

High Density Polyethylene

General Purpose Blow Molding

Product Description:

HDPE 012DB54 is a high density bimodal resin grade produced by Lyondell Basell's Hostalen slurry process with following features:

- Good Processability,
- Good balance of stiffness & impact properties
- Moderate ESCR to suit packaging of Chemicals

Recommended Applications:

HDPE 012DB54 is General purpose blow moulding grade recommended for:

- Containers / bottles upto 5 Litre capacities for packaging of Lube oil, Edible oil, FMCG products.
- General purpose containers for foodstuffs.
- Containers for packing of Chemicals, Detergents, Pesticides etc.

Typical Properties:

Tested Properties	Test Method	UOM	Values*
Resin Properties			
Melt Flow Index (190°C & 5 Kg)	ASTM D 1238	gm/10 min	1.3
Density @ 23°C	ASTM D 1505	gm/cm ³	0.9520
Mechanical Properties**			
Tensile Strength @ Yield (Type-IV)	ASTM D 638	MPa	30
Elongation @ Yield (Type-IV)	ASTM D 638	%	10
Elongation @ Break (Type-IV)	ASTM D 638	%	1000
Flexural Modulus	ASTM D 790	MPa	1200
Notched Izod Impact Strength @ 23°C	ASTM D 256 A	J/m	150
Hardness	ASTM D2240	Shore D	61
Thermal Properties			
Vicat Softening Point	ASTM D 1525	°C	124
Heat Deflection Temperature (0.455 MPa)	ASTM D 648	°C	75
Environmental Properties			
ESCR (10% Igepal), F ₅₀	ASTM D 1693 B	Hrs	>200

* 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 012DB54 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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