



# Kkalpana Industries (India) Limited

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

**Thermoplastic Semi Conductive Strippable Compound :**

**KI – TPC – 08S**

## DESCRIPTION :

KI-TPC-08S is thermoplastic semi conductive (strippable) Compound specially developed for Insulation shielding for Sioplas based medium voltage power cables. The base polymer is copolymer modified polyolefin suitable for strippable semiconducting insulation screen application.

## SPECIFICATIONS :

Cables with strippable-insulation screen of KI-TPC-08S when made using standard manufacturing and test procedure, meet the following cable specifications:

- BS 6622
- IEC 60502

## TYPICAL PROPERTIES :

Properties	Unit	Typical Value	Test Method
Density	gm / cm <sup>3</sup>	1.14	ASTM D-792
Tensile Strength	MPa	10.00	ASTM D-638
Variation in Tensile Strength*	%	< 20	IEC 60811-507
Elongation at Break	%	100	ASTM D-638
Variation in elongation at break*	%	< 20	IEC 60811-507
Moisture Content	ppm	< 300	Karl Fischer
DC Volume Resistivity @ 25°C	Ohm-cm	< 50	ASTM D-991
DC Volume Resistivity @ 90°C	Ohm-cm	< 1000	ASTM D-991
Stripping Force	Kg/12.7 mm	10.0 – 20.00	ASTM-D-903

## RECOMMENDED PROCESSING CONDITIONS :

Suitable for conventional PE wire and cable extrusion line.

The recommended extrusion temperature is 140°C – 175°C (Melt temperature ≈ 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. The screw cooling temperature should be maintained around 60°C.

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

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**PACKAGE :**

For Export:

550 kg paper carton with Aluminum foil liner & 40' FCL will take 22 MT.

25 kg Moisture barrier Multilayer bags pelletized & 40' FCL will take 24.75 MT.

For Local:

25 kg packed in Moisture barrier Multilayer bags with PP woven sack bags.

**STORAGE :**

The shelf life of the product is 12 months from the date of production, subject to following conditions:

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

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*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.*

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