

## Polypropylene Homopolymer

## Injection Molding

### Product Description:

PP Homopolymer 1110MAS is a natural colored grade produced by the latest Spheripol II Technology. The Grade is having a High flow & high stiffness and excellent gloss. This grade contains antistatic agent that reduces static charge build up in products. This grade is designed to offer faster molding cycles and the ability to achieve cycle time reduction of up to 18% (Depending on product & equipment). This grade is ideal for products requiring very good dimensional stability (low warpage).

### Recommended Applications:

PP Homopolymer 1110MAS is recommended for Injection Molded applications like

- Furniture
- Household articles
- Automotive component (where high stiffness is required)

### Typical Properties:

Tested Properties	Test Method	UOM	Values*
<b>Resin Properties</b>			
Melt Flow Index (230°C & 2.16 Kg)	ASTM D 1238	gm/10 min	11.0
Density @ 23°C	ASTM D 1505	gm/cm <sup>3</sup>	0.90
<b>Mechanical Properties</b>			
Tensile Strength @ Yield (50 mm/min)	ASTM D 638	MPa	42
Elongation @ Yield (50 mm/min)	ASTM D 638	%	8
Flexural Modulus (1.3 mm/min)	ASTM D 790	MPa	1800
Notched Izod Impact Strength @ 23°C	ASTM D 256	J/m	30
<b>Thermal Properties</b>			
Heat Deflection Temperature (0.46 N/m <sup>2</sup> )	ASTM D 648	°C	115
Vicat Softening Point (10 N)	ASTM D 1525	°C	154

\* Typical values not to be construed as specification limits. Values may change without any prior notice.

\* Mechanical properties tested on specimen molded as per ASTM D 4101 and conditioned as per ASTM D 618.

**Recommended Processing Temperature: 170 – 230 °C**

### Packaging Information:

This material is packed and available in raffia bags with net content of 25.0 Kg only. The raffia bags used conforms to the minimum strength requirements of BIS, however, customer shall take due care while handling the bag. Prolonged exposure of these bags to sunlight may deteriorate the bag's performance and cause spillage and wastage. IOCL does not warranty loss of material due to poor material handling practices.

### Regulatory Information:

PP Homopolymer 1110MAS shall meet the requirements stipulated in IS 10910 on 'Specification for Polypropylene and its Copolymers for safe use in contact with Foodstuff, Pharmaceutical & Drinking water'. The grade and Additives incorporated in this grade shall meet the positive list of constituents as prescribed in IS 10909. The Grade and the additives incorporated in it will also comply with the FDA: CFR Title 21,177.1520, Olefin Polymers.

### Storage & Handling:

Prevent PP Material from direct exposure to sunlight & heat to avoid quality deterioration. The storage location should be dry, dust free and the Storage temperature should not exceed 50 °C. Non - compliance to these precautionary measures can lead to degradation of the product causing Color changes, Odor & inadequate product performance. It is advised to process PP material within 06 months after delivery.

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