



# **High Density Polyethylene**

## Product Description:

010E52 is a High Density Polyethylene manufactured using Nova Chemical's Sclairtech Solution Polymerization Technology with following features:

- Excellent orientation characteristics
- Low water carry over
- Superior mechanical properties

# **Oriented Tape & Monofilament**

### **Recommended Applications:**

HDPE 010E52 is recommended for following

applications

- Raffia for woven sacks
- Wrapping fabric
- Tarpaulin
- · Agri shade net
- Rachel bags

## **Typical Properties:**

Tested Properties	Test Method	UOM	Values*
Resin Properties			
Melt Flow Index (190 <sup>0</sup> C & 2.16 Kg)	ASTM D 1238	gm/10 min	0.90
Density @ 23°C	ASTM D 1505	gm/cm <sup>3</sup>	0.952
Mechanical Properties			
Tensile Strength @ Yield (50 mm/min) MD/TD	ASTM D 882	MPa	21.5/26.0
Ultimate Tensile Strength (50 mm/min) MD/TD	ASTM D 882	MPa	46.0/45.5
Elongation at Break(50 mm/min) MD/TD	ASTM D 882	%	1100/1250
Dart Impact Strength (38mm dart,66cm height)	ASTM D 1709	g/µ	1.5

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

\* Mechanical Properties tested on 40µ film made with 0.75mm die gap & 2.75 BUR.

## 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 010E52 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 no exceed 50°C. Non - compliance to these precautionary measures can lead to degradation.

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