

# ExxonMobil™ LLDPE LL 1001 Series

## Linear Low Density Polyethylene Resin

### Product Description

LL 1001 series are LLDPE grades, offering excellent drawdown and puncture resistance combined with high gloss and clarity. They are also frequently used as a blend partner with LDPE resins to improve film properties and processability. Several additive packages are available according to the required surface properties.

### General

Availability <sup>1</sup>	<ul style="list-style-type: none"> <li>Africa &amp; Middle East</li> <li>Europe</li> </ul>
Additive	<ul style="list-style-type: none"> <li>LL 1001XV: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes</li> <li>LL 1001KI: Antiblock: 2500 ppm; Slip: 1000 ppm; Processing Aid: No; Thermal Stabilizer: Yes</li> <li>LL 1001KW: Antiblock: 3500 ppm; Slip: 1500 ppm; Processing Aid: No; Thermal Stabilizer: Yes</li> </ul>
Applications	<ul style="list-style-type: none"> <li>Agricultural Film</li> <li>Bag in Box</li> <li>Barrier Food Packaging</li> <li>Blown Film</li> <li>Bread Bags</li> <li>Food Packaging</li> <li>Form Fill And Seal Packaging</li> <li>Freezer Film</li> <li>Garment Film</li> <li>General Packaging</li> <li>Heavy Duty Bags</li> <li>Ice Bags</li> <li>Industrial Liners</li> <li>Industrial Packaging</li> <li>Lamination Film</li> <li>Liners</li> <li>Multilayer Packaging Film</li> <li>Packaging Films</li> <li>Produce Bags</li> <li>Refuse Bags</li> <li>Shoppers</li> <li>Stand Up Pouches</li> <li>Trash Bags</li> </ul>
Revision Date	<ul style="list-style-type: none"> <li>03/01/2013</li> </ul>

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.918 g/cm <sup>3</sup>	0.918 g/cm <sup>3</sup>	ASTM D1505
Melt Index (190°C/2.16 kg)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Peak Melting Temperature	248 °F	120 °C	ExxonMobil Method

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Break MD	8700 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	5200 psi	36 MPa	ASTM D882
Elongation at Break MD	570 %	570 %	ASTM D882
Elongation at Break TD	840 %	840 %	ASTM D882
Secant Modulus MD - 1% Secant	29000 psi	200 MPa	ASTM D882
Secant Modulus TD - 1% Secant	32000 psi	220 MPa	ASTM D882
Dart Drop Impact	90 g	90 g	ASTM D1709A
Elmendorf Tear Strength MD	80 g	80 g	ASTM D1922
Elmendorf Tear Strength TD	430 g	430 g	ASTM D1922

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	48	48	ASTM D2457
Haze	13 %	13 %	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).

### Processing Statement

The film properties have been measured on 30 µm (1.18 mil) thick films of LL 1001XV (Blow-up ratio : 2.5)

### 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.

ExxonMobil™ LLDPE LL 1001 Series  
Linear Low Density Polyethylene Resin

For additional technical, sales and order assistance: [www.exxonmobilchemical.com/ContactUs](http://www.exxonmobilchemical.com/ContactUs)

©2019 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Chemical" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

[exxonmobilchemical.com](http://exxonmobilchemical.com)