

# ExxonMobil™ LLDPE LL 1002YB Cast

## Linear Low Density Polyethylene Resin

### Product Description

LL 1002YB is an LLDPE resin designed for cast films. It offers high gloss and excellent drawdown in both blown and cast film applications. LL 1002YB may also be used as a blend partner with LDPE resins to improve film properties and processability.

### General

Availability <sup>1</sup>	<ul style="list-style-type: none"> <li>Africa &amp; Middle East</li> <li>Asia Pacific</li> </ul>	<ul style="list-style-type: none"> <li>Europe</li> <li>Latin America</li> </ul>	<ul style="list-style-type: none"> <li>North America</li> </ul>
Additive	<ul style="list-style-type: none"> <li>Antiblock: No</li> <li>Slip: No</li> </ul>	<ul style="list-style-type: none"> <li>Processing Aid: No</li> <li>Thermal Stabilizer: Yes</li> </ul>	
Applications	<ul style="list-style-type: none"> <li>Cast Film</li> <li>Cast Stretch Film</li> <li>Garment Film</li> </ul>	<ul style="list-style-type: none"> <li>General Packaging</li> <li>Hygiene film</li> <li>Packaging Films</li> </ul>	<ul style="list-style-type: none"> <li>Personal Care</li> </ul>
Revision Date	<ul style="list-style-type: none"> <li>06/01/2013</li> </ul>		

### Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density / Specific Gravity	0.918 g/cm <sup>3</sup>	0.918 g/cm <sup>3</sup>	ASTM D792
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	1100 psi	7.4 MPa	ASTM D882
Tensile Strength at Yield TD	940 psi	6.5 MPa	ASTM D882
Tensile Strength at Break MD	9000 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	3600 psi	25 MPa	ASTM D882
Elongation at Break MD	420 %	420 %	ASTM D882
Elongation at Break TD	830 %	830 %	ASTM D882
Secant Modulus MD - 1% Secant	17000 psi	110 MPa	ASTM D882
Secant Modulus TD - 1% Secant	19000 psi	130 MPa	ASTM D882
Dart Drop Impact	< 50 g	< 50 g	ASTM D1709A
Elmendorf Tear Strength MD	20 g	20 g	ASTM D1922
Elmendorf Tear Strength TD	430 g	430 g	ASTM D1922
Puncture Force	10 lbf	43 N	ExxonMobil Method
Puncture Energy	21 in-lb	2.3 J	ExxonMobil Method

### Optical Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	98	98	ASTM D2457
Haze	1.7 %	1.7 %	ASTM D1003

### 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).

### Processing Statement

Film (0.8 mil / 20.3 micron) made from LL 1002YB on a 3.5 inch (88.9 mm) cast film line with a 5 inch (14 cm) melt curtain length, a 534°F (279°C) melt temperature, 80°F (26.7°C) chill roll temperature and 750 fpm (229 mpm) line speed.

### 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.

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

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