

## Technical Datasheet

### F03RR1 Polysure PP Homopolymer

BOPP Film

#### Product Characteristics:

Polysure F03RR1 is a Polypropylene Homopolymer, produced by latest Spheripol – II Technology & primarily suitable for BOPP tenter Process. F03RR1 combines narrow MFR specification range especially for consistent processing on high-speed BOPP lines. The grade is free from metal stearates making it suitable for metallisable BOPP film. This grade offers excellent stretchability & gel free films with superior clarity.

#### Recommended Applications:

General Purpose BOPP Films, Adhesive tapes, Food packaging, Textile overwraps, Metallisable BOPP Films & Lamination BOPP Films

#### Typical Properties:

| Sr. No. | Property                                     | Test Method                | Unit     | Value* |
|---------|----------------------------------------------|----------------------------|----------|--------|
| 1       | Melt Flow Index (230°C & 2.16 kg)            | ASTM D1238                 | g/10 min | 3.2    |
| 2       | Tensile Strength at Yield, Type I Specimen   | ASTM D638<br>(50 mm / min) | MPa      | 35     |
| 3       | Tensile Elongation at Yield, Type I Specimen |                            | %        | 11     |
| 4       | Flexural Modulus (2% Secant)                 | ASTM D790A                 | MPa      | 1400   |
| 5       | Notched Izod Impact Strength (23°C)          | ASTM D256A                 | J/m      | 45     |
| 6       | Vicat Softening Point (10 N)                 | ASTM D1525                 | °C       | 153    |
| 7       | Heat Deflection Temperature (0.455 MPa)      | ASTM D648                  | °C       | 90     |

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

#### Processing Guidelines:

- Barrel Temperature : 230 - 280°C
- Quench Temperature : 10 - 15°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:

F03RR1 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.

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