

PRODUCT DESCRIPTION:

Not all coating with “high dielectric strength” are created equal. Safety of your team and plant is important to us.

ELECTROGARD® ELI is a high performance solvent free two component Electric Insulation epoxy floor coating. It provides a hard-wearing floor finish for use in most industrial and commercial premises where a high quality floor with 100% performance for Dielectric strength and dust free surface is required. ELECTROGARD® ELI is well suited up to 200 °C.

BENEFITS:

-) High dielectric strength and insulation resistant,
-) High bond strength,
-) Less than 0.1% porosity with dielectric strength of more than 3000 Volt/25 micron,
-) Seamless and hygienic surface,
-) Abrasion resistance,
-) Acid (98% sulfuric Acid), Alkali and solvent resistant,
-) Easy to apply being composite pack,
-) Oil and dust free.

USES:

APPLICATION

-) Concrete floors and slabs, metal plates in Electrical, Electronics and Communication industries
-) Concrete, metal and non-metal surfaces for dielectric insulation such as control panel rooms, AC rooms, transformer rooms, LT/HT laboratories
-) Concrete flooring at warehouses, chemical and petrochemical plants, workshops, clean rooms, food processing areas which are subjected to electric hazards and chemical spillages,
-) Pulp and paper mills,
-) Metal-treatment plants,
-) Battery storage areas,
-) Production areas,
-) Food-processing plants,
-) Waste areas.

LOCATION

-) Interior

SUBSTRATE

-) Horizontal & vertical surfaces



TECHNICAL DATA:

Properties	Values				
Thickness	Electrogard ELI-500	Electrogard ELI-1100	Electrogard ELI-2200	Electrogard ELI-3300	Electrogard ELI-5300
Breakdown Voltage, KV	5	11	22	33	53
Coverage, m²/kg/thickness	6-4	2.0-1.5	1.25-1.10	0.8-0.68	0.45-0.41
Thickness Required, Micron	100-150	300-400	700-800	1100-1300	1900-2100
Touch Dry Time	2-5 Hours				
Shore D Hardness	80-85				
Compressive Strength	>60 N/mm ²				
Flexural Strength	40 N/mm ²				
Bond Strength	>1.5 MPa				
Pot Life	30 Minutes				
Min. Working Temperature	25 °C				
Colour Available	Light Grey, Light Blue, Green, Signal Yellow, Dark Red,				

PRODUCTS FOR SPECIFIC REQUIREMENT:

1. FLOORPRIME® EP: Epoxy based primer for concrete
2. FLOORSCREED® EP: Epoxy based screed for concrete floor
3. ELECTROSCREED: Epoxy based dielectric insulation screed
4. FLOORSCREED® EP(L): General purpose self-leveling epoxy coating

APPLICATION DATA:

PREPARATION:

All Surfaces

Remove all dirt, grease, oil, salt and chemical contaminants by washing the surface with Pure Strength Cleaner/Degreaser MultiKleen, commercial detergent or other suitable cleaner. Mold and mildew areas must be cleaned with a chlorinated cleaner or bleach solution. Rinse thoroughly with fresh water and allow to fully dry. All surfaces must be dry at time of application.

Concrete

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 such as FloorTop® EP 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, to get concrete profile to CSP4 or more. Remove curing and parting compounds and other surface hardeners and floor coatings in accordance with the manufacturer's instructions.
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 1.5 Kg /1000 ft² 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 1.5 Kg, the flooring installation products can be applied.

Metal

For immersion service, abrasive blasting to a minimum Near White Grade (SSPC-SP-10, NACE 2) with a 50-75µ surface profile is recommended for optimal performance. All weld spatter must be removed along weld seams, rough welds should be ground smooth, and all sharp edges should be ground to a smooth radius.

For non-immersion service, abrasive blasting to a minimum Commercial Grade (SSPC-SP-6, NACE 3) with a 50-75µ surface profile is recommended for optimal performance. Abrasive blast cleaned steel requires two coats.

PREVIOUSLY COATED: Previously coated surfaces must be sound and in good condition. Smooth, hard, or glossy finishes should be scarified by sanding to create a surface profile. The FloorShield® Electrogard® ELI is compatible with most coatings, but a test patch is suggested. **WARNING!** If you scrape, sand or remove old paint, you may release lead dust.

MIXING:

1. FloorShield® Electrogard® ELI 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 FloorShield® Electrogard® ELI 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.
5. DO NOT MIX BY HAND. Mix with a Jiffy mixer blade and an electric drill at extremely 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 FloorShield® Electrogard® ELI 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 mentioned in technical details for desired thickness.
3. FloorShield® Electrogard® ELI 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: 1 Kg, 5 Kg and 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.

1. 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.
2. Do not thin with solvents unless advised to do so by Multichem.
3. Prepare substrate according to "Surface Preparation" portion of this document.
4. Do not apply to slabs on grade unless a heavy unruptured vapor barrier has been installed under the slab.



5. 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.
6. 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 FloorShield® Electrogard® ELI 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 FloorShield® Electrogard® ELI.

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 FloorShield® Electrogard® ELI.

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

