Ddev Plastiks Industries Limited

An ISO 9001:2015 company

**TECHNICAL DATA**

**Crosslinkable Semi Conductive Compound For CCV : KI – XLC – 09S**

## CROSSLINKABLE SEMICONDUCTIVE STRIPABLE INSULATION SHIELDING COMPOUND FOR POWER CABLE

### DESCRIPTION :

KI-XLC-09S is a specially formulated, cross-linkable polyethylene copolymer semiconductive compound for strippable insulation shielding of medium voltage XLPE power cables (Up to 36 KV). It is suitable for both tandem and triple common head extrusion process in steam of dry curing system.

### SPECIFICATIONS :

Cables with strippable insulation, shielding of KI-XLC-09S when made using standard manufacturing and test procedure meet the following cable specifications:

- IEC – 60502
- NEMA – WC – 7
- AEIC – CS – 5 / AEIC – CS5
- IS – 7098 – II

### TYPICAL PROPERTIES :

| Property | Unit | Typical Value | Test Method |
|---|---|---|---|
| Density | gm / $cm^3$ | 1.17 | ASTM-D-792 |
| Tensile Strength | MPa | 14 | ASTM D-638 |
| Variation in Tensile Strength* | % | < 20 | IEC-60811-401 |
| Elongation at break | % | > 250 | ASTM-D-638 |
| Variation in elongation at break* | % | < 40 | IEC-60811-401 |
| Hot elongation @200°C, 20N/$cm^2$ | % | 45 | IEC-60811-507 |
| Shore D Hardness | - | 50 | ASTM-D-2240 |
| Moisture Content | ppm | < 300 | Karl Fischer |
| DC Volume Resistivity @ 25°C | Ohm-cm | < 100 | ASTM-D-991 |
| DC Volume Resistivity @ 90°C | Ohm-cm | < 500 | ASTM-D-991 |
| Stripping Force | N/cm | 10.0 – 20.00 | IEC 60502-2 |
| Stripping Force | Kgf/12.7 mm | 1.0 – 2.00 | ASTM-D-903 |

* After Heat ageing at 121°C for 168 hours.

* On moulded sheet at 180°C / 20 min.

**PRE DRYING :** Dehumidified hopper drying at 40°C for 1 to 2 hours prior to extrusion may be used to remove moisture, if necessary.

Specific processing conditions depends on type / size of the extruder and cable dimension and output.

**RECOMMENDED PROCESSING CONDITIONS :**

| Position | Temperature (°C) |
|---|---|
| Barrel | 85 - 105 |
| Head | 110 |
| Die | 110 |

The curing temperature should be carefully controlled, and the maximum surface temperature in the CV tube should not exceed 527°F (275°C) for optimum results.

**PACKAGE:**

For Export:
600 kgs. paper carton with Aluminum liner & 40' FCL will take 24 MT.

For Local:
450 kgs. paper carton with Aluminum liner.

**STORAGE** **:** Storage should be in cool and dry place. Boxes should be kept on Wooden or plastic pellets.

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