Luban HP5101R
Polypropylene Homopolymer

Description

Luban polypropylene is manufactured using Novolen vertical stirred Gas-phase polymerization process. Luban HP5101R is a homopolymer polypropylene with anti-gas fading stabilization. Luban HP5105R is used for the production of (bulk) continuous filaments (BCF/CF).

Application

BCF: Residential carpets, object carpets, carpets for automotive.
CF: Fabrics for mattress covers, POY for socks, clothes, inlets for suitcases.

Properties (Typical Values)

Property	Units	Test method	Value*
Melt flow rate (230°C/2.16 kg)	g/10 min	ASTM D1238	24
Density	g /cm³	ASTM D792	0.90
Flexural Modulus (1% Secant)	MPa	ASTM D790	1600
Tensile Stress @ Yield	MPa	ASTM D638	37
Elongation @ Yield	%	ASTM D638	7
Tensile Stress @ Break	%	ASTM D638	24
Elongation @ Break (+23°C)	kJ/m²	ASTM D638	10
Notched Izod Impact Strength @23°C	kJ/m²	ASTM D256	25
Vicat Softening Temperature (10N)	°C	ASTM D1525	155
Heat Deflection Temperature (0.45 MPa)	°C	ASTM D648	105

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 HP5101R are:

Extrusion Temperatures	210 – 240 °C
Rolls Temperature	80 – 120 °C
Quenching Temperature	10 – 20 °C
Draw Ratio	2.8 – 3.3
Texturising Temperature	150 – 170 °C

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

Storage and Handling

Luban HP5101R 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 HP5101R 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 HP5101R 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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