

## Luban HP5101SC

### Polypropylene Homopolymer



#### Description

Luban polypropylene is manufactured using Novolen vertical stirred Gas-phase polymerization process. Luban HP5101SC is a homopolymer polypropylene which has a narrow molecular weight distribution with anti-gas fading stabilization.

#### Application

Nonwovens spunbonded. Fabrics for hygienic (diaper stock, disposable napkins), filter applications, geotextiles, agricultural textiles, blankets.

#### Properties (Typical Values)

| Property                                 | Units              | Test method | Value* |
|------------------------------------------|--------------------|-------------|--------|
| Melt flow rate (230°C/2.16 kg)           | g/10 min           | ISO 1133    | 35     |
| Density                                  | g /cm <sup>3</sup> | ISO 1183    | 0.90   |
| Tensile modulus (1 mm/min)               | MPa                | ISO 527-2   | 1450   |
| Tensile stress at yield (50 mm/min)      | MPa                | ISO 527-2   | 34     |
| Tensile strain at yield (50 mm/min)      | %                  | ISO 527-2   | 8      |
| Tensile strain at break (50 mm/min)      | %                  | ISO 527-2   | > 50   |
| Charpy unnotched impact strength (+23°C) | kJ/m <sup>2</sup>  | ISO 179/1eU | 110    |
| Charpy notched impact strength (+23°C)   | kJ/m <sup>2</sup>  | ISO 179/1eA | 2.5    |
| Heat Deflection Temperature (0.45 MPa)   | °C                 | ISO 75-2    | 85     |

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

#### Processing Guidelines

The Typical Processing Conditions for Luban HP5101SC are:

|                                |              |
|--------------------------------|--------------|
| <b>Extrusion Temperatures</b>  | 210 – 240 °C |
| <b>Rolls Temperature</b>       | 80 – 120 °C  |
| <b>Quenching Temperature</b>   | 10 – 20 °C   |
| <b>Draw Ratio</b>              | 2.8 – 3.3    |
| <b>Texturising Temperature</b> | 150 – 170 °C |

**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 HP5101SC 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 HP5101SC 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 HP5101SC 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:

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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