## Provisional Technical Datasheet

# Y35GR1 Polysure PP Homopolymer — Nonwoven

**Product Characteristics:**

Polysure Y35GR1 is a Control Rheology Polypropylene Homopolymer, produced by latest Spheripol – II Technology & primarily suitable for fine denier Multifilament Yarn & Nonwoven processes. It is also suitable for Extrusion Coating process. Y35GR1 combines exceptional processability with superior spinnability & resistance to gas fading.

**Recommended Applications:**

Spunbond Nonwoven Fabric, Face Masks, Coverall, Shoe Covers, Head Covers, Medical Apron, Suit Covers, Diapers, Carry Bag, Multifilament Yarn, Extrusion Coating

**Typical Properties:**

| Sr. No. | Property | Test Method | Unit | Value* |
|---|---|---|---|---|
| 1 | Melt Flow Index (230°C & 2.16 kg) | ASTM D1238 | g/10 min | 35 |
| 2 | Tensile Strength at Yield, Type I Specimen | ASTM D638 (50 mm / min) | MPa | 32 |
| 3 | Tensile Elongation at Yield, Type I Specimen | | % | 10 |
| 4 | Flexural Modulus (1% Secant) | ASTM D790A | MPa | 1250 |
| 5 | Notched Izod Impact Strength (23°C) | ASTM D256A | J/m | 30 |
| 6 | Vicat Softening Point (10 N) | ASTM D1525 | °C | 151 |
| 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 : 195 - 235°C
- Avg. Die Temperature : 235 - 240°C
- Quench Air Temperature : 15 - 18°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:**

Y35GR1 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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