

BONDGUARD-EI

Single Component High Voltage Insulation Coating Based on Modified Co-polymer Chemistry



ELECTRICAL POLES



**ELECTRIC HAZARD
EQUIPMENT**



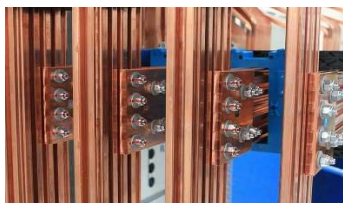
STREET LIGHT POLES



TRANSMISSION POLES



**CURRENT CARRYING
EQUIPMENTS**



BUSBARS



CONTROL PANELS



PRODUCT DESCRIPTION

Bondguard-EI is a composite electric insulation coating designed to impart high electric strength for various electrical applications. Bondguard-EI is highly hydrophobic in nature and is having excellent water repellant properties. Bondguard-EI film helps to avert the leakage currents, resulting into reduction in contamination flashovers.

ADVANTAGES

- High-61KV per mm
- Excellent resistance to UV radiation
- Temperature resistance: up to 150°C
- Resistance to Fire
- Excellent resistance to transformer oil

- Tough and Scratch resistant
- Excellent corrosion resistance
- Quick Drying at Room Temperature

USES

Considering the electrical resistance and other performance properties of Bondguard-EI is recommended as electric insulation coating for following areas/applications- Busbars, Electric poles/towers, Control panel, Di-electric flooring in replacement of rubber mat, Feeder Pillar, current carrying conductors and live parts to avoid electrical mishaps due to leakage current and tracking.

TECHNICAL DATA

PHYSICAL PROPERTIES	RESULTS
Dielectric Strength	63.3 KV/mm (ASTM D 149-20)
Breakdown Voltage	10.3 KV (IS 2584:1963)
Compressive strength	45 – 50 N/mm ² (ISO 604)
Flexural strength	43 – 39 N/mm ² (ISO 178)
Salt Spray Resistance	1400 Hours (ASTM B117)
Tensile Strength	20 – 25 N/mm ² (ISO 527)
Impact Strength	9 – 12 KJ/m ² (ISO 179)
Bond Strength	35 – 38 KJ/m ² (ASTM D 4541)
Abrasion Resistance	0.2 - 0.1 gm. Max weight loss (ASTM D 4060)
Shelf Life	12 Months

STORAGE

The product must be stored in accordance with national regulations. Storage conditions are to keep the containers in a dry, cool, well-ventilated space and away from source of heat and ignition. Containers must be kept tightly closed.

SURFACE PREPARATION

Temperature of the substrate - Minimum 3°C above the dew point of the air temperature

Relative humidity - Maximum 80 % measured in the vicinity of the substrate.

Ventilation -Good ventilation is required in confined areas

Do not use heated air until the solvents (Thinner) have evaporated (flashed off) from the paint film to avoid surface drying and solvent entrapment. During application and the initial drying of the coating, the object should not be exposed to high humidity as this can result in loss of gloss.

APPLICATION METHOD

- **Spray** – Use Air Assisted Spray
- **Brush** – Recommended for coating small areas, care must be taken to achieve the specified dry film thickness.
- **Roller** – May be used for small areas, however when using roller application care must be taken to apply sufficient material in order to achieve the specified dry film thickness.

Application Data:

- **Mixing ratio** - Single Pack System (No Mixing of Two Components)
- **Pot life** - Not Applicable (Can be used for six months after opening the Container)

FILM THICKNESS AND BREAKDOWN VOLTAGE

ELE. INS. Grade	Breakdown voltage	Min. DFT Required	Spreading Rate (Approximate)
BONDGUARD-EI 5	5 KV	100-200 Microns	22 sq. ft./ltr
BONDGUARD-EI 11	11 KV	300-500 Microns	15 sq. ft./ltr
BONDGUARD-EI 22	22 KV	600-800 Microns	12 sq. ft./ltr
BONDGUARD-EI 33	33 KV	800-1000 Microns	10 sq. ft./ltr

PACKAGING

20 liters Packing.

PRECAUTIONS

Take care to avoid skin or eye contact and breathing vapors. In the event of the skin contact immediately wash thoroughly. In the event of eye contact, wash continuously for 15 minutes in water and seek medical advice. Wear protective clothing, gloves, and safety glasses while using this product. If inhalation occurs, move to fresh air and seek medical advice in case of difficulty in breathing. Keep material away from heat, flames, and sources of ignition.

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