

ExxonMobil™ LLDPE LL 6101 Series Molding

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

| | | | |
|---------------------------|---|---|----------|
| Availability ¹ | ▪ Africa & Middle East | ▪ Asia Pacific | ▪ Europe |
| Additive | ▪ LL 6101RQ: Thermal Stabilizer: Yes | ▪ LL 6101XR: Thermal Stabilizer: Yes | |
| Applications | ▪ Bottle Caps ▪ Compounding (RQ version) ▪ Containers | ▪ Door Mats ▪ Dust Bins ▪ Large Part Housewares | ▪ Lids |
| Form(s) | ▪ LL 6101XR: Pellets | ▪ LL 6101RQ: Powder | |
| Revision Date | ▪ 04/01/2017 | | |

| Resin Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|----------------------------|-------------------------|-------------------------|-------------------|
| Density | 0.924 g/cm ³ | 0.924 g/cm ³ | ASTM D1505 |
| Melt Index (190°C/2.16 kg) | 20 g/10 min | 20 g/10 min | ExxonMobil Method |
| Peak Melting Temperature | 251 °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 | 37000 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 | 47 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 15C/min: ESCR 3 mm plaques, notch condition A.

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.

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

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