



SHAKUN POLYMERS LIMITED



SPL-MD

BLACK MEDIUM DENSITY POLYETHYLENE COMPOUND FOR JACKETING OF POWER AND COMMUNICATION CABLES.

Description

SPL-MD is a Black Medium Density Polyethylene Compound for jacketing of Power and Communication Cables. SPL-MD is characterized by extremely good ESCR and heat deformation properties. SPL – MD contains well-dispersed Carbon Black of fine particle size in order to ensure excellent weathering resistance.

Specification

SPL-MD meets the requirements of the following specifications:

- IS: 7098 (Part III) - 1993
- ASTM D 1248, TYPE II, CLASS C, CATEGORY 5, GRADE E8, E9, J4
- BS 6234: TYPE O3C, TS2
- IEC 60502, TYPE ST7
- IEC 60840, TYPE ST7

Properties

<i>Physical Properties</i>	<i>Test Method</i>	<i>Unit</i>	<i>Typical Value</i>
Melt Index	ASTM D 1238	g/10 min	0.30
Density at 27 °C	ASTM D 1505	g/cm ³	0.947
Tensile Strength	ASTM D 638	MPa	22
Yield Strength	ASTM D 638	MPa	17
Elongation	ASTM D 638	%	700
Hot Deformation Test	IS: 10818 (Part15) 1984 IEC – 811 – 3 – 1	%	< 30
ESCR (10% IGEPAL) Fo	ASTM D 1693	h	> 100
OIT, 200 °C, Cu-Pan	ASTM D 3895	min	> 60
Shore D Hardness	ASTM D 2240	--	58
Carbon Black Content	ASTM D 1603	%	2.5 ± 0.5
Carbon Black Dispersion	BS 2782	rating	3
<i>Electrical Properties</i>			
Dielectric Constant	ASTM D 150	-	2.45
Dissipation Factor	ASTM D 150	-	0.0005
Dielectric Strength	ASTM D 149	kV/mm	20
Volume Resistivity	ASTM D 257	ohm-cm	10 ¹⁶

* Data should not be used for specification work

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Application

SPL-MD is well suited for Jacketing of Power Cables and can resist severe laying conditions even at elevated ambient temperatures. The ESCR and Petroleum Jelly resistance makes it suitable for jacketing of communication cable as well.

Processing Technique

SPL-MD provides excellent surface finish and high output rates over a broad range of conditions. For extrusion of SPL-MD, it is recommended to use a screw giving good homogenisation without excessive shear. Standard PE-Screws have proven satisfactory but screws designed for PVC can also be used with good results by using screw cooling.

Maximum Pre-heating Temperature: 70 - 80° C

Melt Temperature: 210° C - 230° C

Shipment

SPL-MD is available in the form of free flowing granules and supplied in raffia bags 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 or legal liabilities 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.

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