

## Polypropylene Impact Copolymer

## Injection Molding

### Product Description:

PP Impact Block Copolymer 4100MH is a natural colored Long Term Heat Stabilized grade produced by the latest Spheripol II Technology with following features:

- Medium flow for easy processing.
- High impact strength with balanced stiffness.
- Good heat Sealability

### Recommended Applications:

PP Impact Copolymer 4100MH is recommended for Injection Molded applications like

- Automotive Battery Containers & Lids
- Inverter Battery Containers & Lids
- Industrial components
- Under the hood parts.

### 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	> 23.0
Elongation @ Yield (50 mm/min)	ASTM D 638	%	6.0
Flexural Modulus (1.3 mm/min)	ASTM D 790	MPa	1200
Notched Izod Impact Strength @ 23°C	ASTM D 256	J/m	100
<b>Thermal Properties</b>			
Heat Deflection Temperature (0.46 N/mm <sup>2</sup> )	ASTM D 648	°C	> 95
Vicat Softening Point (10 N)	ASTM D 1525	°C	140

\* 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 Copolymer 4100MH 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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