

Product Datasheet



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	- Latin America - North America
Additive	- LL 8555.25: Long Term UV-8 Stabilizer: Yes - LLP8555.25: Long Term UV-8 Stabilizer: Yes
Applications	- Consumer Articles - Playground Equipment - Potable Water Tanks - Fine Threaded Containers - Point of Display Cabinets - Toys
Revision Date	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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ExxonMobil**ExxonMobil™ LLDPE LL 8555 Series**
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