

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 ¹	Asia Pacific		
Additive	- LL 1001KI: Antiblock: 2500 ppm; Slip: 1000 ppm; Processing Aid: No; Thermal Stabilizer: Yes - LL 1001XV: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes - LL 1001ZB: Antiblock: 5000 ppm; Slip: 1600 ppm; Processing Aid: No; Thermal Stabilizer: Yes - LL 1001KW: Antiblock: 3500 ppm; Slip: 1500 ppm; Processing Aid: No; Thermal Stabilizer: Yes		
Applications	- Agricultural Film - Blown Film - Bread Bags - Food packaging - Form Fill And Seal Packaging - Freezer Film - Garment Film - General Packaging - Heavy Duty Bags - Ice Bags - Industrial Liners - Industrial Packaging - Lamination Film - Liners - Multilayer Packaging Film - Packaging Films - Produce Bags - Refuse Bags - Shoppers - Stand Up Pouches - Trash Bags		
Revision Date	03/01/2010		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.918 g/cm ³	0.918 g/cm ³	ExxonMobil Method
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
Film Thickness - Tested	1.2 mil	30 µm	
Tensile Strength at Break MD	8300 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	5500 psi	38 MPa	ASTM D882
Elongation at Break MD	590 %	590 %	ASTM D882
Elongation at Break TD	860 %	860 %	ASTM D882
Secant Modulus MD - 1% Secant	32000 psi	220 MPa	ASTM D882
Secant Modulus TD - 1% Secant	36000 psi	250 MPa	ASTM D882
Dart Drop Impact	120 g	120 g	ASTM D1709A
Elmendorf Tear Strength MD	120 g	120 g	ASTM D1922
Elmendorf Tear Strength TD	480 g	480 g	ASTM D1922

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	47	47	ASTM D2457
Haze	9.0 %	9.0 %	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)

ExxonMobil™ LLDPE LL 1001 Series

Linear Low Density Polyethylene Resin

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

©2015 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