

ExxonMobil™ LLDPE LL 6101 Series

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

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

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.924 g/cm ³	0.924 g/cm ³	ExxonMobil Method
Melt Index (190°C/2.16 kg)	20 g/10 min	20 g/10 min	ASTM D1238
Peak Melting Temperature	252 °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	38000 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 ²	48 kJ/m ²	ISO 180/1A

