



# Ddev Plastiks Industries Limited

An ISO 9001:2015 company

**TECHNICAL DATA**

**Crosslinkable Semi Conductive Compound For CCV :**

**KI – XLC – 09-66**

## **CROSSLINKABLE SEMICONDUCTIVE SHIELDING COMPOUND FOR POWER CABLE**

### **DESCRIPTION :**

KI-XLC-09-66 is a specially formulated, cross linkable polyethylene copolymer semiconductive compound for conductor shielding and bonded insulation shielding of medium voltage XLPE power cables up to 66KV. It is suitable for both tandem and triple common head extrusion process in steam of dry curing system.

### **SPECIFICATIONS :**

Cables with conductor and bondable insulation, shielding of KI-XLC-09-66 when made using standard manufacturing and test procedure meet the following cable specifications:

- IEC -60502
- AEIC C S8
- IEC 60840

### **TYPICAL PROPERTIES :**

<b>Property</b>	<b>Unit</b>	<b>Typical Value</b>	<b>Test Method</b>
Density	gm / cm <sup>3</sup>	1.13	ASTM-D-792
Tensile Strength	MPa	16	ASTM D-638
Variation in Tensile Strength*	%	< 20	IEC-60811-401
Elongation at break	%	200	ASTM-D-638
Variation in elongation at break*	%	< 20	IEC-60811-401
Hot elongation @200°C, 20N/cm <sup>2</sup>	%	45	IEC-60811-507
Shore D Hardness	-	55	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
Low Temperature Brittleness	°C	< -50	ASTM D 746

\* After Heat ageing at 135°C for 168 hours.

\* On moulded sheet at 180°C / 20 min.

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**PRE DRYING :** Dehumidified hopper drying at 60°C - 70°C for 1 to 2 hours prior to extrusion may be used to remove moisture. Specific processing conditions depends on type / size of the extruder and cable dimension and output.

**RECOMMENDED PROCESSING CONDITIONS :**

<b>Position</b>	<b>Temperature (°C)</b>
Barrel	95 – 115
Head	110 - 112
Die	115
Screw	70 - 80

**PACKAGE** : 450, 600 & 875 Kgs Corrugated Boxes with PE liners, Other packing to customers Specific requirements are also available

**STORAGE:**

The compound must be stored in the following conditions.

- Closed and unopened bags.
- Ambient temperature generally not exceeding 30°C
- Avoid direct exposure to sunlight and weathering.

The compound can be negatively affected by long storage time. DPIL suggest its use within 12 months from the date of manufacturing.

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*The information given in the document is believed to be reliable and is given in the good faith but without warranty. The user should test the product to ascertain the suitability for the intended use. Product specification or the whole document is subject to change without any prior notice.*

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