Kalpana Industries (India) Limited

An ISO 9001:2015 company

TECHNICAL DATA

Thermoplastic Semi Conductive Compound : KI – TPC - 08

DESCRIPTION :

KI-TPC-08 is thermoplastic semi conductive material specially developed for Conductor and Insulation shielding for Sioplas base medium voltage power cables. The base polymer is copolymer modified polyolefin suitable for 90°C continuous service temperature.

SPECIFICATIONS :

Cables with conductor and bondable insulation, shielding of KI-TPC-08 when made using standard manufacturing and test procedure meet the following cable specifications:

- NEMA – WC – 7
- BS 6622
- IEC 60502
- IEC 60840

TYPICAL PROPERTIES :

Properties	Unit	Typical Value	Test Method
Density	gm / cm^3	1.10	ASTM D-792
Tensile Strength	MPa	11.00	ASTM D-638
Elongation at Break	%	210	ASTM D-638
DC Volume Resistivity @ 25°C	Ohm-cm	< 50	ASTM D-991

RECOMMENDED PROCESSING CONDITIONS :

Suitable for conventional PE wire and cable extrusion line.

The recommended melt extrusion temperature is 140°C – 170°C. The actual processing condition has to be determined by trial on specific extruder as this may vary depending on the extruder / head and toolings used.

PRE DRYING : Semi conductive Compounds absorb moisture, which is undesirable to get smooth surface. It is therefore recommended that the compound KI-TPC-08 should be thoroughly dried (preferably by dehumidified hot air) at 60°C – 65°C for 3 – 4 hours prior to changing in extruder feed.

PACKAGE :25 Kg packed in Moisture Barrier Multilayer liner with PP Woven bag.

STORAGE Shelf life of the product is 12 months from the date of production subject to following condition:

- Storage should be in cool & dry place.Bags should be kept on top of wooden or plastic pallets.