DATASHEET

ELECTROGARD® SLI

1-Part Dielectric Insulation Self Smoothing Surface Coating

FLOORKRETE®: FLOORING PRODUCTS

PRODUCT DESCRIPTION:

Not all coating with "high dielectric strength" are created equal.

ELECTROGARD® SLI is a high-performance electric insulation and single component surface coating. It provides a hard-wearing finish for use in most industrial and commercial areas where a high quality performance is required. Being UV resistance, product is well suited for exterior application.

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,
- Easy to apply being single component.

USES:

APPLICATION

- Concrete floors and slabs, metal plates, metal structures (Towers, electric poles & cross arms, current carrying conductors, etc.), bus bar, ceramic insulators 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/exterior

SUBSTRATE

- Horizontal & vertical surfaces

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TECHNICAL DATA:

Properties	Values	
Products ---->	Electrogard® SLI-5	Electrogard® SLI-11
Breakdown Voltage, KV	5	11
Thickness, microns*	100-150	250-350
Dielectric Strength, KV/mm	>50	
Adhesion, ASTM D3359	No peeling	
Dissipation Factor, ASTM D150-18	<0.08	
Volume Resistivity in air, IS10026, part 2	Satisfies	
Dissipation factor & Permittivity, IS10026, part 2	Satisfies	
Resistance to tracking, IS10026 part 2	Satisfies	
Flexibility, ASTM D522	Satisfies	
Chemical Resistance, ASTM D543	Satisfies	
Resistant to Humidity for 1000 hours, ASTM D2247	Satisfies	
Temperature Resistance, °C	≥90	
Salt Spray resistance, 1000 hours, ASTM B117	Passes	
Accelerated weathering, QUV	No Chalking and no cracking	
Fire Resistance, UL94	V-0	
Touch Dry Time, Minutes	15	25
Tukon Hardness, Knoop No.	>8	
Coverage	3.00 m^2/kg for 100 micron thickness	1.50 m^2/kg for 250 micron thickness
Min. Working Temperature	25 °C	
Colour Available	Light Grey, Steel Grey, Light Blue, Green, Signal Yellow, Pastel Green, Sky Blue, Dark Red,	

*The breakdown voltage is mentioned for the thickness provided. Take into calculation of additional thickness of film which may wear off (due to maintenance/ abrasion) over the period of time, for getting consistent breakdown voltage.

PRODUCTS FOR SPECIFIC REQUIREMENT:

1. ELECTROGARD® ELI Series: Epoxy based electric insulation coatings for 22 KV and above

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 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 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 wield 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.

PLACING:

1. Floor and atmospheric temperature must be between 16 – 27°C during the application of ElectroGard® SLI coatings.
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.
3. ElectroGard® SLI Concrete Floor Coating can be applied when the surface is 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: 5 Kg, 10 Kg and 20 Kg pack

CLEANING:

All tools should be cleaned with suitable solvent 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 Electrogard® SLI 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 Electrogard® SLI.

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 Electrogard® SLI.

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