

# 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

Additive	<ul style="list-style-type: none"> <li>LL 6301XR Molding: Thermal Stabilizer: Yes</li> </ul>	<ul style="list-style-type: none"> <li>LL 6301RQ Molding: Thermal Stabilizer: Yes</li> </ul>
Applications	<ul style="list-style-type: none"> <li>Caps</li> <li>Compounding (RQ version)</li> </ul>	<ul style="list-style-type: none"> <li>Housewares</li> <li>Technical Parts</li> <li>Threaded Closures</li> </ul>

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.936 g/cm <sup>3</sup>	0.936 g/cm <sup>3</sup>	ExxonMobil Method
Melt Index (190°C/2.16 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
Peak Melting Temperature	257 °F	125 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	234 °F	112 °C	ISO 306

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Stress at Yield	2000 psi	14 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	64000 psi	440 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	24 ft-lb/in <sup>2</sup>	50 kJ/m <sup>2</sup>	ISO 180/1A

