

ExxonMobil

Linear Low Density Polyethylene

LL-1001 Blown Film Resin

Description

LL-1001 is a butene LLDPE blown film resin having good drawdown. Films made from LL-1001 exhibit very good tensile and toughness properties. LL-1001 is available with several stabilization packages.

Applications

- Refuse and trash bags
- Drum and box liners
- Industrial liners
- Stretch film
- Produce bags
- Frozen food packaging

Resin Properties	Test Based On	Units (SI)	Typical Value ²
Melt Index	ASTM D-1238 (E)	g/10 min.	1.0
Density	ExxonMobil Method	g/cm ³	0.918
Melting Point	ExxonMobil Method	°F (°C)	249 (121)

Film Properties¹ (1.2 mil film)

Haze		ASTM D-1003	%	14	
Gloss, 45°		ASTM D-2457	—	46	
Tensile Strength	@ Yield	MD	ASTM D-882	psi (MPa)	1800 (12)
	@ Break	MD			6600 (46)
		TD			5400 (37)
Ultimate Elongation		MD	ASTM D-882	%	670
		TD			790
1% Secant Modulus		MD	ASTM D-882	psi (MPa)	27,000 (186)
		TD			31,000 (214)
Elmendorf Tear Strength		MD	ASTM D-1922	g	170
		TD			480
Puncture			ExxonMobil Method	in·lb	22
Dart Drop Impact, F ₅₀			ExxonMobil Method	g	120

1. Film data was obtained on a Sano 3½" blown film line with 2.5:1 blow-up ratio and melt temperature of 390-440°F with wide die gap.
2. Values given are typical for clear film without trim recycle and should not be interpreted as specification.

FDA Status

LL-1001 is an olefin copolymer which complies with FDA Regulations 21 CFR 177.1520 (c) 3.1 and 3.2, and may be used in articles which are intended to contact foods at or below cooking temperatures. The finished food contact articles which are produced with this grade may not be heat-sterilized at temperatures in excess of 212°F.

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