ExxonMobil™ LLDPE LL 8446.21

Linear Low Density Polyethylene Resin

Product Description

LL 8446 is a linear low density butene copolymer designed to offer excellent processability, whiteness, and fast grinding rate. This UV stabilized resin is ideally suited for applications that require excellent dimensional control and low warpage.

General

Availability [1]	▪ Africa & Middle East	▪ Asia Pacific	▪ Europe
Additive	▪ Long Term UV-8 Stabilizer: Yes		
Applications	▪ Consumer Articles ▪ General Purpose Articles	▪ Tanks ▪ Toys	
Revision Date	▪ 03/01/2010		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.936	g/cm³	0.936	g/cm³	ISO 1183
Melt Index (190°C/2.16 kg)	5.0	g/10 min	5.0	g/10 min	ISO 1133

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	257	°F	125	°C	ASTM D3418

Molded Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield	2500	psi	17	MPa	ASTM D638
Tensile Stress at Yield	2500	psi	17	MPa	ISO 527-2/1A/50
Tensile Strain at Yield	10	%	10	%	ISO 527-2/50
Flexural Modulus - 1% Secant	110000	psi	730	MPa	ASTM D790B
Flexural Modulus	100000	psi	700	MPa	ISO 178
Environmental Stress-Crack Resistance					
0.0787 in (2.00 mm), 10% Igepal, F50	30	hr	30	hr	ASTM D1693
10% Igepal, F50	20	hr	20	hr	ASTM D1693A
100% Igepal, F50	40	hr	40	hr	ASTM D1693A

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

This product is not intended for use in medical applications and should not be used in any such applications.

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

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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