hardener, mixing should occur near the edges of the container and from the bottom of the package throughout.

Application Details

CLASS EPX-160 can be thinned by gradually incorporating clean water at a rate of 5% to 20%, contingent upon ambient conditions and the application surface. It may be applied using a roller, brush, or airless spray method. The prepared mixture should be uniformly applied to the pre-prepared surface utilizing the selected method. CLASS EPX-160 is applied in one or two coats until the surface is saturated and a layer is established. To ensure complete coverage, the surface must be thoroughly brushed with a roller. The subsequent coat should be applied before the preceding one begins to dry. The number of coats varies based on the absorbency of the surface.

- The material must be safeguarded against water, rain, external influences, and mechanical stress until it has fully cured.
- Epoxy and polyurethane topcoats or insulation materials should be applied 24 hours following the application of the primer.
- It is important to acknowledge that waiting times may be reduced during warm weather and extended in cold weather.

Consumption

P - Water-Based Epoxy Primer - Concrete - 0.300 g
P - Water-Based Epoxy Primer - Metal - 0.150 g
P - Water-Based Epoxy Primer - Wood, Eternit, etc. - 0.160 g

PACKAGING

20 kg (A: 17 + B: 3) arranged in tin buckets.

Shelf life

It must be safeguarded against unfavorable weather conditions. It should be kept in a dry, cool, and sealed environment (between +10 °C and +25 °C). Once opened and mixed, the product should be consumed promptly. In its unopened packaging, it has a shelf life of 12 months when stored in a dry location at a minimum temperature of +5 °C.

Attention

- In applications conducted in enclosed spaces, the environment must be adequately ventilated.
- In cold weather, packaging should be maintained at a minimum temperature of +15°C for no less than 24 hours before application.
- Following application, the surface must be safeguarded against water, rain, dew, snow, hail, frost, and comparable weather conditions until it is entirely dry.
- Avoid using open flames and refrain from smoking during application.
- Don appropriate gloves, goggles, and protective attire.
- In the event of skin contact, cleanse thoroughly with soap and ample water.
- Do not ingest, do not utilize empty packaging for food storage, and do not dispose of in fire.
- For professional use exclusively. Keep out of children's reach.

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