



Technical Datasheet

CM40NR Polysure PP Impact Copolymer

Injection Molding

Product Characteristics:

Polysure CM40NR is a Polypropylene Impact Copolymer (Reactor Grade), produced by latest Spheripol – II Technology & primarily suitable for Injection Molding & Compounding Processes. CM40NR is a nucleated grade. It offers low warpage, good stiffness - impact balance and lower cycle time for reduced specific energy consumption to enhance sustainability.

Recommended Applications:

TWIM, Appliances, Housewares, Compounding

Typical Properties:

Sr. No.	Property	Test Method	Unit	Value*
1	Melt Flow Index (230°C & 2.16 kg)	ASTM D1238	g/10 min	40
2	Tensile Strength at Yield, Type I Specimen	ASTM D638 (50 mm / min)	MPa	25
3	Tensile Elongation at Yield, Type I Specimen		%	5
4	Flexural Modulus (2% Secant)	ASTM D790A	MPa	1200
5	Notched Izod Impact Strength (23°C)	ASTM D256A	J/m	65
6	Vicat Softening Point (10 N)	ASTM D1525	°C	145
7	Heat Deflection Temperature (0.455 MPa)	ASTM D648	°C	96

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

Processing Guidelines:

- Processing Temperature : 190 - 230°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:

CM40NR 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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