Provisional Technical Datasheet

F0153S Polysure HDPE — HD Film

Product Characteristics:

Polysure F0153S is 1-hexene comonomer based High Density Polyethylene, produced by Gas Phase – UNIPOL™ PE technology, suitable for Blown Film Extrusion process. F0153S resin offers excellent processability, good bubble stability, superb mechanical properties and high filler loading characteristics.

Recommended Applications:

General purpose packaging, Kirana bags, Shopping bags, T-shirt bags, Liners, Trash bags, Multilayer films

Typical Properties:

Sr. No.	Property	Test Method	Unit	Value*
1	Melt Flow Index (190°C & 2.16 kg)	ASTM D1238	g/10 min	0.2
2	Density (23°C)	ASTM D1505	g/cc	0.953
Film Properties*:				
1	Tensile Strength at Yield (MD/TD)	ASTM D882 (50 mm / min)	MPa	24 / 26
2	Tensile Strength at Break (MD/TD)		MPa	50 / 30
3	Tensile Elongation at Break (MD/TD)		%	480 / 640
4	Elmendorf Tear Strength (MD/TD)	ASTM D1922	g/micron	0.8 / 10.8
5	Dart Impact Strength	ASTM D1709A	g/micron	3.6

***** *The film properties have been measured on 25 µm thick films (Blow-up ratio: 4, Die Gap: 1 mm)*

Processing Guidelines:

- Barrel Temperature : 180 - 220°C
- Die Temperature : 190 - 210°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:

F0153S 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