

Provisional

Luban RP2251T Polypropylene Random Copolymer



Description

Luban RP2251T is manufactured using the Spheripol Technology. Luban RP2251T is a nucleated random copolymer used for injection moulding. Luban RP2251T offers a very good flowability and an excellent transparency and organoleptic performance. Luban RP2251T is typically used in the production of thin-walled packaging with high transparency and high requirements for organoleptic properties. In multilayer barrier systems, processors have found that it provides good adhesion with the inner barrier layer, without impacting the overall transparency and processability. Luban RP2251T has a superior aesthetic appearance and can be processed at significantly lower temperatures, enabling converters to generate energy savings and improved productivity due to reduced cycle times.

Applications

Thin

Thin Wall Injection Molding (TWIM) for food packaging.

Properties (Typical Values)

Property	Units	Test method	Value
Melt flow rate (230°C/2.16 kg)	g/10 min	ISO 1133	40
Density	g /cm ³	ISO 1183	0.90
Tensile modulus (1 mm/min)	MPa	ISO 527-2	1100
Tensile stress at yield (50 mm/min)	MPa	ISO 527-2	28
Tensile strain at yield (50 mm/min)	%	ISO 527-2	14
Tensile strain at break (50 mm/min)	%	ISO 527-2	> 50
Charpy notched impact strength (+23°C)	kJ/m ²	ISO 179/1eA	5.0
Charpy notched impact strength (0°C)	kJ/m ²	ISO 179/1eA	2.5
Heat Deflection Temperature (0.45 MPa)	°C	ISO 75-2	70
Haze, (1 mm - injection molded disc)	%	ASTM D1003	9
Vicat Softening Temperature	°C	ISO 306	127

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 RP2251T are:

Melt temperature	220 – 260 °C
Holding pressure	200 – 500 bar Maximum to avoid sink marks
Mold temperature	20 – 40 °C
Injection speed	High
Shrinkage	1 – 2 % depending on wall thickness and molding parameters

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Storage and Handling

Luban RP2251T 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

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Luban RP2251T 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 RP2251T 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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