

## Luban DMDZ-6147

### High Density Polyethylene



#### Description

Luban DMDZ-6147 is high-density polyethylene with broad molecular weight distribution and high molecular weight. This product provides an excellent combination of extrudability and parison stability, which contribute to uniform wall thickness in large parts. The grade is ideal for blow molding containers such as the 5 - 55 gallon (20 - 210 lit) closed head shipping containers and other similar parts. The broad distribution also provides outstanding environmental stress crack resistance (ESCR) at a good rigidity. The smooth surface of molded parts is readily treated and printed for high quality applications.

#### Main Characteristics:

- Hexene High Density Resin
- Outstanding environmental stress crack resistance
- Excellent parison melt strength/ low sag
- Good extrudability/ processability
- Good rigidity

#### Application

Blow molding containers from 20 lit – 210 lit for packaging of industrial chemicals, latex paints, printing inks, foodstuffs, adhesives, and other chemical specialties

#### Properties (Typical Values)

Property	Unit	Test method	Value
Melt Index (190°C/2.16 kg)	g/10 min	ASTM D1238	0.05
Melt Index (190°C/21.6 kg)	g/10 min	ASTM D1238	9
Density	g /cm <sup>3</sup>	ASTM D792	0.948
Environmental Stress-Cracking Resistance 122°F (50°C), 10% Igepal, F50	hr	ASTM D1693 <sub>1</sub>	>1000
Flexural Modulus - 2% Secant	MPa	ASTM D790B <sub>1</sub>	885
Tensile stress at yield	MPa	ASTM D638 <sub>1</sub>	24.6
Tensile stress at break	MPa	ASTM D638 <sub>1</sub>	35.5
Tensile strain at break	%	ASTM D638 <sub>1</sub>	780
Tensile Impact Strength	kJ/m <sup>2</sup>	ASTM D1822 <sub>1</sub>	462
Durometer Hardness (Shore D)		ASTM D2240 <sub>1</sub>	57
Deflection Temperature Under Load 0.45 MPa, Unannealed	°C	ASTM D648 <sub>1</sub>	66
Vicat Softening Temperature	°C	ASTM D1525	127

<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 DMDZ-6147 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 DMDZ-6147 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 DMDZ-6147 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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