



## Luban DMDH-6400 High Density Polyethylene

### Description

Luban DMDH-6400 high-density polyethylene is a multipurpose homopolymer designed for producing thin-walled blow molded containers used to package dairy products. In addition, it can be blow molded into other thin-walled parts and houseware items.

Main Characteristics:

- Maximum rigidity
- High impact strength
- Top load strength
- Moderate swell

### Application

thin walled bottles for packaging of dairy products, viz., milk, water and fruit juices

### Properties (Typical Values)

Property	Unit	Test method	Value
Melt Index (190°C/2.16 kg)	g/10 min	ASTM D1238	0.73
Melt Index (190°C/21.6 kg)	g/10 min	ASTM D1238	57
Density	g /cm <sup>3</sup>	ASTM D792	0.963
Environmental Stress-Cracking Resistance 122°F (50°C), 100% Igepal, F50	hr	ASTM D1693 <sup>1</sup>	20
Flexural Modulus - 2% Secant	MPa	ASTM D790B <sup>1</sup>	1300
Tensile stress at yield	MPa	ASTM D638 <sup>1</sup>	31.7
Tensile strain at yield	%	ASTM D638 <sup>1</sup>	7
Tensile stress at break	MPa	ASTM D638 <sup>1</sup>	24.1
Tensile strain at break	%	ASTM D638 <sup>1</sup>	1000
Tensile Impact Strength	kJ/m <sup>2</sup>	ASTM D1822 <sup>1</sup>	84
Durometer Hardness (Shore D)		ASTM D2240 <sup>1</sup>	66
Deflection Temperature Under Load 0.45 MPa, Unannealed	°C	ASTM D648 <sup>1</sup>	76

<sup>1</sup>Molded 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.



## Luban DMDH-6400

### High Density Polyethylene

#### Storage and Handling

Luban DMDH-6400 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 DMDH-6400 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 DMDH-6400 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.

Updated: Mar. 2020

#### Disclaimer:

Values given here are typical and should not be interpreted as specification. Before using OQ product, customers and other users should make their own independent determination that the product is suitable for the intended use. This document does not constitute a warranty, express or implied, including a warranty of merchantability or fitness for a particular purpose. In addition, no immunity under OQ or third parties' intellectual property rights shall be implied from this document. No one is authorized to make any warranties, issue any immunities or assume any liabilities on behalf of OQ except in a writing signed by an authorized OQ employee. Unless otherwise agreed in writing, the exclusive remedy for all claims is replacement of the product or refund of the purchase price at OQ's option, and in no event shall OQ be liable for special, consequential, incidental, punitive or exemplary damages.