

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

Additive	LLP8555.25: Long Term UV-8 Stabilizer: Yes	LL 8555.25: Long Term UV-8 Stabilizer: Yes
Applications	- Consumer Articles - Fine Threaded Containers	- Playground Equipment - Point of Display Cabinets - Potable Water Tanks - Toys

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)

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
Peak Melting Temperature	259 °F	126 °C	ASTM D3418

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	

