## Luban HP5101LC

# Polypropylene Homopolymer



### **Description**

Luban polypropylene is manufactured using Novolen vertical stirred Gas-phase polymerization process. Luban HP5101LC is a homopolymer polypropylene which has a narrow molecular weight distribution with anti-gas fading stabilization.

### **Application**

High tenacity staple fibers, suitable for extrusion of staple fibers, geotextiles.

## **Properties (Typical Values)**

Property	Units	Test method	Value
Melt flow rate (230°C/2.16 kg)	g/10 min	ASTM D1238	5
Density	g/cm³	ASTM D792	0.90
Flexural Modulus (1% Secant)	MPa	ASTM D790	1450
Tensile Stress @ Yield	MPa	ASTM D638	37
Elongation @ Yield	%	ASTM D638	8
Tensile Stress @ Break	%	ASTM D638	21
Elongation @ Break (+23°C)	kJ/m²	ASTM D638	>50
Notched Izod Impact Strength @23°C	kJ/m²	ASTM D256	33
Vicat Softening Temperature (10N)	°C	ASTM D1525	156
Heat Deflection Temperature (0.45 MPa)	°C	ASTM D648	100

**Note:** These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

### **Processing Guidlines**

The Typical Processing Conditions for Luban HP5101LC are:

Extrusion temperatures  $220 - 260 \,^{\circ}\text{C}$ Quenching Temperature  $15 - 25 \,^{\circ}\text{C}$ Draw Ratio 1:3 - 1:6

**Note:** Processing parameters should only be used as guidelines. The above properties values are not to be construed as specifications.

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### **Storage and Handling**

Luban HP5101LC 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 HP5101LC 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 HP5101LC 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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