

## ExxonMobil™ LLDPE LL 3201 Series

# Linear Low Density Polyethylene Resin

#### **Product Description**

ExxonMobil™ LL 3201 resins are ethylene 1-hexene linear low density polyethylene film resins. Films made from LL 3201 resins have outstanding tensile, stiffness, and toughness properties. These superior properties, along with good drawdown capability, permit usage in many demanding packaging applications.

General					
Availability <sup>1</sup>	<ul> <li>Latin America</li> </ul>	• No	orth America		
Additive	<ul> <li>LL 3201.69: Antiblock: No; Slip: No; Processing Aid: Yes; Thermal Stabilizer: Yes</li> <li>LL 3201.36: Antiblock: 5000 ppm; Slip: No; Processing Aid: Yes; Thermal Stabilizer: Yes</li> <li>LL 3201.15: Antiblock: 4250 ppm; Slip: Yes; Processing Aid: Yes; Thermal Stabilizer: Yes</li> </ul>				
Applications	<ul><li>Freezer Film</li><li>Grocery Sacks</li></ul>		avy Duty Bags erchandise Bags		
Form(s)	<ul> <li>Pellets</li> </ul>				
Revision Date	• 09/24/2021				
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)	0.80	g/10 min	0.80	g/10 min	ASTM D1238
Peak Melting Temperature	257	°F	125	°C	ExxonMobil Method
Thermal	Typical Value	(English)	Typical Value	(SI)	Test Based On
Vicat Softening Temperature	226	°F	108	°C	ExxonMobil Method
Film Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Tensile Strength at Yield MD	1700	psi	12	MPa	ASTM D882
Tensile Strength at Yield TD	1900	psi	13	MPa	ASTM D882
Tensile Strength at Break MD	8300	psi	60	MPa	ASTM D882
Tensile Strength at Break TD	6700	psi	46	MPa	ASTM D882
Elongation at Break MD	530	%	530	%	ASTM D882
Elongation at Break TD	800	%	800	%	ASTM D882
Secant Modulus MD - 1% Secant	38000	psi	260	MPa	ASTM D882
Secant Modulus TD - 1% Secant	46000	psi	320	MPa	ASTM D882
Dart Drop Impact	130	g	130	g	ASTM D1709A
Elmendorf Tear Strength MD	220	9	220	g	ASTM D1922
Elmendorf Tear Strength TD	670	9	670	g	ASTM D1922
Puncture Force	11	lbf	47	N	ExxonMobil Method
Puncture Energy	33	in·lb	3.7	J	ExxonMobil Method
Optical Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Gloss (45°)	58		58		ASTM D2457
Haze	14	%	14	%	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 (1.0 mil/25.4 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 395-415°F (202-213°C), a 60 mil (1.52 mm) die gap at a rate of 10 lbs/hr/in die circumference (1.79 kg/hr/cm).

Effective Date: 09/24/2021 ExxonMobil Page: 1 of 2



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#### Notes

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

<sup>1</sup> 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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