Technical Datasheet

Y12GR Polypropylene Homopolymer — Fiber & Filaments

Product Characteristics:
Polysure Y12GR is a Polypropylene Homopolymer, produced by latest Novolen Technology & primarily suitable for Fiber Spinning operations to produce Staple Fibers and High Tenacity Multifilament Yarns. Y12GR is formulated with gas fading resistant stabilizer package to offer excellent balance between processability and end use performance in fiber and filament application.

Recommended Applications:
Y12GR is recommended for Staple fibers and High Tenacity Multifilament yarns

Typical Properties:

Sr. No.	Property	Test Method	Unit	Value*
1	Melt Flow Index (230°C & 2.16 kg)	ASTM D1238	g/10 min	12
2	Tensile Strength at Yield (50mm / min)	ASTM D638	MPa	35
3	Tensile Elongation at Yield (50mm / min)	ASTM D638	%	10
4	Flexural Modulus (1% Secant)	ASTM D790A	MPa	1450
5	Notched Izod Impact Strength (23°C)	ASTM D256	J/m	30
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 : 200 - 250°C
- Avg. Die Heater Temperature : 250 - 255°C
- Quench Air Temperature : 15 - 20°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:
Y12GR 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 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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