

Provisional Technical Datasheet

M0662DU Polysure HDPE

Injection Molding

Product Characteristics:

Polysure M0662DU is 1-Hexene comonomer based High Density Polyethylene, produced by Advanced Dual Loop Slurry MarTECH™ technology, suitable for Injection Molding process. M0662DU resin offers superior dimensional stability of the products with excellent stiffness, good impact resistance, low warpage and good durability. This UV stabilized grade is specifically designed for long term outdoor exposure during service life.

Recommended Applications:

Heavy-duty Crates, Tote Boxes, Industrial Products

Typical Properties:

Sr. No.	Property	Test Method	Unit	Value*
1	Melt Flow Index (190°C & 2.16 kg)	ASTM D1238	g/10 min	6.5
2	Density (23°C)	ASTM D1505	g/cc	0.962
3	Tensile Strength at Yield, Type IV Specimen	ASTM D638 (50 mm / min)	MPa	28
4	Tensile Elongation at Break, Type IV Specimen		%	990
5	Flexural Modulus (1% Secant)	ASTM D790A	MPa	1250
6	Notched Izod Impact Strength (23°C)	ASTM D256A	J/m	50
7	Vicat Softening Point (10N)	ASTM D1525	°C	127
8	Heat Deflection Temperature (0.455 MPa)	ASTM D648	°C	87

*All the mechanical properties are tested on Injection Molded Test Specimen

Processing Guidelines:

- Barrel Temperature : 190 - 220°C
- Mold Temperature : 20 - 30°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:

M0662DU to be manufactured complying the requirements specified in IS 10146 on "Specification for Polyethylene for its 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.

Updated as of Jan 2024

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