Durex® Dur-A-Static SL 535 Conductive

2mm Self-Leveling Epoxy Based Electrostatic Conductive Coating for Dur-A-Static ESD Systems

Description

Durex® Dur-A-Static SL 535 a 2mm thick self-leveling epoxy based electrostatic conductive topcoat for Durex® Dur-A-Static electrostatic discharge (ESD) flooring systems. Durex® Dur-A-Static SL 535 is designed for use as a high build, durable, wear resistant topcoat in a static discharge system that provides electric conductive resistance to protect sensitive electronic equipment and machinery. The system performs to a range of 2.5 x 10^4 to 1.0 x 10^6 ohms, which is sustained throughout the 2mm Durex® Dur-A-Static SL 535 coating. The system consists Priming/leveling layer which is then combined with conductive grounded copper wire, Durex® Dur-A-Static ESD 100 intermediate conductive coat and Durex® Dur-A-Static SL 535.

Uses

Durex® Dur-A-Static SL 535 is the 2mm self-leveling top coat for Durex® Dur-A-Static SL Conductive Electrostatic Discharge (ESD) flooring system to provide electrostatic control properties to concrete and other construction substrates. The system is recommended for floors in environments where static electricity and stray currents produced by friction could pose risks of explosions or interference with the working of precision electronic instruments.

Ideal For

- High Traffic Areas
- Data Processing Centers, Computer and IT related rooms and processing facilities
- Dry powder filling and handling facilities
- Solvent handling, flammable gas handling & explosion hazard facilities
- Aircraft & Aerospace facilities and hangars
- Pharmaceutical plants
- Hospitals and health care facilities / laboratories
- Electronic based manufacturing facilities & production areas with electrically sensitive equipment
- Computer, conductor & circuit board production areas

Features

- Abrasion Resistant, Self-Leveling, High-Build 2mm Coating
- Ohm reading consistent throughout 2mm of coating
- Protects sensitive electronic parts from the effects of static charges by dissipating them away.
- Prevents explosions due to sparks of accumulated static charges by effectively conducting it away.
- Avoid errors in readings recorded by sensitive electronic instruments monitoring vital parameters.
- Enables easy maintenance of clean room environment through its seamless, pore free smooth surface.
- Improves the working environment by its pleasant aesthetics.
- Conductive - Performs to 2.5 x 10^4 to 1.0 x 10^6 ohms as per EOS/ESD
- Low BVG Body Voltage Generation
- Maintain electrical resistance throughout coating thickness

TECHNICAL DATA

PHYSICAL PROPERTIES

Colour	Please see Durex® ESD Colour Selection Guide for available colour options.
Resin Type	Epoxy Resin
Mix Ratio	Factory controlled Unit.
Coverage	3.6 Kg per SMT @ 2mm
Cure Time @ 23°C	To touch: 6 hours *Drying times will vary due to temperature and humidity.* Foot traffic: 12-24 hours Total cure: 5 days
Pot Life @ 23°C	30 minutes
Recommended Film Thickness	80 mils (2mm)

	TEST METHOD	RESULTS
Percent Solids	ASTM D 7232-06	100%
V.O.C.	ASTM D 3960	0 g/L
Specific Gravity (Mixed)	ASTM D 333	1.8 ± 0.05 g/L
Viscosity (Brookfield, 23°C)	ASTM D 2196	1100 cps
Abrasion Resistance	ASTM 5178-91 CS-17 wheel	25 mg loss, 1000 g load, 1000 cycles
Tensile Strength	ASTM D 638-86	2,100 psi
Elongation	ASTM D638-86	8%
Adhesion to Concrete	ASTM D-4541	>350 Psi – Concrete Fails
Shore A Hardness	ASTM D 2240	85

Packaging

Durex® Dur-A-Static SL 535 is packaged in 30 kg combined kits. Durex® Dur-A-Static SL 535 is available in restricted standard colours.

Storage Conditions

Store Durex® Dur-A-Static SL 535 in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. KEEP FROM FREEZING.

Surface Preparation

Surfaces to be coated must be free of dirt, oils, and any other contaminants that may prevent proper adhesion. Contact Durabond Technical Services for surface preparation methods of surfaces contaminated by oil or other materials.

Durex® Durex® Dur-A-Static SL 535 is to be applied overtop of Durex® Dur-A-Static ESD 100, an Intermediate Conductive Coat that is vital to the Durex® Dur-A-Static ESD system. Durex® Dur-A-Static SL 535 must be applied overtop of Durex® Dur-A-Static ESD 100 within 8-24 hours of application. Please contact your Durabond representative for further details. Durex® Dur-A-Static ESD 100 must be installed overtop of an appropriate primer had electrically grounded with copper wire installed overtop. Recommended primers are Durex® Epotel Multi-Prime and Durex® Epotel GSC. Please contact Durabond for appropriate copper tape.

Mixing Instructions

Mixing shall be carried out in a clean, rust-free container, and mixed by a power-drill at 400-500 rpm maximum. See the respective product data sheets for specific mixing ratios and instructions.

Application

Concrete Primer: Refer to Durex® Epotel Multi-Prime system data sheet

Electrical Grounding: Refer to Durex® Dur-A-Static 100 ESD system data sheet for installation and layout instructions.

Isolation Layer Primer: Refer to Durex® Dur-A-Static 100 ESD system data sheet.

Self-Leveling ESD Body Coat (Durex® Dur-A-Static SL 535):

Apply Durex® Dur-A-Static SL 535 over cured Durex® Dur-A-Static ESD 100 within an 8-24-hour window after application. Substrate and ambient temperatures must be above 10 degrees C. For best results, apply by notched squeegee to a thickness of 2mm thick followed by back-rolling with a spike roller to level the coating.

Avoid stop and start lines within any one section. Ensure that the final stroke of the roller is always in the same direction and with the same pressure applied to the roller. Maintain a wet edge to prevent overlap marks and gloss differences. Divide the floor into sections that can be applied and completed without interruption. When ending a section, tape it off to form a clean, straight edge for an adjacent section.

Clean Up

Wash all tools and equipment immediately with mineral Xylene or solvent-based cleaner. Allow any unused product to harden in container and discard according to local regulations.

Limitations

Durex® Dur-A-Static ESD Flooring System shall not be installed under the following conditions:

- Concrete Slabs with a moisture content greater than 4% be weight
- High Compression (super-plasticized) concrete slabs
- Application Temperature is less than 3 degrees Celsius above dew point
- On-Grade Slabs & Split Concrete Slabs with existing Membrane Coating
- Minimum Ambient and Substrate Temperatures: Below 10 degrees Celsius.

Health and Safety

Use rubber gloves and protective clothing at all times when handling the product. Avoid contact with eyes and prolonged contact with skin. Keep away from children. Read published Safety Data Sheet prior to handling, use and for additional information.

Warranty

Durabond warrants this product is free of manufacturing defects, and will replace at no charge, provided it has been applied within 12 months of purchase, it has been installed for uses suitable for this product and in accordance with the manufacturer's instructions.

Technical Services

Technical support is available upon request at *info@durabond.com*. Data sheets are subject to change without notice. Please visit our website at *www.durabond.com* for the most current information, or call toll free at 1-877-DURABOND (387-2266).