

# ExxonMobil™ LLDPE LL 3201 Series

## Linear Low Density Polyethylene Resin

### Product Description

LL 3201 resins are LLDPE hexene copolymer film resins. Film 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 style="list-style-type: none"> <li>▪ Latin America</li> <li>▪ North America</li> </ul>
Additive	<ul style="list-style-type: none"> <li>▪ LL 3201.36: Antiblock: 5000 ppm; Slip: No; Processing Aid: Yes; Thermal Stabilizer: Yes</li> <li>▪ LL 3201.69: Antiblock: No; Slip: No; Processing Aid: Yes; Thermal Stabilizer: Yes</li> </ul>
Applications	<ul style="list-style-type: none"> <li>▪ Freezer Film</li> <li>▪ Grocery Sacks</li> <li>▪ Heavy Duty Bags</li> <li>▪ Merchandise Bags</li> </ul>
Revision Date	<ul style="list-style-type: none"> <li>▪ 03/01/2010</li> </ul>

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.926 g/cm <sup>3</sup>	0.926 g/cm <sup>3</sup>	ExxonMobil Method
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

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	2000 psi	13 MPa	ASTM D882
Tensile Strength at Break MD	8900 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	7000 psi	48 MPa	ASTM D882
Elongation at Break MD	510 %	510 %	ASTM D882
Elongation at Break TD	810 %	810 %	ASTM D882
Secant Modulus MD - 1% Secant	34000 psi	240 MPa	ASTM D882
Secant Modulus TD - 1% Secant	41000 psi	280 MPa	ASTM D882
Dart Drop Impact	110 g	110 g	ASTM D1709
Elmendorf Tear Strength MD	140 g	140 g	ASTM D1922
Elmendorf Tear Strength TD	780 g	780 g	ASTM D1922
Puncture Force	10 lbf	44 N	ExxonMobil Method
Puncture Energy	26 in-lb	2.9 J	ExxonMobil Method

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	57	57	ASTM D2457
Haze	11 %	11 %	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 mil / 25/4 micron) made on a Gloucester 2.5 inch blown film line with a 2.5:1 blow-up ratio, a melt temperature of 405°F and a 60 mil die gap.

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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](http://www.exxonmobilchemical.com/ContactUs)

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