



## Technical Datasheet

### R03RR Polypropylene Homopolymer

### Woven Sacks & Monofilaments

#### 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 @ Yield (50mm / min)	ASTM D638	MPa	35
3	Tensile Elongation @ Yield (50mm / min)	ASTM D638	%	12
4	Flexural Modulus (1% Secant)	ASTM D790A	MPa	1500
5	Notch Izod Impact Strength ( 23°C)	ASTM D256	J/m	40
6	Vicat Softening Point (10N)	ASTM D1525	°C	153
7	Heat Deflection Temperature (0.455 MPa)	ASTM D648	°C	95

\*All the mechanical properties are tested on Injection molded Test Specimen, prepared in accordance with ASTM D 4101

#### Processing Guidelines:

- Barrel Temperature : 220 - 280°C
- Die Temperature : 260 - 280°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.

#### Regulatory Requirements:

R03RR is 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 of Polypropylene and its Copolymers in contact with Foodstuff, Pharmaceutical & Drinking water" as laid down under IS 10909. 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 September 2023

**Disclaimer:** The information & data presented herein are typical values & should not be considered as specification and may be used as guideline only. HMEL 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. HMEL 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 (HMEL), INOX Tower, Plot No.17, Sector-16A, Noida – 201301 (U.P), India. Tel: 0120-4634500. Corporate Site: [www.hmel.in](http://www.hmel.in)