SPJK-L93

Black Low Density Polyethylene Compound

Product Description

SPJK-L93 is a black low density polyethylene compound which contains 2.4 percent of well-dispersed carbon black which gives it very good measure of resistance against weathering. The formulation ensures excellent physical toughness.

Applications

SPJK-L93 is designed for jacketing of power and communication cables.

Specifications

SPJK-L93 meet the requirements of the below standards when processed using sound extrusion and testing procedure
ASTM D1248 Type II, Class C, Category 4
IEC 60502 ST3, ST7
IEC 60840 ST3, ST7

General Features

Good processability, Excellent surface finish, Excellent thermo-oxidative stability, Excellent ESCR
Excellent UV and weathering resistance, Low water permeability

Physical & Mechanical Properties	Standard & Test Method	Unit	Value
Density	IEC 60811-606	gr/cm^3	0.935
Melt Flow Index (MFI) (190 ˚C/2.16 kg)	IEC 60811-511	g/10 min	0.5
Melt Flow Index (MFI) (190 ˚C/5 kg)	IEC 60811-511	g/10 min	1.6
Carbon black Content	ASTM D1603	%	2.4
Carbon Black Dispersion	ISO 18553		2.5
Hardness	ASTM D2240	Shore D	54
Tensile Strength	IEC 60811-501	MPa	27
Tensile Strain		%	700
Ageing (110 °C, 10 days)			
Variation of Tensile Strength	IEC 60811-401	%	=< 20
Variation of Tensile Strain		%	=< 20

Note: The properties in the table are typical and should not be considered as standardized.

Processing Guidelines

The temperature profile for extrusion of SPJK-L93 can vary depending on the extruder and screw configurations, however, the following process conditions can be normally used

Barrel 1	150 - 160 ˚C
Barrel 2	160 - 170 ˚C
Barrel 3	170 - 180 ˚C
Barrel 4	180 - 190 ˚C
Clamp	190 - 200 ˚C
Head	200 - 210 ˚C
Die	200 - 210 ˚C
Screw	70 - 80 ˚C

Preheating/pre-drying is recommended for two to three hours and the temperature should not be over 90 ˚C. Melt temperature during process is recommended to be kept under 200 ˚C.

Storage

Original packages should be kept closed and stored in dry conditions, away from direct sunlight in the temperature range between 10 to 35 ˚C

Packaging

25 kg bags (1250 kg per pallet)