Technical Datasheet

T03NR1 Polysure PP Homopolymer — Thermoforming

Product Characteristics:
PolysureT03NR1 is a Polypropylene Homopolymer, produced by latest Spheripol – II Technology & primarily suitable for Sheet Extrusion & Thermoforming processes. T03NR1 offers superior clarity & gloss with high stiffness & reduced cycle time due to the presence of nucleating agent. Antistatic agents present in the grade reduces static charge build-up in products.

Recommended Applications:
Disposable Cups & Glasses, Food containers, Dairy containers, Trays, Rigid packaging, etc.

Typical Properties:

Sr. No.	Property	Test Method	Unit	Value*
1	Melt Flow Index (230°C & 2.16 kg)	ASTM D1238	g/10 min	3.5
2	Tensile Strength at Yield, Type I Specimen	ASTM D638 (50 mm / min)	MPa	37
3	Tensile Elongation at Yield, Type I Specimen		%	10
4	Flexural Modulus (2% Secant)	ASTM D790A	MPa	1700
5	Notched Izod Impact Strength (23°C)	ASTM D256A	J/m	50
6	Vicat Softening Point (10 N)	ASTM D1525	°C	156
7	Heat Deflection Temperature (0.455 MPa)	ASTM D648	°C	110

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

Processing Guidelines:

- Barrel Temperature : 190 - 230°C
- Die Temperature : 220 - 250°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:
T03NR1 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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