

ExxonMobil LLDPE

ExxonMobil
Chemical

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

©2003 ExxonMobil. To the extent the user is entitled to disclose and distribute this document, the user may forward, distribute, and/or photocopy this copyrighted document only if unaltered and complete, including all of its headers, footers, disclaimers, and other information. You may not copy this document to a Web site. ExxonMobil does not guarantee the typical (or other) values. Analysis may be performed on 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, 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. There is no endorsement of any product or process, and we expressly disclaim any contrary implication. The terms, "we", "our", "ExxonMobil Chemical", or "ExxonMobil" are used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliates they directly or indirectly steward. The ExxonMobil Emblem, the "Interlocking X" Device and ExxonMobil are trademarks of ExxonMobil Corporation.