An ISO 9001:2015 company **TECHNICAL DATA** 

**Crosslinkable Semi Conductive Compound For CCV:** 

**KI – XLC – 09 ES** 

# CROSSLINKABLE SEMICONDUCTIVE STRIPABLE INSULATION SHIELDING COMPOUND FOR POWER CABLE

#### **DESCRIPTION:**

KI-XLC-09ES 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-09ES 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	<b>Test Method</b>
Density	gm / cm <sup>3</sup>	1.18	ASTM-D-792
Tensile Strength	MPa	14	ASTM D-638
Variation in Tensile Strength*	%	< 10	IEC-60811-401
Elongation at break	%	> 350	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	-	52	ASTM-D-2240
Moisture Content	ppm	< 300	Karl Fischer
DC Volume Resistivity @ 25°C	Ohm-cm	< 50	ASTM-D-991
DC Volume Resistivity @ 90°C	Ohm-cm	< 900	ASTM-D-991
Stripping Force	N/cm	05 – 15	IEC 60502-2
Low Temperature Brittleness	$^{0}\mathrm{C}$	< -50	ASTM D 746

<sup>\*</sup> After Heat ageing at 135°C for 168 hours.

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

**PRE DRYING:** Dehumidified hopper drying at 50°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	70 - 85	
Neck-1	95	
Neck-2	95	

The curing temperature should be carefully controlled, and the maximum surface temperature in the CV tube should not exceed 270°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.

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.

MKT: TDS - XLC/09ES -11/2022