



PLEXCON : THERMOPLASTIC SEMI-CONDUCTING SHIELDING COMPOUND

Grade SP-PESC-11

Description

SP-PESC-11 is a Semi Conducting Compound having excellent heat deformation resistant characteristics and specially designed for use as a thermoplastic conductor shield. Further it is easy to process and has low volume resistivity.

Specification

SP-PESC-11 meets the requirement of:

ICEA S-66-524/NEMA WC7

- BS 6622
- IEC 60502
- IEC 60840

Application

Semiconducting SP-PESC-11 has been designed to meet the conductivity and bondability requirements of both conductor and insulation shield for medium voltage cables.

Cables manufactured with SP-PESC-11 conductor and insulation shields are rated for 90°C continuous service and 130°C overload temperature.

Typical Properties of Compound

Properties	Test Method	Unit	Value
Melt Flow Index, 190 °C, 21.6 Kg.	ASTM D 1238	g/10 min.	22
Density at 27 °C	ASTM D 1505	g/cm ³	1.06
Tensile Strength (25mm/min)	ASTM D 638	kg/cm ²	170
Elongation (25mm/min)	ASTM D 638	%	400
Change of Tensile Properties After ageing 168 hrs. at 121 °C	ASTM D 638	%	<20
Shore D Hardness	ASTM D 2240	--	53
DC Volume Resistivity	ASTM D 257	ohm-cm	<50
- at 23 °C		ohm-cm	<100
- at 90 °C			

Processing

Semiconducting SP-PESC-11 has been formulated to be easily extrudable using conventional polyethylene extrusion lines. For optimum extrusion result with SP-PESC-11 use melt extrusion temperature in the range of 140 - 180°C. Specific processing condition can be determined only by trials on individual equipment.

It is therefore recommended that the compound be thoroughly dried prior to use, usually 2-4 hours in hopper drier at 70 - 75°C

Packing

SP-PSS-20 is available in the form of free flowing pellets and supplied in bags of moisture resistant material with a net content of 25 Kgs.

The information contained herein is to the best of our knowledge accurate but since the circumstances and conditions in which it may be used are beyond our control .We do not accept liability for any loss or damage , however arising, which results directly or indirectly from the use of such information . This document shall form no part of any contract with a customer .

Do you have the safety data sheet for this product ? Please contact you service representative for one or E-mail us at : plexchem@plexchem.com.sg

date of publication: May 2009

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

