



# Ddev Plastiks Industries Limited

An ISO 9001:2015 company

## TECHNICAL DATA

Thermoplastic Semi Conductive Compound :

KI – TPC - 07

### DESCRIPTION :

KI-TPC-07 is thermoplastic semi conductive material specially developed for Jacketing over HDPE sheath of medium, high & extra high voltage power cables. It can be used as conductor and insulation shield for Sioplas cables. The base polymer is copolymer modified LLDPE suitable for 90°C continuous service temperature.

### TYPICAL PROPERTIES:

Properties	Unit	Typical Value	Test Method
Density	gm / cm <sup>3</sup>	1.11	ASTM D-792
Tensile Strength	MPa	14.00	ASTM D-638
Variation in Tensile Strength*	%	< 15	IEC-60811-401
Elongation at Break	%	300	ASTM D-638
Variation in elongation at break*	%	< 15	IEC-60811-401
DC Volume Resistivity @ 25°C	Ohm-cm	< 50	ADTM D-991
Low Temperature Brittleness	°C	< -25	ASTM D 746

\* After Heat ageing at 100°C for 168 hours.

### 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 tooling used.

**PRE DRYING :** Semi conductive Compounds absorb moisture, which is undesirable to get smooth surface. It is therefore recommended that the compound KI-TPC-07 should be thoroughly dried (preferably by dehumidified hot air) at 60°C – 65°C for 3 – 4 hours prior to charging in extruder feed.

*MKT: TDS – TPC/07 – 09/2022*

**PACKAGE** : 25 Kg packed in Moisture barrier multilayer liner with PP Woven Sack

**STORAGE** : The shelf life of the product is 180 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 boxes.

---

*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 – TPC/07 – 09/2022***