Provisional Technical Datasheet

F0418LM Polysure LLDPE (Metallocene) 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 Mono & Multilayer Cast Film Extrusion Process. Film produced with F0418LM offers smooth processing & superior drawdown characteristic. Film will also have superior tensile, impact & puncture resistance properties.

Recommended Applications:

High performance multilayer film, FFS packaging film, Overwrap film, Heavy duty bags, Barrier film, Food packaging, Freezer Film, Non-food packaging film, Agricultural film, Bag in box

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	3.5
2	Density (23°C)	ASTM D1505	g/cc	0.918
Film Properties*:				
1	Tensile Strength at Yield (MD/TD)	ASTM D882 (500 mm / min)	MPa	8.3 / 7.6
2	Tensile Strength at Break (MD/TD)		MPa	86.2 / 55.2
3	Tensile Elongation at Break (MD/TD)		%	500 / 750
4	Elmendorf Tear Strength (MD/TD)	ASTM D1922	g/micron	8 / 23
5	Dart Impact Strength	ASTM D1709A	g/micron	9
6	Haze	ASTM D1003	%	2.0
7	Gloss	ASTM D2457, 45°	GU	86

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

Processing Guidelines:

- Processing Temperature : 190 - 240°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:

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 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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