Provisional Technical Datasheet

F0320L Polysure LLDPE — Blown & Cast Film

Product Characteristics:

Polysure F0320L is a 1-butene comonomer based Linear Low-Density Polyethylene, produced by Gas Phase – UNIPOL™ PE technology and primarily suitable for high speed Blown & Cast Film Extrusion Process. This grade does not contain Slip & Anti-block additives. Film produced with F0320L offers excellent optical, superior mechanical, tear resistance & good heat seal properties.

Recommended Applications:

High speed co-extrusion, Liners, Air bubble film, Stretch Wrap, Multilayer film, Lamination, Mulch films for Agriculture and wire & cable compounds.

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	3.0
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	25 / 20
3	Tensile Elongation at Break (MD/TD)		%	450 / 650
4	Elmendorf Tear Strength (MD/TD)	ASTM D1922	g/micron	2.5 / 8.5
5	Dart Impact Strength	ASTM D1709A	g/micron	2.5
6	Haze	ASTM D1003	%	8
7	Gloss	ASTM D2457, 60°	GU	95

** 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.

Regulatory Requirements:

F0320L 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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