

Technical Datasheet



Polypropylene Homo polymer

HR003

Woven Sacks, FIBC, Monofilament

Product Characteristics:

MANGPOL HR003 is a Polypropylene Homo polymer produced by latest solvent free gas phase polymerization using Novolen Technology. This grade is primarily suitable for extrusion process. HR003 features excellent processability coupled with low water carryover and excellent balance between tenacity and toughness.

Recommended Applications:

- Stretched tapes for woven sacks for packaging Fertilizers, Cement, Polymer Pellets, Food Grains, Sugar, Carpet backing etc.
- Leno Bags for Vegetable Packaging, Stretch Tapes for FIBC.
- Ropes and yarns.

Typical Properties

Sr. No.	Properties	Test Method	Units	Typical Values
1.	Melt Flow Index (I _{2.16} @230°C)	ASTM D 1238	g / 10 min	3.5
2.	Tensile Strength at Yield	ASTM D 638 (Type 1)	MPa	34
3.	Tensile Elongation at Yield		%	9
4.	Flexural Modulus	ASTM D 790	MPa	1500
5.	Izod Impact Strength	ASTM D 256	J /m	35
6.	Vicat Softening Point (10N)	ASTM D 1525	°C	154
7.	Heat Deflection Temperature (0.455MPa)	ASTM D 648	°C	100

- All the mechanical properties are as per ASTM D638 Type 1 injection molded specimen prepared in accordance with ASTM D 4101.

Typical Processing Temperature

- Barrel Temperature : 220 - 280°C
- Die Temperature : 260 - 280°C
- Quench Temperature : 30 - 40°C
- Oven Temperature : 155 - 160°C

Handling & Storage

Bags should be stored in dry & dust free environment at temperature below 50°C. Avoid direct exposure to sunlight & heat to avoid quality deterioration.

“Not to be used in the manufacture of Single Use Plastic (SUP) items – Prohibited under PWM Rules including plastic sheets <50-micron thickness, non-woven carry bags <60 GSM, Carry bags <75-micron thickness w.e.f 30.09.21 & 120-micron thickness w.e.f 31.12.22”.

For statement of compliance for MANGPOL PP HR003, Please visit www.mrpl.co.in or contact MRPL representatives.

Disclaimer: The above typical properties are not to be construed as Specifications and may change without any prior notice. The user will solely be responsible for any intended process / product usage and MRPL does not guarantee or undertake any responsibility for any consequential damage or loss based on the information given above.

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