

An ISO 9001:2015 company TECHNICAL DATA

Crosslinkable Semi Conductive Compound For CCV:

KI – XLC - 09

## CROSSLINKABLE SEMICONDUCTIVE SHIELDING COMPOUND FOR POWER CABLE

### **DESCRIPTION :**

KI-XLC-09 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 36 KV). It is suitable of 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 when made using standard manufacturing and test procedure meet the following cable specifications:

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

#### **TYPICAL PROPERTIES :**

Property	Unit	Typical Value	<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*	%	< 15	IEC-60811-401
Elongation at break	%	200	ASTM-D-638
Variation in elongation at break*	%	< 15	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	$^{0}C$	< -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 :**

Position	Temperature (°C)	
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** : Storage should be in cool and dry place. Boxes should be kept on Wooden or Plastic Pallets.

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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