

# ExxonMobil™ LLDPE LL 1002AY Cast

## Linear Low Density Polyethylene Resin

### Product Description

LL 1002AY is an LLDPE resin designed for cast films. It offers high gloss and excellent drawdown in both blown and cast film applications. LL 1002AY may also be used as a blend partner with LDPE resins to improve film properties and processability. TnPP is not intentionally added to LL 1002AY resin.

### General

Availability <sup>1</sup>	<ul style="list-style-type: none"> <li>Asia Pacific</li> <li>Europe</li> <li>Latin America</li> </ul>
Additive	<ul style="list-style-type: none"> <li>Antiblock: No</li> <li>Slip: No</li> <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> <li>General Packaging</li> <li>Hygiene film</li> <li>Packaging Films</li> <li>Personal Care</li> </ul>
Revision Date	<ul style="list-style-type: none"> <li>07/16/2018</li> </ul>

### Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.918 g/cm <sup>3</sup>	0.918 g/cm <sup>3</sup>	ASTM D1505
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

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

Tris(nonylphenol)phosphite (TNPP) CAS# 26523-78-4 is not intentionally used by ExxonMobil in this product. Although this product is not routinely tested for its presence, based on product composition knowledge this substance is not expected to be present. However, the fact that this substance is not intentionally used by ExxonMobil in this product does not exclude that trace levels of this substance may be present as a result of the specific characteristics of the raw materials and/or of the manufacturing process.

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

### Processing Statement

Film (0.8 mil / 20.3 micron) made from LL 1002AY 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.

ExxonMobil™ LLDPE LL 1002AY Cast  
Linear Low Density Polyethylene Resin

#### 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.

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

©2024 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 Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

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