

ExxonMobil™ LLDPE LL 8555 Series

Linear Low Density Polyethylene Resin

Product Description

LL 8555 is a linear low density hexene copolymer designed to offer superior processability, excellent dimensional control, whiteness and low warpage. This resin is ideally suited for applications that require excellent surface appearance and the optimum balance of ESCR, toughness and stiffness properties.

General

| | |
|---------------------------|---|
| Availability ¹ | <ul style="list-style-type: none"> Latin America North America |
| Additive | <ul style="list-style-type: none"> LL 8555.25: Long Term UV-8 Stabilizer: Yes LLP8555.25: Long Term UV-8 Stabilizer: Yes |
| Applications | <ul style="list-style-type: none"> Consumer Articles Playground Equipment Potable Water Tanks Fine Threaded Containers Point of Display Cabinets Toys |
| Revision Date | <ul style="list-style-type: none"> 09/01/2014 |

Resin Properties

| | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|-------------------------|-------------------|
| Density | 0.936 g/cm ³ | 0.936 g/cm ³ | ASTM D1505 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 6.8 g/10 min | 6.8 g/10 min | ASTM D1238 (mod) |
| Peak Melting Temperature | 259 °F | 126 °C | ExxonMobil Method |

Thermal

| | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|--------------------|---------------|
| Deflection Temperature Under Load (DTUL) at 66psi - Unannealed | 126 °F | 52 °C | ASTM D648 |
| Deflection Temperature Under Load (DTUL) at 264psi - Unannealed | 97 °F | 36 °C | ASTM D648 |

Molded Properties

| | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|--------------------|---------------|
| Tensile Strength at Yield 2.0 in/min (50 mm/min) | 2300 psi | 16 MPa | ASTM D638 |
| Elongation at Yield (2.0 in/min (50 mm/min)) | 10 % | 10 % | ASTM D638 |
| Flexural Modulus - 1% Secant | 83000 psi | 570 MPa | ASTM D790B |
| Environmental Stress-Crack Resistance | | | ASTM D1693A |
| 10% Igepal, F50 | 50 hr | 50 hr | |
| 100% Igepal, F50 | > 1000 hr | > 1000 hr | |

Impact

| | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------------------|-------------------------|--------------------|---------------|
| Impact Strength | | | ARM |
| -40°F (-40°C), 0.125 in (3.18 mm) | 59 ft-lb | 80 J | |
| -40°F (-40°C), 0.250 in (6.35 mm) | 150 ft-lb | 203 J | |

Additional Information

- All physical properties were measured on 3 mm. rotomolded samples unless a different value is shown, except for ESCR, which was measured on compression molded samples.
- Tensile testing was conducted at a crosshead speed of 50 mm/min. The tensile strength reported refers to the maximum stress reached during the test.
- Test procedures may be modified to accommodate operating conditions or facility limitations.

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.

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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