

ExxonMobil™ LLDPE LL 1107 Series

Linear Low Density Polyethylene Resin

Product Description

ExxonMobil™ LL 1107 resins are fractional melt index ethylene 1-butene linear low density polyethylene blown film resins. Films made from LL 1107 resins have good stiffness and tensile strength. These resins' strength and drawability make them excellent for many film applications.

General

Availability ¹	<ul style="list-style-type: none"> Latin America North America
Additive	<ul style="list-style-type: none"> LL 1107X93: Antiblock: 3500 ppm; Slip: 1000 ppm; Processing Aid: Yes; Thermal Stabilizer: Yes LL 1107X95: Antiblock: 3500 ppm; Slip: 1700 ppm; Processing Aid: Yes; Thermal Stabilizer: Yes
Applications	<ul style="list-style-type: none"> Blown Film Garment Film Produce Bags
Form(s)	<ul style="list-style-type: none"> Pellets
Revision Date	<ul style="list-style-type: none"> 07/01/2019

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.922 g/cm ³	0.922 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	0.80 g/10 min	0.80 g/10 min	ASTM D1238
Peak Melting Temperature	253 °F	123 °C	ExxonMobil Method

Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	219 °F	104 °C	ASTM D1525

Film Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1500 psi	10 MPa	ASTM D882
Tensile Strength at Yield TD	1600 psi	11 MPa	ASTM D882
Tensile Strength at Break MD	8000 psi	50 MPa	ASTM D882
Tensile Strength at Break TD	5000 psi	34 MPa	ASTM D882
Elongation at Break MD	540 %	540 %	ASTM D882
Elongation at Break TD	820 %	820 %	ASTM D882
Secant Modulus MD - 1% Secant	34000 psi	230 MPa	ASTM D882
Secant Modulus TD - 1% Secant	39000 psi	270 MPa	ASTM D882
Dart Drop Impact	70 g	70 g	ASTM D1709A
Elmendorf Tear Strength MD	50 g	50 g	ASTM D1922
Elmendorf Tear Strength TD	620 g	620 g	ASTM D1922
Puncture Force	8 lbf	34 N	ExxonMobil Method
Puncture Energy	15 in-lb	1.7 J	ExxonMobil Method

Optical Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	34	34	ASTM D2457
Haze	17 %	17 %	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 from LL 1107X93 resin 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).

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.

ExxonMobil™ LLDPE LL 1107 Series
Linear Low Density Polyethylene Resin

For additional technical, sales and order assistance: 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

