ExxonMobil™ LDPE LD 331.NM

Low Density Polyethylene Resin

Product Description

ExxonMobil™ LDPE LD 331.NM is a 5.9 wt% vinyl acetate copolymer, high clarity film resin. Films made from LD 331.NM resins exhibit superior impact strength and heat sealability.

General

Availability [1]	▪ Latin America	▪ North America	
Additive	▪ Antiblock: No	▪ Slip: No	▪ Thermal Stabilizer: Yes
Applications	▪ Co-Extrusion Films ▪ Foams ▪ Form Fill And Seal Packaging	▪ Freezer Film ▪ High Clarity Film ▪ Lamination Film	▪ Poultry Bag ▪ Produce Bags ▪ Rice Bags
Form(s)	▪ Pellets		
Revision Date	▪ 08/02/2021		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.926	g/cm³	0.926	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	2.0	g/10 min	2.0	g/10 min	ASTM D1238
Vinyl Acetate Content	5.9	wt%	5.9	wt%	ExxonMobil Method
Peak Melting Temperature	214	°F	101	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	178	°F	81.0	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1000	psi	7.1	MPa	ASTM D882
Tensile Strength at Yield TD	1000	psi	6.9	MPa	ASTM D882
Tensile Strength at Break MD	4300	psi	29	MPa	ASTM D882
Tensile Strength at Break TD	3600	psi	25	MPa	ASTM D882
Elongation at Break MD	330	%	330	%	ASTM D882
Elongation at Break TD	620	%	620	%	ASTM D882
Secant Modulus MD - 1% Secant	17000	psi	120	MPa	ASTM D882
Secant Modulus TD - 1% Secant	19000	psi	130	MPa	ASTM D882
Dart Drop Impact	230	g	230	g	ASTM D1709A
Elmendorf Tear Strength MD	160	g	160	g	ASTM D1922
Elmendorf Tear Strength TD	100	g	100	g	ASTM D1922
Puncture Force	13	lbf	59	N	ExxonMobil Method
Puncture Energy	24	in·lb	2.7	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	84		84		ASTM D2457
Haze	2.5	%	2.5	%	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/38.1 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).

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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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