

## **High Density Polyethylene**

# Oriented Tape & Monofilament

#### **Product Description:**

012E50 is a High Density Polyethylene manufactured using Nova Chemical's Sclairtech Solution Polymerisation Technology with following features:

- Excellent processability
- Superior mechanical properties
- Lower water carryover

#### **Recommended Applications:**

HDPE 012E50 is recommended for following applications

- Tarpaulin
- woven sacks
- Monofilaments for mosquito nets, fishing nets
   & filter cloth etc

#### **Typical Properties:**

Tested Properties	Test Method	UOM	Values*
Resin Properties	V \		
Melt Flow Index (190°C & 2.16 Kg)	ASTM D 1238	gm/10 min	1.2
Density @ 23°C	ASTM D 1505	gm/cm <sup>3</sup>	0.950
Mechanical Properties			
Tensile Strength @ Yield (50 mm/min)	ASTM D 638	MPa	20
Ultimate Tensile Strength (50 mm/min)	ASTM D 638	MPa	37
Elongation at Break	ASTM D 638	%	>1000
Izod impact strength (Notched, 23°C)	ASTM D 256	J/m	400
Hardness	ASTM D 2240	Shore D	65

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

### Recommended Processing Temperature: 180-250 °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 012E50 shall 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.

#### 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.

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<sup>\*</sup> Mechanical Properties tested on compression molded Type IV specimen as per ASTM D 638