



# Luban HD-M6408

(Legacy name: Luban DMDA-8007)

## High Density Polyethylene

### Description

Luban HD-M6408 is a narrow molecular weight distribution high density homopolymer designed to offer excellent stiffness, low warpage, good/ acceptable toughness, and good moldability. This grade is ideally suited for injection molded products requiring high rigidity. This resin is also suitable for cast film extrusion processing.

Main Characteristics:

- Excellent stiffness/modulus
- Excellent warp resistance
- Molded parts have high gloss, low odor
- For injection molded crates, cases, totes, and other parts needing high modulus
- For cast film extrusion

### Application

Injection molded crates, cases, trays, tote bins, injection molded caps and closures for beverages

### Properties (Typical Values)

| Property                                                                   | Unit               | Test method             | Value |
|----------------------------------------------------------------------------|--------------------|-------------------------|-------|
| Melt Index (190°C/2.16 kg)                                                 | g/10 min           | ASTM D1238              | 8     |
| Melt Index (190°C/21.6 kg)                                                 | g/10 min           | ASTM D1238              | 180   |
| Density                                                                    | g /cm <sup>3</sup> | ASTM D792               | 0.965 |
| Environmental Stress-Cracking Resistance<br>122°F (50°C), 100% Igepal, F50 | hr                 | ASTM D1693 <sup>1</sup> | 2     |
| Flexural Modulus - 2% Secant                                               | MPa                | ASTM D790B <sup>1</sup> | 1410  |
| Tensile stress at yield                                                    | MPa                | ASTM D638 <sup>1</sup>  | 31    |
| Tensile strain at yield                                                    | %                  | ASTM D638 <sup>1</sup>  | 6     |
| Tensile stress at break                                                    | MPa                | ASTM D638 <sup>1</sup>  | 17.9  |
| Tensile strain at break                                                    | %                  | ASTM D638 <sup>1</sup>  | 350   |
| Tensile Impact Strength                                                    | kJ/m <sup>2</sup>  | ASTM D1822 <sup>1</sup> | 168   |
| Durometer Hardness (Shore D)                                               |                    | ASTM D2240 <sup>1</sup> | 61    |
| Deflection Temperature Under Load<br>0.45 MPa, Unannealed                  | °C                 | ASTM D648 <sup>1</sup>  | 84    |
| Vicat Softening Temperature                                                | °C                 | ASTM D1525              | 131   |

<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 HD-M6408 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-M6408 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-M6408 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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