

Electrostatic Conductive Water Based Epoxy Coating

Description

EpiMax 333WB-EC Electrostatic Conductive Water Based Epoxy Coating is available to provide static control properties in a wide variety of environments where the harmful effects of electrostatic discharge must be avoided.

This system combines water-based epoxy application features, exceptional mechanical performance and the "Perfect Balance" in static dissipation for a great variety of floor protection applications.

EpiMax 333WB-EC takes advantage of innovative formulating technologies to produce unique conductive flooring systems where electrical conductivity is on the surface and is not thickness dependent. It is considered a true Generation 3 static control coating.

Generation 3 coating consists of an electrically conductive primer and EpiMax 333WB-EC as a high gloss coating with electrostatic discharge properties.

A Skydrol resistant, aviation version is also available called EpiMax 333WB-SR Type 2.



Advantages

- True electrostatic control
- Water based formulation - food safe
- Environmentally friendly
- Fast installation
- Good durability
- Good resistance to marking
- Fully cross-linking system - excellent abrasion resistance
- Meets GBCA Low VOC standard
- Suitable for application on floors and walls
- Standard colour range includes AS 2700 colours

Typical applications

- Data centres
- Medical facilities
- Defence facilities
- Electronic assembly areas
- Laboratory environments
- Explosive storage
- Clean rooms
- Pharma industry
- Specialised office areas

Typical properties

- Coverage/litre - theoretical: 6 - 8 m²/coat
- Work time: 30 minutes at 25°C
- Mix ratio: 3 volumes Part A : 1 volume Part B
- Full cure: 7 days at 25°C
- Electrical resistance, point to point: < 1 x 10⁶ ohms
- Static decay: 5,000 - 0V in <0.1 seconds
- Recoating window: 6 - 12 hours at 25°C (depends on air flow)
- Tack-free time: 6 hours at 25°C (depends on air flow)
- Finish: Satin
- VOC content: <1 gm per litre
- Electrical resistance, point to ground: < 1 x 10⁶ ohms
- HBM Body Voltage, with ESD footwear < 35Mohms, <100V

Estimating data

16 ltr EpiMax 333WB-EC Electrostatic Conductive Water Based Epoxy Coating = 55 - 65 m² (typical 2 coats).

General surface preparation

Concrete should be at least 28 days old. Ensure sub-floor is clean, dry and free of additives, curing agents, oils, etc. Prepare the sub-floor by professional diamond grinding to expose firmly adhered aggregate.

Surface profile should exceed CSP 2. Scrub with clean water and then vacuum. Allow surfaces to dry. Always confirm preparation adequacy.

Priming

Select a slow speed (400 rpm) mechanical mixer and ensure thorough mixing. Add EpiMax EC Primer Part B to EpiMax EC Primer Part A. Mix for a minimum of 4 minutes. To adjust the viscosity add up to 5% potable Thinner X, then mix for an additional 2 minutes. Apply in an even coat over the prepared surface at 4 - 5 m² per litre.

General application comments

Pre-condition the material in an environment with a temperature between 18°C - 25°C. Pre-conditioning times will vary depending on the product starting temperature.

Minimum and maximum air and substrate temperatures for application >10°C to <30°C.

The maximum air humidity during application 85% R.H.

Confirm the Part A batch numbers are the same to ensure colour consistency.

The hardening mechanism is two stage - firstly the contained water evaporates and then the chemical hardening takes place. Consistent air flow will assist the water evaporation stage. Work time/pot life cannot be determined visually, so always keep track of actual time.

Review the sub-floor area in advance so that a fixed volume of mixed material can be applied over a fixed area to ensure correct application rate.

Select a slow speed (400 rpm) mechanical mixer and ensure thorough mixing. Add EpiMax 333WB-EC Part B to EpiMax 333WB-EC Part A.

Mix for a minimum of 3 minutes. To adjust the viscosity of the first coat, add up to 5% potable water. Mix for an additional 2 minutes after the addition of any potable water. Note that this will reduce the final film build. Apply in an even coat over the prepared surface at 6 - 8 m² per litre. When dry to touch, apply a second coat at 7 - 8 m² per litre.

EpiMax 333WB-EC can be applied by 10 - 12 mm nap roller roller.

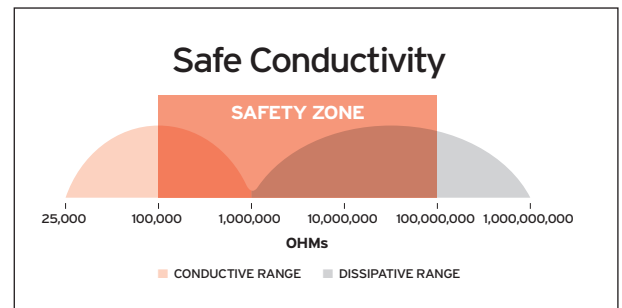
General cleaning

Housekeeping is critical in keeping floor surfaces safe. Vacuum, wash, scrub or sweep daily in accordance with recommendations. Mechanical sweepers and scrubbers can provide excellent results. Verify that the frequency and effectiveness of the cleaning process is appropriate for site conditions. Remove spills quickly, wash and allow the floor to dry completely.

Packaging

EpiMax 333WB-EC is available in 16 litre packs (includes Part A and Part B).

It is pre-packed in correct proportions for use.



Safety precautions

Read **Safety Data Sheet** before commencing any application. Keep away from children. Avoid contact with skin and avoid breathing vapour. Always provide adequate personal protection (gloves & goggles etc) during use. Always provide adequate ventilation, especially in confined spaces. If poisoning occurs, call Doctor or Poisons Information Centre. Phone 13 11 26. If swallowed, DO NOT induce vomiting. Give plenty of water or milk. If skin contact occurs, quickly remove contaminated clothing and wash affected areas thoroughly with soap and water.

TDG Code: Part A - Not Classified, Part B - Not Classified

This Technical Data Sheet is provided for general information and instruction only. The properties and characteristics set out herein represent typical testing results using industry test methods under laboratory conditions. Results of actual product characteristics may vary slightly. Site-specific and project-specific conditions may affect product performance, including without limitation: surfaces, environmental conditions, contact conditions, storage conditions, storage timeframes, weather, and climatic or seasonal conditions. Not all product parameters are batch tested as part of the manufacturing quality control process, and performance may vary between batches.

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