ExxonMobil™ LDPE LD 313.NF

Low Density Polyethylene Resin

Product Description

ExxonMobil™ LD 313.NF is a 3 wt% vinyl acetate copolymer. The vinyl acetate content of this resin provides good heat sealing and good cold temperature toughness when compared to LDPE homopolymers.

General

Availability [1]	▪ Latin America	▪ North America	
Additive	▪ Antiblock: 2500 ppm	▪ Slip: 800 ppm	▪ Thermal Stabilizer: Yes
Applications	▪ Carpet Backing ▪ Co-Extrusion Films ▪ Foams	▪ Form Fill And Seal Packaging ▪ Freezer Film ▪ High Clarity Film	▪ Lamination Film
Form(s)	▪ Pellets		
Revision Date	▪ 06/17/2020		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.925	g/cm³	0.925	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	2.5	g/10 min	2.5	g/10 min	ASTM D1238
Vinyl Acetate Content	3.0	wt%	3.0	wt%	ExxonMobil Method
Peak Melting Temperature	223	°F	106	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	191	°F	88.4	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1300	psi	8.9	MPa	ASTM D882
Tensile Strength at Yield TD	1300	psi	9.2	MPa	ASTM D882
Tensile Strength at Break MD	3400	psi	23	MPa	ASTM D882
Tensile Strength at Break TD	2800	psi	19	MPa	ASTM D882
Elongation at Break MD	190	%	190	%	ASTM D882
Elongation at Break TD	520	%	520	%	ASTM D882
Secant Modulus MD - 1% Secant	21000	psi	150	MPa	ASTM D882
Secant Modulus TD - 1% Secant	25000	psi	170	MPa	ASTM D882
Dart Drop Impact	120	g	120	g	ASTM D1709A
Elmendorf Tear Strength MD	240	g	240	g	ASTM D1922
Elmendorf Tear Strength TD	150	g	150	g	ASTM D1922
Puncture Force	6	lbf	28	N	ExxonMobil Method
Puncture Energy	3.7	in·lb	0.42	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	77		77		ASTM D2457
Haze	5.1	%	5.1	%	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 313.NF resin 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).

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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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