

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

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.936 g/cm <sup>3</sup>	0.936 g/cm <sup>3</sup>	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

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.

<sup>1</sup> Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.



ExxonMobil™ LLDPE LL 8446.21  
Linear Low Density Polyethylene Resin

For additional technical, sales and order assistance: [www.exxonmobilchemical.com/ContactUs](http://www.exxonmobilchemical.com/ContactUs)

©2015 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Chemical" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

[exxonmobilchemical.com](http://exxonmobilchemical.com)

