



Luban HD-B5323

(Legacy name: Luban DMDD-6200)

High Density Polyethylene

Description

Luban HD-B5323 is a multi-purpose high-density polyethylene designed for high-speed production of blow molded containers used to package food products, household industrial chemicals, toiletries and cosmetics. In addition, this grade can be blow molded into other thin-walled parts and houseware items and can also be extruded into profiles.

Main Characteristics:

- Hexene High Density Resin
- Excellent environmental stress crack resistance and rigidity
- High impact strength
- Moderate swell
- High melt strength

Application

Bottles for HIC, cosmetics & toiletries, viz. detergents, bleach, fabric softeners, shampoos, creams, lotions

Properties (Typical Values)

Property	Unit	Test method	Value
Melt Index (190°C/2.16 kg)	g/10 min	ASTM D1238	0.25
Melt Index (190°C/21.6 kg)	g/10 min	ASTM D1238	23
Density	g /cm ³	ASTM D792	0.953
Environmental Stress-Cracking Resistance 122°F (50°C), 100% Igepal, F50	hr	ASTM D1693 ¹	50
Flexural Modulus - 2% Secant	MPa	ASTM D790B ¹	1020
Tensile stress at yield	MPa	ASTM D638 ¹	26.2
Tensile strain at yield	%	ASTM D638 ¹	6
Tensile stress at break	MPa	ASTM D638 ¹	25.5
Tensile strain at break	%	ASTM D638 ¹	900
Tensile Impact Strength	kJ/m ²	ASTM D1822 ¹	210
Durometer Hardness (Shore D)		ASTM D2240 ¹	59
Deflection Temperature Under Load 0.45 MPa, Unannealed	°C	ASTM D648 ¹	70
Vicat Softening Temperature	°C	ASTM D1525	129

¹Molded and tested in accordance with ASTM D4976.

Note: These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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Storage and Handling

Luban HD-B5323 must be protected from direct sunlight and should be stored in a shaded and completely dry area. During handling and processing, the material should be kept in a well-ventilated area to prevent the accumulation of dust and fumes. Contact with strong oxidizers, excessive heat, sparks or open flame should be avoided as this could initiate the degradation process and consequently impact the quality of the material.

Safety

Luban HD-B5323 is not classified as dangerous preparation. For further information about safety in handling and processing please refer to the Safety Data Sheet.

Food Contact

Luban HD-B5323 meets the requirements of the U.S. Food and Drug Administration (FDA) as specified in 21 CFR 177.1520, covering safe use of polyolefin articles and components of articles intended for direct food contact. For additional information on approved conditions of use for food contact applications, please refer to the "Product Stewardship Declaration".

Recycling

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

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Disclaimer:

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