

ExxonMobil™ LLDPE LL 8450 Series

Linear Low Density Polyethylene Resin

Product Description

LL 8450 Series are linear low density hexene copolymer designed to offer excellent stiffness, processability, whiteness, and ESCR. They are ideally suited for applications that require the optimum balance of stiffness and processability.

General

Availability ¹	▪ Latin America	▪ North America
Additive	▪ LL 8450,32: Long Term UV-10 Stabilizer: Yes	▪ LLP8450,32: Long Term UV-10 Stabilizer: Yes
Applications	▪ Consumer Articles ▪ Junction Boxes	▪ Playground Equipment ▪ Potable Water Tanks ▪ Small Storage Boxes
Revision Date	▪ 09/01/2014	

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.937 g/cm ³	0.937 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
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	122 °F	50 °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)	2400 psi	17 MPa	ASTM D638
Elongation at Yield (2.0 in/min (50 mm/min))	20 %	20 %	ASTM D638
Flexural Modulus - 1% Secant	90000 psi	620 MPa	ASTM D790B
Environmental Stress-Crack Resistance			ASTM D1693A
10% Igepal, F50	60 hr	60 hr	
100% Igepal, F50	> 980 hr	> 980 hr	

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Impact Strength			ARM
-40°F (-40°C), 0.125 in (3.18 mm)	60 ft·lb	81 J	
-40°F (-40°C), 0.250 in (6.35 mm)	160 ft·lb	217 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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