ExxonMobil™ LDPE LD 302 Series

Low Density Polyethylene Resin

Product Description

ExxonMobil™ LD 302 resins are 3.5 wt% vinyl acetate copolymer, high clarity film resins. The combination of comonomer content and low melt index helps produce films which exhibit superior impact strength, good heat sealability, and good low temperature properties.

General

Availability [1]	▪ Latin America	▪ North America	
Additive	▪ LD 302.56: Antiblock: 3000 ppm; Slip: No; Thermal Stabilizer: Yes ▪ LD 302.AJ: Antiblock: 2500 ppm; Slip: 500 ppm; Thermal Stabilizer: Yes ▪ LD 302.LS: Antiblock: 3000 ppm; Slip: No; Thermal Stabilizer: Yes		
Applications	▪ Co-Extrusion Films ▪ Foams ▪ Form Fill And Seal Packaging	▪ Freezer Film ▪ Lamination Film ▪ Poultry Bag	▪ Produce Bags
Form(s)	▪ Pellets		
Revision Date	▪ 06/17/2020		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.923	g/cm³	0.923	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	1.3	g/10 min	1.3	g/10 min	ASTM D1238
Vinyl Acetate Content	3.5	wt%	3.5	wt%	ExxonMobil Method
Peak Melting Temperature	219	°F	104	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	187	°F	86.0	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1300	psi	8.6	MPa	ASTM D882
Tensile Strength at Yield TD	1200	psi	8.6	MPa	ASTM D882
Tensile Strength at Break MD	3600	psi	25	MPa	ASTM D882
Tensile Strength at Break TD	3200	psi	22	MPa	ASTM D882
Elongation at Break MD	150	%	150	%	ASTM D882
Elongation at Break TD	520	%	520	%	ASTM D882
Secant Modulus MD - 1% Secant	22000	psi	150	MPa	ASTM D882
Secant Modulus TD - 1% Secant	26000	psi	180	MPa	ASTM D882
Dart Drop Impact	170	g	170	g	ASTM D1709A
Elmendorf Tear Strength MD	200	g	200	g	ASTM D1922
Elmendorf Tear Strength TD	100	g	100	g	ASTM D1922
Puncture Force	8	lbf	36	N	ExxonMobil Method
Puncture Energy	5.4	in·lb	0.61	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	71		71		ASTM D2457
Haze	5.8	%	5.8	%	ASTM D1003

Legal Statement

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

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

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Processing Statement

Film (1.5 mil/38.1 micron) made on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 340-360°F (171-182°C), a 30 mil (0.76 mm) die gap at a rate of 8 lbs/hr/in die circumference (1.43 kg/hr/cm).

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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