



# 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 thin-walled parts and houseware items and can also be extruded into profiles.

Main Characteristics:

- 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              | 25    |
| Density  | g /cm <sup>3</sup> | ASTM D792               | 0.953 |
| Environmental Stress-Cracking Resistance<br>122°F (50°C), 100% Igepal, F50 | hr                 | ASTM D1693 <sup>1</sup> | 50    |
| Flexural Modulus - 2% Secant   | MPa                | ASTM D790B <sup>1</sup> | 1020  |
| Tensile stress at yield  | MPa                | ASTM D638 <sup>1</sup>  | 26.2  |
| Tensile strain at yield  | %                  | ASTM D638 <sup>1</sup>  | 6     |
| Tensile stress at break  | MPa                | ASTM D638 <sup>1</sup>  | 25.5  |
| Tensile strain at break  | %                  | ASTM D638 <sup>1</sup>  | 900   |
| Tensile Impact Strength  | kJ/m <sup>2</sup>  | ASTM D1822 <sup>1</sup> | 210   |
| Durometer Hardness (Shore D)   |                    | ASTM D2240 <sup>1</sup> | 59    |
| Deflection Temperature Under Load<br>0.45 MPa, Unannealed                  | °C                 | ASTM D648 <sup>1</sup>  | 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 should be stored in well ventilate area during handling or processing of to prevent accumulation of dust and fumes. Avoid contact with strong oxidizers, excessive heat, sparks or open flame as this could well speed up alteration and consequently loss of quality of the material in which could lead to unforeseen dangers. The bags must be protected from direct sunlight and should be stored in shaded and completely dry area for good processing.

### 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. In-house production waste should be kept clean to facilitate direct recycling.

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#### Disclaimer:

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