

ExxonMobil LLDPE

LL 6101 series

Injection Molding Resins

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.

Applications

- large housewares
- bottle caps
- containers
- door mats
- dustbins
- lids
- compounding applications (RQ version)

Additive Package	Thermal Stabilizer	Physical Appearance
LL 6101XR	Yes	Pellets
LL 6101RQ	Yes	Coarse Powder

Resin Properties	Test Based On	Typical Value / Unit	
Melt Index	ASTM D1238	20 g/10 min	
Density	ASTM D4703 / D1505	0.924 g/cm ³	
Peak Melting Temperature	ASTM D3418	123 °C	253 °F
Crystallization Point	ASTM D3418	104 °C	219 °F
Vicat Softening Point	ISO 306-A50	96 °C	205 °F

Molded Properties

Flexural Modulus (0.05 - 0.25 %)	ISO 178	260 MPa	37500 psi
Yield Strength	ISO 527-2/1A/50	10 MPa	1150 psi
Elongation @ Break	ISO 527-2/1A/50	> 100 %	
Elongation @ Yield	ISO 527-2/1A/50	19 %	
IZOD Impact	ISO 180-1A	47 KJ/m ²	22 ft-lb/in ²
Environmental Stress Crack Resistance (*)	ASTM D1693	40 hrs	

The molded properties were measured on 4 mm (157.5 mil) thick injection molded specimen based on ISO 1872-2.

(*) ESCR was measured on 2 mm (78.7 mil) thick compression molded plate (F50, 10 % Igepal, 50 °C, 122 °F).

LL 6101 series grades can - in principle - be used in food contact applications in various EU Member States and in the USA (FDA). Migration or use limitations may apply. Please contact your ExxonMobil Chemical representative for more detailed information and/or actual compliance certification documents for the specific grade of interest.

Revised 12/03