

ExxonMobil™ LLDPE LL 1001.32

Linear Low Density Polyethylene Resin

Product Description

ExxonMobil™ LL 1001.32 is an ethylene 1-butene linear low density polyethylene resin. Films made from LL 1001.32 resin have very good tensile and toughness properties.

General

Additive	- Antiblock: No - Slip: No	- Processing Aid: No - Thermal Stabilizer: Yes
Applications	- Cast Film - Cast Stretch Film - Industrial Liners	- Liners - Produce Bags - Refuse Bags - Trash Bags
Form(s)	Pellets	

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.918 g/cm ³	0.918 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Peak Melting Temperature	250 °F	121 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	212 °F	100 °C	ASTM D1525

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1200 psi	8.3 MPa	ASTM D882
Tensile Strength at Yield TD	1200 psi	8.4 MPa	ASTM D882
Tensile Strength at Break MD	8500 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	4300 psi	30 MPa	ASTM D882
Elongation at Break MD	390 %	390 %	ASTM D882
Elongation at Break TD	850 %	850 %	ASTM D882
Secant Modulus MD - 1% Secant	20000 psi	140 MPa	ASTM D882
Secant Modulus TD - 1% Secant	23000 psi	160 MPa	ASTM D882
Dart Drop Impact	< 60 g	< 60 g	ASTM D1709A
Elmendorf Tear Strength MD	30 g	30 g	ASTM D1922
Elmendorf Tear Strength TD	450 g	450 g	ASTM D1922
Puncture Force	8 lbf	36 N	ExxonMobil Method
Puncture Energy	23 in-lb	2.6 J	ExxonMobil Method

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	90	90	ASTM D2457
Haze	2.0 %	2.0 %	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.

Processing Statement

Film (0.8 mil / 20 micron) made from LL 1001.32 resin on a 3.5 inch cast film line with a 8.25 inch melt curtain, 80°F (27°C) chill roll temperature at a 150 ft/min (46 m/min) take-off speed and a melt temperature of 560°F (293°C).