

## Technical Datasheet

# F0418LM Polysure Metallocene LLDPE

Cast Film

### Product Characteristics:

Polysure F0418LM is a 1-hexene comonomer based Linear Low-Density Polyethylene, produced by Gas Phase – UNIPOL™ PE technology, using Metallocene Catalyst and primarily suitable for Cast Film Mono & Multilayer Extrusion Process. Film produced with F0418LM offers smooth processing & superior drawdown characteristic. Film will also have superior tensile, impact & puncture resistance properties.

### Recommended Applications:

Cast Stretch Film, Food Packaging film, Barrier food packaging, Hygiene Film, Industrial Packaging, Diaper Backsheet, Packaging film

### Typical Properties:

Sr. No.	Property	Test Method	Unit	Value*
<b>Resin Properties:</b>				
1	Melt Flow Index (190°C & 2.16 kg)	ASTM D1238	g/10 min	3.5
2	Density (23°C)	ASTM D1505	g/cc	0.918
<b>Film Properties*:</b>				
1	Tensile Strength at Yield (MD/TD)	ASTM D882 (500 mm / min)	MPa	9 / 9
2	Tensile Strength at Break (MD/TD)		MPa	50 / 40
3	Tensile Elongation at Break (MD/TD)		%	500 / 600
4	Elmendorf Tear Strength (MD/TD)	ASTM D1922	g/micron	11 / 15
5	Dart Impact Strength	ASTM D1709A	g/micron	9
6	Haze	ASTM D1003	%	8
7	Gloss	ASTM D2457, 45°	GU	86

\* The film properties have been measured on 20 µm (0.8 mil) thick cast films

### Processing Guidelines:

- Barrel Temperature : 175 - 220°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 7328:2020 - Specification for Polyethylene Material for Moulding and Extrusion.

### Regulatory Requirements:

F0418LM 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 complies 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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