



Kkalpana Industries (India) Limited

An ISO 9001:2015 company
TECHNICAL DATA

NATURAL MDPE INSULATION CUM SHEATHING COMPOUND

KI-SC-0477-IN

DESCRIPTION:

KI-SC-0477-IN is high molecular weight, Medium density based Insulation cum Sheathing Compound, specially formulated for Polyethylene insulated cables. An enriched additive package ensures its thermal stability during processing.

KI-SC-0477-IN has excellent stress crack resistance and tensile properties. It contains UV additive as well as metal deactivators to ensure excellent resistance to outdoor weathering as well as thermal ageing of insulation cores.

Cables made with KI-SC-0477-IN can prevent 11kV flashovers in stormy conditions between the Jumpers.

TYPICAL PROPERTIES:

Properties	Unit	Typical Value	Test Method
Density	g/cm ³	0.938	ASTM-D-792
MFI@190°C, 2.16 kg load	g/10 Minutes	0.6	ASTM-D-1238
Oxidation Induction Time	Minutes	> 100	ASTM-D-3895
Tensile Strength at break	MPa	> 25	ASTM-D-638
Elongation at break	%	> 900	ASTM-D-638
ESCR	Hrs	> 100	ASTM-D-1693
Volume Resistivity@25°C	Ohm-cm	>1x10 ¹⁵	ASTM-D-257
Oven ageing at 100°C, 240 hours a) Variation in Tensile Strength b) Variation in Elongation at Break	% %	±20 ±20	IS-10810 Part-11/IEC 60811-401 DO
Volume Resistivity@25°C	Ohm-cm	>1x10 ¹⁵	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

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

PREDRYING:

Dehumidified hoper drying at 70°C for 1 to 2 hours prior to extrusion may be used to remove moisture. Specific processing condition depends on type / size of the extruder and cable dimension and output.

PROCESSING CONDITIONS:

Barrel Position	Temperature, °C
Barrel	180-200
Head	200-220
Die	230

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.

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