

## High Molecular Weight High Density Polyethylene

## HM Film

### Product Description:

**HDPE 003DF49** is a high molecular weight high density bimodal grade produced by Lyondell Basell's Hostalen Slurry process with following features:

- Good Processability
- Excellent optical properties of processed films
- Good mechanical & sealing properties.

### Recommended Applications:

**HDPE 003DF49** is recommended for film applications like

- Shopping bags
- Carrier bag
- Liners
- Wrapping applications

### Typical Properties:

Tested Properties	Test Method	UOM	Values*
<b>Resin Properties</b>			
Melt Flow Index (190 <sup>o</sup> C & 5 Kg)	ASTM D 1238	gm/10 min	0.35
Density @ 23 <sup>o</sup> C	ASTM D 1505	gm/cm <sup>3</sup>	0.951
<b>Mechanical Properties</b>			
Tensile Strength @ Yield	ASTM D 638	MPa	32
Elongation @ Break	ASTM D 638	%	1000
Flexural Modulus	ASTM D 790	MPa	1000
Notched Izod Impact Strength @ 23 <sup>o</sup> C	ASTM D 256	J/m	300
Dart Impact Strength	ASTM D 1709	gm	120 <sup>#</sup>
Gloss(60 <sup>o</sup> )	ASTM D 523	%	14 <sup>#</sup>
Hardness	ASTM D 2240	Shore D	62
<b>Thermal Properties</b>			
Vicat Softening Point	ASTM D 1525	°C	126

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

\* Test specimen from compression moulded sheet at 23<sup>o</sup>C, samples not annealed

# Result of 20µ Blown film extruded on 120mm die diameter, 1.2mm die gap & 4 BUR.

**Recommended Processing Temperature: 180 – 220 °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 003DF49 shall meet "Specification for Polyethylene" for safe use in contact with Foodstuff, Pharmaceutical & Drinking water as per IS:10146-1982. The Grade and the additives incorporated in it also comply with the FDA: CFR Title 21,177.1520, 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<sup>o</sup>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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