

High Density Polyethylene

Telecom Ducts

Product Description:

HDPE 010DP45U is a natural high density bimodal UV-stabilized Polyethylene grade produced by Lyondell Basell's Hostalen Slurry Process. The grade conforms to latest TEC Generic Requirement No. TEC/GR/FA/CDS-008/04/AUG-19 & TEC/GR/FA/DWC-034/02/AUG-19 of CACT, BSNL.

Recommended Applications:

HDPE 010DP45U is recommended for

- Ducts for Optical Fibre Cables
- General Purpose PE-63 Non-Pressure Pipe Applications

Typical Properties:

Tested Properties	Test Method	UOM	Values*
Resin Properties			
Melt Flow Index (190°C & 5 Kg)	ASTM D1238	gm/10 min	0.90
Density @ 23°C	ASTM D792	gm/cm ³	0.947
Density @ 27°C	ASTM D792	gm/cm ³	0.945
Mechanical Properties			
Tensile Strength @ Yield (Type-IV)	ASTM D638	MPa	28
Elongation @ Yield (Type-IV)	ASTM D638	%	8.5
Elongation @ Break (Type-IV)	ASTM D638	%	>600
Notched Izod Impact Strength @ 23 °C	ASTM D256	J/m	300
Flexural Modulus	ASTM D790	MPa	850
Hardness	ASTM D2240	Shore D	64
Thermal Properties			
Vicat Softening Point (10N)	ASTM D1525	°C	126
Heat Deflection Temperature (0.455 Mpa)	ASTM D648	°C	68
Oxidative Induction Time	ASTM D3895	Min	>30
Thermo-Chemical Properties			
ESCR, F50 (10% Igepal)	ASTM D1693	Hrs	>600

* Typical values not to be construed as specification limits. Values may change without any prior notice.

* Mechanical Properties tested on compression Molded test specimens.

Recommended Processing Temperature: 160 – 210 °C

Packaging Information:

This material is packed and available in raffia bags with net content of 25.0 Kg only. The raffia bags used conforms to the minimum strength requirements of BIS, however, customer shall take due care while handling the bag. Prolonged exposure of these bags to sunlight may deteriorate the bag's performance and cause spillage and wastage. IOCL does not warranty loss of material due to poor material handling practices.

Storage & Handling:

Prevent HDPE Material from direct exposure to sunlight & heat to avoid quality deterioration. The storage location should be dry, dust free and the storage temperature should not exceed 50°C. Non - compliance to these precautionary measures can lead to degradation of the product causing color changes, odor and inadequate product performance. It is advised to process HDPE material within 06 months of delivery.

Regulatory Information:

HDPE 010DP45U meet "Specification for Polyethylene for safe use in contact with Foodstuff, Pharmaceuticals and Drinking water" as per IS: 10146-1982. It also confirms to the positive list of constituents as per IS: 10141-1982. The grade and Additives incorporated shall meet with FDA: CFR Title21, 177.1520, Olefin Polymers.

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