Provisional Technical Datasheet

R0151D Polysure HDPE — Raffia

Product Characteristics:

Polysure R0151D is a 1-Hexene co-monomer based High Density Polyethylene, produced by Advanced Dual Loop Slurry MarTECH™ technology, suitable for Raffia tape Extrusion process. R0151D resin comes with a combination of excellent processability with low water carry over, good stretchability and resistance to fibrillation. Tapes made with R0151D have high tenacity.

Recommended Applications:

Stretched tapes for woven fabric applications, Fertilizer bags, Food Grain bags, Tarpaulin and General-purpose wrapping fabrics

Typical Properties:

Sr. No.	Property	Test Method	Unit	Value*
1	Melt Flow Index (190°C & 2.16 kg)	ASTM D1238	g/10 min	0.55
2	Density (23°C)	ASTM D1505	g/cc	0.951
3	Tensile Strength at Yield, Type IV Specimen	ASTM D638 (50 mm / min)	MPa	26
4	Tensile Strength at Break, Type IV Specimen		MPa	35
5	Tensile Elongation at Break, Type IV Specimen		%	>800
6	Flexural Modulus (1% Secant)	ASTM D790A	MPa	1200
7	Notched Izod Impact Strength (23°C)	ASTM D256A	J/m	250
8	ESCR (F_{50}), 100% Igepal	ASTM D1693B	Hour	80

***** *All the mechanical properties are determined on Compression Molded Test Specimen, prepared in accordance with ASTM D4703*

Processing Guidelines:

- Barrel Temperature : 190 - 240°C
- Die Temperature : 220 - 240°C
- Quench Temperature : 25 - 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:

R015D to be manufactured complying the requirements specified in IS 10146 on “Specification for Polyethylene for its safe 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 May 2021

HPCL-Mittal Energy Limited (HMEL), INOX Tower, Plot No.17, Sector-16A, Noida – 201301 (U.P), India. Tel: 0120-4634500. Corporate Site: www.hmel.in