



High Density Polyethylene

High ESCR GPBM Grade

Product Description:

HDPE 010DB50 is a High Density Polyethylene manufactured using Lyondell Basell's Hostalen Slurry Process with following features:

- Superior Processability
- · Superior mechanical properties
- High ESCR to suit packaging of Chemicals

Recommended Applications:

HDPE 010DB50 is recommended for following applications

- Containers / Bottles upto 5 ltrs capacities
- High ESCR Blow Molded Containers
- Containers for packing of Chemicals, Pesticides etc

Typical Properties:

Tested Properties	Test Method	UOM	Values*
Resin Properties			
Melt Flow Index (190°C & 5 Kg)	ASTM D1238	gm/10 min	1.2
Density @ 23°C	ASTM D1505	gm/cm ³	0.950
Mechanical Properties			
Tensile Strength @ Yield (Type-IV)	ASTM D638	MPa	25
Elongation @ Break (Type-IV)	ASTM D638	%	>600
Notched Izod Impact Strength @ 23 °C	ASTM D256	J/m	150
Flexural Modulus	ASTM D790	MPa	900
Thermal Properties			
Vicat Softening Point (10N)	ASTM D1525	°C	125
Heat Deflection Temperature (0.455 Mpa)	ASTM D648	°C	70
Environmental Properties			
ESCR (10% Igepal), F ₅₀	ASTM D1693 B	Hrs	>500

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

Recommended Processing Temperature: 160 – 190 °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 010DB50 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 of the product causing color changes, odor and inadequate product performance. It is advised to process HDPE material within 06 months of delivery.

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^{*} Mechanical Properties tested on compression Molded test specimens.