



Ddev Plastiks Industries 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 (up to 36 KV). 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 ³	1.14	ASTM D-792
Tensile Strength	MPa	11.00	ASTM D-638
Variation in Tensile Strength*	%	< 20	IEC 60811-401
Elongation at Break	%	150	ASTM D-638
Variation in elongation at break*	%	< 20	IEC 60811-401
Moisture Content	ppm	< 300	Karl Fischer
DC Volume Resistivity @ 25°C	Ohm-cm	< 300	ASTM D-991
DC Volume Resistivity @ 90°C	Ohm-cm	< 900	ASTM D-991
Stripping Force	N/cm	10.0 – 40.00	IEC 60502-2
Stripping Force	Kgf/12.7 mm	1.0 – 4.00	ASTM-D-903

RECOMMENDED PROCESSING CONDITIONS :

Suitable for conventional PE wire and cable extrusion line.

The recommended extrusion temperature is 150°C – 175°C (Melt temperature \approx 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.

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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.

PACKAGE :

For Export:

600 kg paper carton with Aluminum foil liner & 40' FCL will take 24 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 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.

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