



## Technical Datasheet

# R03RR Polysure PP Homopolymer

Raffia

### Product Characteristics:

Polysure R03RR is Polypropylene Homopolymer, produced by Latest Novolen Technology & Primarily suitable for tape extrusion process applications. R03RR combines extremely low water carry-over with Exceptional processability, good balance of tenacity & elongation for the production of tapes.

### Recommended Applications:

R03RR is recommended for Tape yarns, Monofilaments, Ropes, Leno bags, Strapping & Thermoforming application.

### Typical Properties:

Sr. No.	Property	Test Method	Unit	Value*
1	Melt Flow Index (230°C & 2.16 kg)	ASTM D1238	g/10 min	3.4
2	Tensile Strength at Yield, Type I Specimen	ASTM D638 (50 mm / min)	MPa	36
3	Tensile Elongation at Yield, Type I Specimen		%	11
4	Flexural Modulus (2% Secant)	ASTM D790A	MPa	1550
5	Notched Izod Impact Strength (23°C)	ASTM D256A	J/m	40
6	Vicat Softening Point (10 N)	ASTM D1525	°C	154
7	Heat Deflection Temperature (0.455 MPa)	ASTM D648	°C	100

\*All the mechanical properties are tested on Injection molded Test Specimen, prepared in accordance with ASTM D4101

### Processing Guidelines:

- Barrel Temperature : 180 - 260°C
- Die Temperature : 250 - 270°C
- Quench Temperature : 30 - 40°C
- Oven Temperature : 155 - 160°C

### Storage & Handling:

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

This grade meets the requirements of IS 10951:2020 - Specification for Polypropylene Material for Moulding and Extrusion.

### Regulatory Requirements:

R03RR to be manufactured complying the requirements specified in IS 10910 on "Specification for Polypropylene & its Copolymers for safe use in contact with Foodstuff, Pharmaceutical & Drinking water". Furthermore, the Additives added in this grade formulation compiles to the "Positive list of constituents for Polypropylene, Polyethylene and their Copolymers for its safe use in contact with Foodstuffs & Pharmaceuticals" as laid down under IS 16738:2018. In general, the additives & constituents used in the grade are in line with requirement laid down under FDA: CFR Title 21,177.1520, Olefin Polymers.

Updated as of July 2025

**Disclaimer:** The information & data presented herein are typical values & should not be considered as specification and may be used as guideline only. H MEL does not undertake any responsibility for any outcome or results from the adoption or replication of the above-mentioned data & information there on for possible use for various applications. H MEL reserves the right to change the information & data without any prior notice or information. The user will solely be responsible for any process/product usage.

HPCL-Mittal Energy Limited (H MEL), The Rise, Plot No.17B & 17C, Block – FC, Sector-16A, Noida – 201301 (U.P), India. Tel: 0120-4634500. Corporate Site: [www.hmel.in](http://www.hmel.in)