

ExxonMobil™ LLDPE LL 1001 Series

Linear Low Density Polyethylene Resin

Product Description

LL 1001 series are LLDPE grades, offering excellent drawdown and puncture resistance combined with high gloss and clarity. They are also frequently used as a blend partner with LDPE resins to improve film properties and processability. Several additive packages are available according to the required surface properties.

General

Availability ¹	- Africa & Middle East - Europe
Additive	- LL 1001XV: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes - LL 1001KI: Antiblock: 2500 ppm; Slip: 1000 ppm; Processing Aid: No; Thermal Stabilizer: Yes - LL 1001KW: Antiblock: 3500 ppm; Slip: 1500 ppm; Processing Aid: No; Thermal Stabilizer: Yes
Applications	- Agricultural Film - Bag in Box - Barrier Food Packaging - Blown Film - Bread Bags - Food packaging - Form Fill And Seal Packaging - Freezer Film - Garment Film - General Packaging - Heavy Duty Bags - Ice Bags - Industrial Liners - Industrial Packaging - Lamination Film - Liners - Multilayer Packaging Film - Packaging Films - Produce Bags - Refuse Bags - Shoppers - Stand Up Pouches - Trash Bags
Revision Date	03/01/2013

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)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Peak Melting Temperature	248 °F	120 °C	ExxonMobil Method

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Break MD	8700 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	5200 psi	36 MPa	ASTM D882
Elongation at Break MD	570 %	570 %	ASTM D882
Elongation at Break TD	840 %	840 %	ASTM D882
Secant Modulus MD - 1% Secant	29000 psi	200 MPa	ASTM D882
Secant Modulus TD - 1% Secant	32000 psi	220 MPa	ASTM D882
Dart Drop Impact	90 g	90 g	ASTM D1709A
Elmendorf Tear Strength MD	80 g	80 g	ASTM D1922
Elmendorf Tear Strength TD	430 g	430 g	ASTM D1922

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	48	48	ASTM D2457
Haze	13 %	13 %	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

The film properties have been measured on 30 µm (1.18 mil) thick films of LL 1001XV (Blow-up ratio : 2.5)

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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.

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