



THERMOPLASTIC SEMI-CONDUCTING SHIELDING COMPOUND

PLEXCON SP-PESC-60 (S)

THERMOPLASTIC SEMI-CONDUCTING INSULATION SHIELDING (STRIPPABLE) COMPOUND FOR MEDIUM VOLTAGE CABLE

Description

SP-PESC-60 (S) is a Semi Conducting Insulation Shielding Compound for Medium Voltage Power Cables. The material is suitable for steam and water curing and gives good strip force over a wide temperature range without tears. Further it is easy to process and has low volume resistivity.

Specification

SP-PESC-60 (S) meets the requirement of:

- ICEA S-66-524/NEMA WC7
- BS 6622
- IEC 60502
- IEC 60840

Typical Properties of Compound

Properties	Test Method	Unit	Value
Melt Flow Index, 190 °C, 21.6 Kg.	ASTM D 1238	g/10 min.	6
Density at 27 °C	ASTM D 1505	g/cm ³	1.15
Tensile Strength (25mm/min)	ASTM D 638	kg/cm ²	60
Elongation (25mm/min)	ASTM D 638	%	400
Change of Tensile Properties After ageing 168 hrs. at 121 °C	ASTM D 638	%	<20
Stripping Force	ASTM D 903	kgf/12.7 mm	2.5
Shore D Hardness	ASTM D 2240	--	40
DC Volume Resistivity - at 23 °C - at 90 °C	ASTM D 257	ohm-cm ohm-cm	<50 <100

Data should not be used for specification work

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Processing

Semiconducting SP-PESC-60 (S) has been formulated to be easily extrudable using conventional polyethylene extrusion lines. For optimum extrusion result with SP-PESC-60 (S) use melt extrusion temperature as under

Zone	1	2	3	4	Flange	Neck	Die	
Temp in C	80°	105°	120°	140°	150°	160°	165°	+/- 10°

Specific processing condition can be determined only by trials on individual equipment.

Semiconducting SP-PESC-60 (S) absorbs moisture, which can result in porosity in the extrudate. It is therefore recommended that the compound be thoroughly dried prior to use, usually 2-4 hours in hopper drier at 60 - 65°C.

Curing

Curing in low temp steam at <70° C in order to prevent potential deformation of the Cable

Shipment

SP-PESC-60 (S) is available in the form of free flowing pellets and supplied in bags of moisture resistant materiel with a net content of 25 Kgs.

This information is to the best of our knowledge, accurate but all recommendations or suggestions are made without guarantee since the conditions of use are beyond our control. The typical values given do not constitute specification for the product but represent typical analytical values.

PLEXCON® is a product of PLEXCHEM TECHNOLOGIES an ISO 9001 accredited company.

