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 [1]	▪ Asia Pacific	▪ Europe	▪ Latin America
Additive	▪ Antiblock: No ▪ Slip: No	▪ Processing Aid: No ▪ Thermal Stabilizer: Yes	
Applications	▪ Cast Film ▪ Cast Stretch Film ▪ Garment Film	▪ General Packaging ▪ Hygiene film ▪ Packaging Films	▪ Personal Care
Revision Date	▪ 07/16/2018		

Resin Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Density	0.918	g/cm³	0.918	g/cm³	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.

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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.

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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