

# 010DP45U

# **High Density Polyethylene**

## **Telecom Ducts**

#### **Product Description:**

**HDPE 010DP45U** is a bimodal, natural, UV Stabilized pipe extrusion grade. The grade conforms to TEC generic requirements No: GR/TX/CDS-008/03/MAR- 2011 of CACT, BSNL

#### **Recommended Applications:**

**HDPE 010DP45U** is recommended for Ducts for optical fibre cables & other 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 D 1238	gm/10 min	0.90
Density @ 23°C	ASTM D 1505	gm/cm <sup>3</sup>	0.947
Density @ 27°C	ASTM D 1505	gm/cm <sup>3</sup>	0.945
Mechanical Properties			
Tensile Strength @ Yield (Type-IV)	ASTM D 638	MPa	28
Elongation @ Yield (Type-IV)	ASTM D 638	%	8.5
Elongation @ Break (Type-IV)	ASTM D 638	%	>600
Flexural Modulus	ASTM D 790	MPa	850
Notched Izod Impact Strength @ 23°C	ASTM D 256	J/m	300
Hardness	ASTM D2240	Shore D	60
Thermal Properties			
Vicat Softening Point	ASTM D 1525	°C	126
Oxidative Induction Time	ASTM D3895	Min	>30
Thermo Chemical Properties			
ESCR, F50 (10% Igepol)	ASTM D 1693	Hrs	>600

<sup>\*</sup> Typical values not to be construed as specification limits. Values may change without any prior notice.

#### 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.

#### **Regulatory Information:**

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

### 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 & inadequate product performance. It is advised to process HDPE material within 06 months after delivery.

Disclaimer: IOCL assumes no liability whatsoever in respect of application, processing or any use made of the aforementioned information or products, or any consequence thereof. No liability whatsoever shall attached to any of the IOCL companies for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of application, processing or use of the afore-mentioned information or products by the user.



Registered Office Address → G-9, Aliyavar Jung Marg, Bandra (East), Mumbai – 400051

Maharashtra, India.

Contact Address →

Product Application and Development Center (PADC), Near Panipat Naphtha Cracker Complex, Village – Baljattan, Panipat – 132140, Haryana, India Contact Details ->

Tel : +91-180-2526702, 2526704 Fax : +91-180-2528651

Fax: +91-180-2528651

Web: https://propel.indianoil.in

<sup>\*\*</sup> Mechanical properties were determined on compression moulded specimens.