

# ExxonMobil™ LLDPE LL 6101 Series Molding

## Linear Low Density Polyethylene Resin

### Product Description

LL 6101 series are medium flow LLDPE grades, which offer excellent stiffness, heat distortion resistance and good environmental stress crack resistance. The excellent toughness and ESCR make LL 6101 grades an excellent blend partner for HDPE, where it can enhance the ESCR of items like buckets and lids.

### General

Availability <sup>1</sup>	▪ Africa & Middle East	▪ Asia Pacific	▪ Europe
Additive	▪ LL 6101XR: Thermal Stabilizer: Yes	▪ LL 6101RQ: Thermal Stabilizer: Yes	
Applications	▪ Bottle Caps ▪ Compounding (RQ version) ▪ Containers	▪ Door Mats ▪ Dust Bins ▪ Large Part Housewares	▪ Lids
Revision Date	▪ 04/01/2017		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.924 g/cm <sup>3</sup>	0.924 g/cm <sup>3</sup>	ASTM D1505
Melt Index (190°C/2.16 kg)	20 g/10 min	20 g/10 min	ExxonMobil Method
Peak Melting Temperature	251 °F	122 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	201 °F	94 °C	ISO 306

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Stress at Yield	1500 psi	10 MPa	ISO 527-2/1A/50
Tensile Strain at Yield	20 %	20 %	ISO 527-2/1A/50
Tensile Strain at Break	> 100 %	> 100 %	ISO 527-2/1A/50
Flexural Modulus	37000 psi	260 MPa	ISO 178
Environmental Stress-Crack Resistance 122°F (50°C), 10% Igepal	20 hr	20 hr	ASTM D1693

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact Strength	23 ft·lb/in <sup>2</sup>	47 kJ/m <sup>2</sup>	ISO 180/1A

### 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

Molded properties were measured on 2 mm (78.7 mil) thick compression molded plaques prepared based on ASTM D 4703 Procedure C 15C/min: ESCR 3 mm plaques, notch condition A.

### 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 6101 Series Molding  
Linear Low Density Polyethylene Resin

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

©2020 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)