ExxonMobil® LDPE

ExxonMobil Chemical

LD 100 series

Low Density Polyethylene for blown film applications

Key features

LD 100 series are LDPE grades, offering a good balance of optical and mechanical properties.

Several additive packages are available according to the required surface properties.

They are typically used in produce bags, T-shirt carrier bags, display packaging and light duty shrink film.

Recommended blown film extrusion conditions

- Melt temperature : 160 - 180 °C
- Blow-up ratio : 2.5 : 1 (or higher)
- Film thickness range : 25 - 60 µm

Additive packages

	Antiblock (ppm)	Slip (ppm)	Stabilizer (non BHT)
LD 100 BW	-	-	+
LD 100 AC	450	500 (*)	+
LD 100 BR	1000	750 (*)	+

(*) Erucamide

Typical values

General properties		Test Method (based on)	Unit	Typical Value
Melt Index		ASTM D 1238	g/10 min	2
Density		ASTM D 2839/1505	g/cm^3	0.923
Melting Point (DSC)		ASTM D 3418	°C	109
Crystallization Point (DSC)		ASTM D 3418	°C	95
Film properties				
Tensile Strength at Break	MD / TD	ASTM D 882	MPa	27 / 22
Elongation at Break	MD / TD	ASTM D 882	%	270 /580
1 % Secant Modulus	MD / TD	ASTM D 882	MPa	210 / 250
Haze		ASTM D 1003	%	6
Gloss (60° angle)		ASTM D 2457	%	10
Clarity		ASTM D 1746	%	60
Dart Drop Impact (A/Face)		ASTM D 1709	g/µm	2.5
Elmendorf Tear Strength	MD / TD	ASTM D 1922	g/µm	5.8 / 3.6

The film properties have been measured on a 30 µm thick film LD 100 BW (Blow-up ratio : 2.5)

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