

ExxonMobil™ LLDPE LL 1002 Series

Linear Low Density Polyethylene Resin

Product Description

LL 1002 series are butene LLDPE designed for the blown film process, offering high gloss and excellent draw down.

Films made from LL1002 resins have very good tensile and toughness properties.

General

Availability ¹	• Africa & Middle East	• Asia Pacific	• Europe
Additive	• LL 1002YB: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes • LL 1002KW: Antiblock: 3500 ppm; Slip: 1500 ppm; Processing Aid: No; Thermal Stabilizer: Yes		
Applications	• Agricultural Film • Bag in Box • Blown Film • Cast Film • Food packaging • Form Fill And Seal Packaging • Freezer Film	• Garment Film • General Packaging • Industrial Packaging • Institutional Can Liners • Lamination Film • Liners • Mulch Film	• Multilayer Packaging Film • Packaging Films • Personal Care • Produce Bags On A Roll • Shoppers • Trash Can Liners
Revision Date	• March 2010		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.918 g/cm ³	0.918 g/cm ³	ExxonMobil Method
Melt Index (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Peak Melting Temperature	250 °F	121 °C	ExxonMobil Method

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1600 psi	11 MPa	ASTM D882
Tensile Strength at Yield TD	1500 psi	10 MPa	ASTM D882
Tensile Strength at Break MD	7100 psi	49 MPa	ASTM D882
Tensile Strength at Break TD	4200 psi	29 MPa	ASTM D882
Elongation at Break MD	600 %	600 %	ASTM D882
Elongation at Break TD	800 %	800 %	ASTM D882
Secant Modulus MD - 1% Secant	28000 psi	190 MPa	ASTM D882
Secant Modulus TD - 1% Secant	32000 psi	220 MPa	ASTM D882
Dart Drop Impact	70 g	70 g	ASTM D1709A
Elmendorf Tear Strength MD	90 g	90 g	ASTM D1922
Elmendorf Tear Strength TD	400 g	400 g	ASTM D1922

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	76	76	ASTM D2457
Haze	4.4 %	4.4 %	ASTM D1003

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.

Typical properties: these are not to be construed as specifications.

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ExxonMobil Chemical ExxonMobil™ LLDPE LL 1002 Series

Linear Low Density Polyethylene Resin

Processing Statement

Representative samples LL1002YB from our global manufacturing facilities were used. The test specimen were prepared and tested at our European Technology Center using a 25.4 µm (1.0 mil) thick film (screw diameter = 75 mm, die gap = 2.5 mm, BUR = 2.5 and temperature setting of 200°C).

Optical film properties have been measured on a 25.4 µm thick film with addition of 10% LDPE at the same conditions.

Notes

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.

For additional technical, sales and order assistance:

Worldwide and the Americas
ExxonMobil Chemical Company
13501 Katy Freeway
Houston, TX 77079-1398
USA
1-281-870-6050

Asia Pacific
ExxonMobil Chemical Asia Pacific
1 HarbourFront Place
#06-00 HarbourFront Tower One
Singapore 098633
+86-21-24173999

Europe, Middle East and Africa
ExxonMobil Chemical Europe
Hermeslaan 2
1831 Machelen, Belgium
420-239-016-274

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