



# Kkalpana Industries (India) Limited

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

**Silane Grafted XLPE Compound : KI – XL – 03 W & KI – XL – 04W**

## DESCRIPTION :

A High Density Cross Linkable Polyethylene Compound where silane is incorporated to PE through grafting; This product is suitable for Winding wire applications.

The above product consists of 2 Components i.e. Grafted Polymer – Grade KI-XL-03 W & Catalyst Master Batch Grade KI-XL-04 W to be premixed prior to use at a ratio of 95:05.

## SPECIFICATIONS :

KI-XL-03 W & XL-04W meets requirements as applicable under following standards, when processed using sound extrusion practice and testing procedure;

- IS 8783 (Part 2)

## TYPICAL PROPERTIES :

### A) XL-03

Property	Unit	Typical Value	Test Method
Density	gm / cm <sup>3</sup>	0.945	ASTM-D-792
Melt Flow Index (190°C, 2.16 Kg)	gms / 10 Min	0.50	IS-10810 (Part-23) / ASTM-D-1238
Contamination (Visual)	No./Kg	< 5	KIIL

### A) XL-03 W/ XL-04 W Combination

Mixed at 130°C at 95:5 ratio for 3 minutes. Compression moulded to a sheet of 1.5 mm thickness. Cured by immersion in water at 95°C for 3 hours. Conditioning for 3 hours.

**MKT: TDS – 03W/04 W– 11/17**

Property	Unit	Typical Value	Test Method
Tensile Strength	MPa	20	IS-10810 (Part-7) / ASTM-D-638
Elongation at break	%	400	IS-10810 (Part-7) / ASTM-D-638
Oven ageing at 135 °C, 168 hours, Variation in Tensile Strength & Elongation at Break	%	± 25	IS-10810 Part-11 / IEC 60811-401
Hot set at 200 °C a) Hot Elongation after 15 min. b) Permanent Set after after 5 min	% %	50 ± 5	IS-10810 Part-30 / IEC 60811-507 -- do --
Volume Resistivity	Ohm-cm	1 X 10 <sup>14</sup>	ASTM-D-257

**PROCESSING GUIDELINES :**

It is recommended to dry the Catalyst Master batch and colour Master batch (if any) at 60°C in air oven in 4-6 cm layers for 8-12 hours. The Grafted Polymer should never be pre-heated.

The Grafted Polymer and Catalyst Master batch should be manually mixed at a ratio 95:5 at room temperature without shearing, just before consumption. Mixing in large quantities should be avoided, since such leftover premix cannot be stored.

It is important that extruder should not be kept idle for more that 10 minutes when filled with XL-03 W / XL-04 W premix. It should be kept running at a low RPM if it is needed for changeover of size etc.

**PACKAGING :**

- Moisture Barrier Multilayer Bags of 25 kg.
- 20' FCL will take palletized 11 MT & 40' will take 24.75 MT.
- Each pallet covered with PE Liner.

**STORAGE :**

The shelf life of the product is 90 days (In case of Export packaging the shelf life is guaranteed for 180 days instead of 90 days) from the date of production, subject to following conditions:

- Storage temperature not generally exceeding 25°C.
- Away from direct sunlight and weathering.
- Closed and unbroken bags.
- Use of compound within 3-4 hours after bags are open.

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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.*

