



# Ddev Plastiks Industries 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 (up to 36 KV). 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 <sup>3</sup>	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	< 100	ASTM D-991
DC Volume Resistivity @ 90°C	Ohm-cm	< 500	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.

*MKT: TDS – TPC/08 – 04/2022*

- 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 Sack & 450, 600 Kgs Corrugated Boxes with PE liners
- STORAGE** : Storage should be in cool & dry place. Bags should be kept top of Wooden or plastic pallets.

---

*KIL has compiled the above information from authoritative sources and believe that is the best currently available on this subject. It is offered as a guide it trails you may care to undertake along these lines. It is subjected to revision as additional knowledge and experience are gained. KIL makes no guarantee to results and assume no obligation or liability whatsoever in connection with this information. This publication is not a license to operate under of suggest infringement of any existing patents.*

***MKT: TDS – TPC/08 – 04/2022***