

Technical Datasheet

F0118L Polysure LLDPE

Blown Film

Product Characteristics:

Polysure F0118L is a 1-butene comonomer based Linear Low-Density Polyethylene, produced by Gas Phase – UNIPOL™ PE technology and primarily suitable for Blown Film Process. This grade does not contain Slip & Anti-block additives. Film produced with F0118L offers excellent optical, superior mechanical, tear resistance & good draw down characteristics.

Recommended Applications:

General purpose packaging, Multilayer films, Liners, Agricultural film, Lamination films, Co-extrusion films, Drip laterals, Stretch cling films.

Typical Properties:

Sr. No.	Property	Test Method	Unit	Value*
Resin Properties:				
1	Melt Flow Index (190°C & 2.16 kg)	ASTM D1238	g/10 min	1.0
2	Density (23°C)	ASTM D1505	g/cc	0.920
Film Properties*:				
1	Tensile Strength at Yield (MD/TD)	ASTM D882 (500 mm / min)	MPa	10 / 11
2	Tensile Strength at Break (MD/TD)		MPa	40 / 32
3	Tensile Elongation at Break (MD/TD)		%	900 / 1000
4	Elmendorf Tear Strength (MD/TD)	ASTM D1922	g/micron	6.5 / 10
5	Dart Impact Strength	ASTM D1709A	g/micron	3.5
6	Haze	ASTM D1003	%	10
7	Gloss	ASTM D2457, 45°	GU	60

* The film properties have been measured on 25.4 µm (1.0 mil) thick films (Blow-up ratio: 2.5, Die Gap: 1.8 mm)

Processing Guidelines:

- Barrel Temperature : 175 - 220°C
- Blow Up Ratio : 2 - 3
- Die Gap : 1.8 - 2.5 mm

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 7328:2020 - Specification for Polyethylene Material for Moulding and Extrusion.

Regulatory Requirements:

F0118L 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.

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