

## Polypropylene Random Copolymer

## Injection Molding & ISBM

### Product Description:

PP Random Copolymer 2120MC is a natural colored grade produced by the latest Spheripol II Technology. The Grade has exceptionally good transparency, gloss and balance of stiffness-impact properties. This grade can be processed with lower processing temperatures (lower specific energy consumption) and has the ability to achieve cycle time reduction up to 15% (depending on product & equipment).

### Recommended Applications:

PP Random Copolymer 2120MC is recommended for Injection Molding & Injection Stretch Blow Molding process for manufacturing of:

- Rigid Containers
- Housewares
- ISBM products

### 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	12.0
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	34
Elongation @ Yield (50 mm/min)	ASTM D 638	%	12
Flexural Modulus (1.3 mm/min)	ASTM D 790	MPa	1100
Notched Izod Impact Strength @ 23°C	ASTM D 256	J/m	46
<b>Thermal Properties</b>			
Heat Deflection Temperature (0.46 N/m <sup>2</sup> )	ASTM D 648	°C	80
Vicat Softening Point (10 N)	ASTM D 1525	°C	130

\* 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: 180 – 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 Random Copolymer 2120MC 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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