ExxonMobil™ LDPE LD 103 Series

Low Density Polyethylene Resin

Product Description

ExxonMobil LD 103 resins are homopolymer industrial film resins with excellent toughness. LD 103 resins have a low melt index, which provides good impact strength and melt strength over a range of gauges.

General

Availability [1]	▪ Latin America	▪ North America	
Additive	▪ LD 103.59: Antiblock: 3000 ppm; Slip: No; Thermal Stabilizer: Yes ▪ LD 103.09: Antiblock: No; Slip: No; Thermal Stabilizer: Yes		
Applications	▪ Agricultural Film ▪ Blend Partner ▪ Co-Extrusion Films	▪ Form Fill And Seal Packaging ▪ Freezer Film ▪ Liners	▪ Medium Duty Shrink Film ▪ Rubber Bale Wrap
Revision Date	▪ 06/01/2012		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.919	g/cm³	0.919	g/cm³	ExxonMobil Method
Melt Index (190°C/2.16 kg)	1.1	g/10 min	1.1	g/10 min	ASTM D1238
Peak Melting Temperature	226	°F	108	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1600	psi	11	MPa	ASTM D882
Tensile Strength at Yield TD	1500	psi	10	MPa	ASTM D882
Tensile Strength at Break MD	4200	psi	29	MPa	ASTM D882
Tensile Strength at Break TD	3500	psi	24	MPa	ASTM D882
Elongation at Break MD	150	%	150	%	ASTM D882
Elongation at Break TD	580	%	580	%	ASTM D882
Secant Modulus MD - 1% Secant	29000	psi	200	MPa	ASTM D882
Secant Modulus TD - 1% Secant	37000	psi	250	MPa	ASTM D882
Dart Drop Impact	140	g	140	g	ASTM D1709A
Elmendorf Tear Strength MD	340	g	340	g	ASTM D1922
Elmendorf Tear Strength TD	70	g	70	g	ASTM D1922
Puncture Force	10	lbf	44	N	ExxonMobil Method
Puncture Energy	9.6	in·lb	1.1	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	50		50		ASTM D2457
Haze	11	%	11	%	ASTM D1003

Legal Statement

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

This product is not intended for use in medical applications and should not be used in any such applications.

Processing Statement

Film (1.5 mil / 38.1 micron) made from LD 103.09 on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 388°F (198°C), a 30 mil (0.76 mm) die gap at a rate of 8 lbs/hr/in die circumference (1.43 kg/hr/cm).

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Notes

Typical properties: these are not to be construed as specifications.

[1] Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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