ExxonMobil™ LDPE LD 312 Series

Low Density Polyethylene Resin

Product Description

ExxonMobil LD 312 series resins are 4.6 wt% vinyl acetate copolymers for films with good toughness. The comonomer content and low melt index of those resins help produce films which exhibit superior impact strength, good heat sealability and good low temperature properties.

General

Availability [1]	▪ Latin America	▪ North America	
Additive	▪ LD 312.82: Antiblock: 4000 ppm; Slip: 800 ppm; Thermal Stabilizer: Yes ▪ LD 312.23: Antiblock: 5000 ppm; Slip: 1100 ppm; Thermal Stabilizer: Yes		
Applications	▪ Co-Extrusion Films ▪ Foams ▪ Form Fill And Seal Packaging	▪ Freezer Film ▪ Lamination Film ▪ Poultry Bag	▪ Produce Bags ▪ Rice Bags
Revision Date	▪ 01/01/2012		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.925	g/cm³	0.925	g/cm³	ExxonMobil Method
Melt Index (190°C/2.16 kg)	1.0	g/10 min	1.0	g/10 min	ASTM D1238
Vinyl Acetate Content	4.6	wt%	4.6	wt%	ExxonMobil Method
Peak Melting Temperature	221	°F	105	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Break MD	3600	psi	25	MPa	ASTM D882
Tensile Strength at Break TD	3400	psi	24	MPa	ASTM D882
Elongation at Break MD	170	%	170	%	ASTM D882
Elongation at Break TD	560	%	560	%	ASTM D882
Secant Modulus MD - 1% Secant	20000	psi	140	MPa	ASTM D882
Secant Modulus TD - 1% Secant	24000	psi	170	MPa	ASTM D882
Dart Drop Impact	200	g	200	g	ASTM D1709A
Elmendorf Tear Strength MD	190	g	190	g	ASTM D1922
Elmendorf Tear Strength TD	90	g	90	g	ASTM D1922
Puncture Force	7	lbf	29	N	ExxonMobil Method
Puncture Energy	4.1	in·lb	0.46	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	66		66		ASTM D2457
Haze	8.5	%	8.5	%	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 micron) made from LD 312.23 on a 2.5 inch blown film line having a 6 inch die with a 30 mil die gap at a 2.5:1 blow-up ratio and a melt temperature of 389°F (198°C).

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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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