KLJ POLYMERS & CHEMICALS LIMITED

PEROXIDE BASED XLPE COMPOUND

KLJ PX 33

Description:

KLJ PX 33 is based on Low density, Cross Linkable Poly-Ethylene Compound for continue vulcanization process to produce medium and high voltage power cable up to 33 KV.

Specifications:

KLJ PX 33 Compound meets the following specifications, when processed using sound extrusion and testing process.

IEC-60502 / 60840
HD-620-S1
IS-7098 (Part-II)

Properties:

Sr. No.	Parameter	Unit	Test Method	Specification	Typical Value
Physical Properties					
01	Density	gm/cm3	ASTM D 792	-	0.922
02	Tensile Strength (min.)	Mpa	IS 10810 Part-7	12.5	15 - 18
03	Elongation at break (min.)	%	IS 10810 Part-7	200	500
04	Variation in properties after ageing	**@ 135±3 °C for 7 days**			
	A. Tensile Strength	%	IS 10810 Part-11	±25	<20
	B. Elongation at break	%	IS 10810 Part-11	±25	<20
05	Hot Set (max.)	**@ 200°C for 15 minutes under load of 20N/cm^2**			
	On moulded sheet @180°C for 20 mnt	%	IS 18010 Part-30	175	65
06	Permanent Set after cooling (max.)	%	IS 18010 Part-30	15	5
07	Moisture Content (max.)	Ppm	ASTM D-1045	-	200
08	Impurity Diameter				
	A. 0.175 – 0.250	mm		≤ 5	2
	B. >250	mm		0	0
Electrical Properties					
09	DC Volume Resistivity @ 25°C (min.)	Ohm-cm	IS 3396	1 x 10^{14}	1 x 10^{16}
10	Dielectric Constant (max.) @ 25°C		IEC-60250	2.3	2.2
11	Dissipation Factor (max.) @ 25°C		IEC-60250	0.0004	0.0004
12	Dielectric Strength (min.)	KV/mm	IEC-60243	22	25

Processing Guidelines:

During extrusion typical process parameters are recommended as under in CCV line:

Barrel-1 : 95 to 115°C, Head-2 : 115 ± 1°C, Die-3 : 115 ± 1°C, Screw-4 : 90 ± 2°C

Packaging:

- 450/500/600/875 Kg in PE liner and corrugated paper boxes.

Storage:

- Storage shall take place indoors at temp. below 23°C with dry conditions

Safety:

KLJ PX 33 is not classified as dangerous preparation.

The products are supplied in the form of free-flowing granules of approx. 2-3 mm size and can be readily handled with commercially available equipment. Handling and transport of the products may generate some dust and fines, which constitute a potential hazard for dust explosion. All metal parts in the system should, therefore, be properly grounded. Properly designed equipment and good housekeeping will reduce the risk.

Inhalation of any type of dust should be avoided as it may cause irritation of the respiratory system.

The product is intended for industrial use only. MSDS is available on request.

Disclaimer:

- The specifications given are the guidelines only.
- Above compound is suitable to run on different machines; however some adjustments may be required on individual machine.
- All properties are tested as per ASTM/IS/IEC standards.
- Any data may change without prior information**.**
- The customers are advised to check the quality, prior to commercial use. There is no guarantee and/or warrantee what so ever, after processing.