

ExxonMobil™ LLDPE LL 6301 Series Molding

Linear Low Density Polyethylene Resin

Product Description

LL 6301 series are medium density LLDPE grades, with a relatively high molecular weight, resulting in molded articles which are very tough and exhibit excellent environmental stress cracking resistance. When compared to LDPE grades of equivalent density, LL 6301 grades exhibits a higher heat deflection temperature and a significantly greater resistance to long term creep.

General

Availability ¹	▪ Africa & Middle East	▪ Asia Pacific	▪ Europe
Additive	▪ LL 6301RQ Molding: Thermal Stabilizer: Yes	▪ LL 6301XR Molding: Thermal Stabilizer: Yes	
Applications	▪ Caps ▪ Compounding (RQ version)	▪ Housewares ▪ Technical Parts	▪ Threaded Closures
Form(s)	▪ LL 6301XR Molding: Pellets	▪ LL 6301RQ Molding: Powder	
Revision Date	▪ 04/01/2017		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.936 g/cm ³	0.936 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	5.0 g/10 min	5.0 g/10 min	ExxonMobil Method
Peak Melting Temperature	257 °F	125 °C	ExxonMobil Method

Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	237 °F	114 °C	ISO 306

Molded Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Stress at Yield	2200 psi	15 MPa	ISO 527-2/1A/50
Tensile Strain at Yield	10 %	10 %	ISO 527-2/1A/50
Tensile Strain at Break	> 100 %	> 100 %	ISO 527-2/1A/50
Flexural Modulus	67000 psi	470 MPa	ISO 178
Environmental Stress-Crack Resistance 122°F (50°C), 10% Igepal	40 hr	40 hr	ASTM D1693

Impact

	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact Strength	15 ft-lb/in ²	32 kJ/m ²	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 (177C, 15C/min); ESCR 2 mm plaques, notch condition B.

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 6301 Series Molding
Linear Low Density Polyethylene Resin

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

©2023 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 Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

exxonmobilchemical.com