



KLJ POLYMERS & CHEMICALS LIMITED

HDPE COMPOUND

KLJ- HDPE

Description:

KLJ-HDPE UV Black is a High-Density Polyethylene (HDPE) compound developed to be used for sheathing of Fiber Optic Cables (OFC) / PIJF & Power cables. It has been formulated with necessary additives and processing aid to achieve good extrusion. The incorporation of 2.5% of Carbon black gives the UV and light stabilization required for the compound and the cables it is used on.

Specifications:

KLJ-MPDE Compound meets the following specifications.

IEC – 60502 , ST-7 ,IEC -60840 ST7

BS 6234 : Type 03

Physical Properties:

Sr.No	Parameter	Unit	Test Method	Spécification	Observed Value
01	Melt Flow Index. 2.16kg load	Gm/10min	ASTM D-1238	<1.0	<1.0
02	Density	g/cm ³	ASTM D-792	0.945 - 0.952	0.945 – 0.952
03	Tensile Strength (min.)	Mpa	IS 10810 Part-7	15	15
04	Elongation at break (min.)	%	IS 10810 Part-7	600	767
06	Volume Resistivity @ 27°C (min.)	Ohm-cm	IS 3396	1 x 10 ¹⁶	2 x 10 ¹⁶
07	Shrinkage @ 80±3°C/5 hour (max.)	%	IS 7098	4.0% max.	0.50
08	ESCR	-	ASTM D-1693 - 48 HRS	No Failure	No Failure
09	Carbon Content	%		2.5 ±0.5	2.5
10	Dielectric Constant (max)		IEC-60250	2.2 max	2.1
11	Dissipation Factor (max)		IEC-60250	0.0004 max	0.0009
12	Dielectric Strength(min)	V/mil	IEC-60243	500	930
13	Moisture Content	ppm	ASTM E-203	200 PPM	57

Processing Guidelines:

Pre-drying of HDPE. : 100°C
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Typical process parameters are recommended as under:

Zone -1: 145 ± 10°C, Zone-2 : 150 ± 10°C, Zone- 3 : 170 ± 10°C,
Zone-4 : 185 ± 10°C, Zone-5 : 200 ± 10°C, X-Head & Die : 230 ± 10°C.

Shelf Life/Storage:

KLJ-HDPE can be stored for 6 -12 months from date of manufacturing , without significant deterioration of the quality of material. However, it is recommended to be consumed as soon as possible.

KLJ-HDPE is recommended to be stored at in a cool, dry & clean environment in unopened original packaging.

Packaging:

KLJ-HDPE granules are packed in 25 kg bags, which are protected from moisture ingress.

Safety:

KLJ-HDPE are 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.