FLOORSHIELD® ELECTROSHIELD™ ELD-5406

Electrostatic Dissipating Self Leveling Epoxy Floor Coating

PRODUCT DESCRIPTION:

ELECTROSHIELD™ ELD5406 is a high performance 3 component, Epoxy floor coating designed to impart electrostatic control properties to a varieties of substrates along with ESD footwear including nonconductive and conductive floors. It provides a hard wearing floor finish for use in most industrial and commercial premises where a high quality floor is required.

BENEFITS:

- Excellent adhesion to concrete and other surfaces,
- Consistent resistance measurements when tested in accordance with slandered methods
- High mechanical strength, both tensile and compressive,
- Resistance to oils, fuel, and many chemicals.
- Abrasion resistance.

US ES:

APPLICATION

- Electronics Assembly and Production floors and slabs
- Warehouses
- Military, automobile and Aerospace
- Clean Rooms
- Computer Rooms
- Quality Control Labs

LOCATION

- Interior

TECHNICAL DATA:

PROPERTIES	VALUES ElectroSHIELD ELD-5406
Coverage	1.70 Kg/m^2/1 mm thick
Thickness	1.5 mm to 2 mm
Touch Dry Time	4hours
Compressive Strength	60-70 N/mm^2
Shore D Hardness	70-75
Flexural Strength	>30 N/mm^2
Static Dissipation, Surface to Ground Resistance, ANSI/ESD S 20 20 2014	10^6 to 10^9 ohms for 2mm thickness with conductive Primer, ElectroShield ETC 5400
Pot Life	30 Minutes
Min. Working Temperature	25 °C

SYSTEM DETAILS:

PRODUCTS	PURPOSE	THICKNESS (µm)
1. FloorPrime® EP	Stabilization of floor	100-200
2. ElectroShield™ 5401 Tape	Conductive Tape	0.5
3. ElectroShield™ ETC-5400 Primer	Conductive Primer	100
4. ElectroShield™ ELD-5406	Self-Leveling Top Coat	2000

APPLICATION DATA:

PREPARATION:

1. Ensure that floors are structurally sound and fully cured a minimum of 28 days.
2. Repair concrete and install joint sealants and fillers as necessary. Use patching materials as appropriate.
3. Mechanical surface profiling is the preferred floor preparation method for both new and existing floors. It is the only acceptable preparation method where warranties are issued. Acid etching is not recommended. Mechanically profile the floor to medium-grit sandpaper texture. Remove curing and parting compounds and other surface hardeners and floor coatings in accordance with the manufacturer's instructions. Grinding should create concrete profile of CSP3 or more.
4. Measure the moisture vapor transmission rate (MVT) after shotblasting by conducting a calcium chloride test in accordance with ASTM F 1869.
5. If the test shows that a rate of 3 lb/1000 ft^2 in 24 hours is exceeded, then **VAPOURGARD** Concrete Floor Primer is needed prior to the use of **Floorkrete** flooring installation products such as adhesives or underlayments.
6. One coat of **VAPOURGARD** Concrete Floor Primer will reduce MVT by half. Multiple coats of **VAPOURGARD** Concrete Floor Primer may be required. Once the MVT is under 3 lbs, the flooring installation products can be applied.

PRIMER APPLICATION:

Primer for stabilization of concrete surface

After proper concrete profile, surface should be primed with **FloorPrime** range of priming products.

MIXING:

1. This product has a limited pot life; complete all preparations before starting the mixing sequence.
2. It is very important to properly mix the components of this product together in the exact manner and sequence specified in the following instructions in order to form a stable emulsion and ensure proper film formation. Before combining Parts

3. A and B, premix each separately. When mixing, wear protective gloves and goggles to avoid injury from splashes.
4. To mix **ELECTROSHIELD™ ELD5406** Concrete Floor coating, pour the entire contents of Part B (Hardener) from the pail and insert into Part A in the bottom of the pail. Scrape out remaining material in the liner, being careful not to spill any. The Part A (Resin) container is oversized to allow for easy mixing. For Part C, it should be added after mixing of Part A and B together.
5. DO NOT MIX BY HAND. Mix with a Jiffy mixer blade and an electric drill at very low speed for 3 – 4 minutes. Scrape sides of the container several times to ensure complete mixing. Keep the mixer blades immersed in the material to avoid introducing air bubbles.
6. Use primer within its pot life.

PLACING:

1. Floor and atmospheric temperature must be between 16 – 27°C during the application of **ELECTROSHIELD™ ELD5406** Concrete Floor coating.
2. Apply the mixed material from a roller tray using a high-quality 3/8" (10 mm) woven roller at a rate of 8.6 – 9.8 m2/L at wet 0.1 mm. For three component product use notch trowel for application.
3. **ELECTROSHIELD™ ELD5406** Concrete Floor Coating can be applied when the floor is surface dry. No puddles or surface water should be present
4. Install as evenly as possible, and avoid leaving excessive build-up in rougher areas. Complete coverage is required to ensure there are no pinholes or voids in the finish.

PACKING:

Pack Size: 10/20 kg composite pack

CLEANING:

All tools should be cleaned with suitable solvent or hot water immediately after use.

STORAGE:

Store in dry, frost-free conditions at moderate temperatures not greater than 25 °C.

IMPORTANT POINTS:

1. Multichem does not recommend that grit be broadcast or otherwise introduced into **ELECTROSHIELD™ ELD5406** Coating. If enhanced slip resistance is desired, Floorkrete other products such as FloorScreed range may be specified to serve this function.
2. This product is designed to provide complete hide and color coverage.

3. Floors should be sloped to drain to prevent standing water or chemicals. As with any surface, all spills should be removed as soon as possible to prevent a slipping hazard.
4. Do not thin with solvents unless advised to do so by Multichem.
5. Prepare substrate according to "Surface Preparation" portion of this document.
6. Do not apply to slabs on grade unless a heavy unruptured vapor barrier has been installed under the slab.
7. Always use protective clothing, gloves and goggles during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.
8. For industrial/commercial use. Products should be installed by trained personnel only.

SAFETY DATA:

- IRRITATING TO EYES, RESPIRATORY SYSTEMS AND SKIN.
- RISK OF SERIOUS DAMAGE TO EYES
- KEEP OUT OF REACH OF CHILDREN.
- IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF CLEAN WATER AND SEEK MEDICAL ADVICE.
- AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF CLEAN WATER.
- WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE /FACE PROTECTION.

WARRANTY

Multichem warrants **ELECTROSHIELD™ ELD5406** to be free from manufacturing defects as defined in this warranty. Manufacturing defects are considered to be those defects that occur due to the quality of the ingredients or from the manufacturing process itself. This warranty does not include labor costs and other costs or expenses associated with the removal or installation of **ELECTROSHIELD™ ELD5406**.

Because the Multichem does not perform the actual installation, it cannot be held responsible for the results of the application. Multichem specifically disclaims problems that occur due to weather conditions, structural movement, structural design flaws and application techniques.

This warranty is in lieu of all other warranties expressed or implied including the warranty of merchantability and fitness of purpose and of all other obligations or liabilities on Multichem part. Multichem neither assumes nor authorizes any person to assume for Multichem any liability in connection with the sale and installation of **ELECTROSHIELD™ ELD5406**.

Because of constant improvement of manufacturing techniques and formulations, Company reserves rights to change this datasheet and its contents without prior notice.