Provisional Technical Datasheet

Y25GR1 Polysure PP Homopolymer — Fibre & Filament

Product Characteristics:
Polysure Y25GR1 is Polypropylene Homopolymer (Reactor Grade), produced by Latest Spheripol – II Technology & primarily suitable for Multifilament Yarn Extrusion & Nonwoven processes. It can also be used in Extrusion Coating process. Y25GR1 offers smooth processing & superior resistance to gas fading.

Recommended Applications:
Multi Filament Yarn, Bulk Continuous Filament Yarn, Staple Fiber, Non-woven Fabrics, Carpets

Typical Properties:

Sr. No.	Property	Test Method	Unit	Value*
1	Melt Flow Index (230°C & 2.16 kg)	ASTM D1238	g/10 min	25
2	Tensile Strength at Yield, Type I Specimen	ASTM D638 (50 mm / min)	MPa	34
3	Tensile Elongation at Yield, Type I Specimen		%	10
4	Flexural Modulus (1% Secant)	ASTM D790A	MPa	1500
5	Notched Izod Impact Strength (23°C)	ASTM D256A	J/m	25
6	Vicat Softening Point (10 N)	ASTM D1525	°C	152
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 D4101*

Processing Guidelines:

- Barrel Temperature : 195 - 240°C
- Avg. Die Temperature : 240 - 250°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:
Y25GR1 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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