# Luban DMDD-6200 High Density Polyethylene



### Description

Luban DMDD-6200 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 thinwalled 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 /cm³   | ASTM D792   | 0.953 |
| Environmental Stress-Cracking Resistance<br>122°F (50°C), 100% Igepal, F50 | hr       | ASTM D16931 | 50    |
| Flexural Modulus - 2% Secant   | MPa      | ASTM D790B1 | 1020  |
| Tensile stress at yield  | MPa      | ASTM D6381  | 26.2  |
| Tensile strain at yield  | %        | ASTM D6381  | 6     |
| Tensile stress at break  | MPa      | ASTM D6381  | 25.5  |
| Tensile strain at break  | %        | ASTM D6381  | 900   |
| Tensile Impact Strength  | kJ/m²    | ASTM D18221 | 210   |
| Durometer Hardness (Shore D)   |          | ASTM D22401 | 59    |
| Deflection Temperature Under Load<br>0.45 MPa, Unannealed                  | °C       | ASTM D6481  | 70    |
| Vicat Softening Temperature  | °C       | ASTM D1525  | 129   |

<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.

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#### **Storage and Handling**

Luban DMDD-6200 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 DMDD-6200 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 DMDD-6200 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. Inhouse production waste should be kept clean to facilitate direct recycling.

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#### 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.

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