



# Kkalpana Industries (India) Limited

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

**NATURAL LDPE INSULATION COMPOUND:****KI-IN-0588****DESCRIPTION:**

KI-IN-0588 is a low density Polyethylene based Insulation Compound, specially formulated for Polyethylene insulated cables. An enriched additive package of antioxidant and metal deactivator ensures its thermal stability during processing as well as thermal ageing of insulated cores with copper conductor.

**TYPICAL PROPERTIES:**

Properties	Unit	Typical Value	Test Method
Density	g/cm <sup>3</sup>	0.920	ASTM-D-792
MFI@190°C, 2.16 kg load	g/10 Minutes	0.3	ASTM-D-1238
Oxidation Induction Time	Minutes	45	ASTM-D-3895
Tensile Strength at break	MPa	15	ASTM-D-638
Elongation at break	%	>600	ASTM-D-638
ESCR	Hrs	> 48	ASTM-D-1693
Volume Resistivity@25°C	Ohm-cm	>1x10 <sup>15</sup>	ASTM-D-257
Di-electric Strength	KV/mm	> 25	ASTM-D-149
Di-Electric Constant @25°C	-	2.3	ASTM-D-150
Dissipation Factor @25°C	-	0.0004	ASTM-D-150
Hardness	Shore D	45-46	ASTM-D-2240
Oven ageing at 100°C, 240 hours			
a) Variation in Tensile Strength	%	±20	IS-10810 Part-11/IEC 60811-401 DO
b) Variation in Elongation at Break	%	±20	

All the above properties have been from compression moulded plaque after 24 hours conditioning.

**PREDRYING:**

Dehumidified Air-drying at 70 60811-401°C for 1 to 2 hours prior to extrusion may be used to remove moisture.

**PROCESSING CONDITIONS:**

Barrel Position	Temperature, °C
Barrel	160-180
Head	180-200
Die	200-220

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

**PACKING:**

25 Kg packed woven sack bags containing inner PE liners, other packing to customer's specific requirements are also available.

**STORAGE:**

Storage should be in cool and dry place. Bags should be kept on Wooden or plastic pallets.

*The information given in the document is believed to be reliable and is given in 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.*