

High Density Polyethylene

Pipe Extrusion & Pesticide Bottles

Product Description:

HDPE 010DP45 is a natural high density bimodal grade with excellent Processability, good balance of impact strength & Stiffness. This Grade meets the requirements of material grade PE-63 as per IS: 4984:1995. The designation of the natural resin 010DP45 is PEEAA-45-T012 as per IS: 7328 - 1992 and shall meet the same given in the amendment No.4 of IS: 4984: 1995.

Recommended Applications:

HDPE 010DP45 is recommended for

- Pipes for Drip irrigation & sprinkler system
- Pipes for drinking water
- Blow molded pesticide bottles upto 1 Ltr
- Pipes for industrial effluent

Typical Properties:

Tested Properties	Test Method	UOM	Values*
Resin Properties			
Melt Flow Index (190°C & 5 Kg)	ASTM D 1238	gm/10 min	0.9
Density @ 23°C	ASTM D 1505	gm/cm ³	0.947
Mechanical Properties			
Tensile Strength @ Yield (Type-IV)	ASTM D 638	MPa	28
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
Thermo Chemical Properties			
ESCR, F50 (10% Igepol)	ASTM D1693	Hrs	> 800
Thermal Properties			
Oxidative Induction Time	ASTM D3895	Min	> 30

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

** Mechanical properties were determined on compression moulded specimens.

Recommended Processing Temperature: 160 – 200 °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 010DP45 meets "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 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.

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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 – Bajattan, Panipat – 132140, Haryana, India

Contact Details →
Tel : +91-180-2526702, 2526704
Fax : +91-180-2528651
Web : <https://propel.indianoil.in>