

ExxonMobil

Linear Low Density Polyethylene

LL-3001 Premium High Strength Film Resin

Description

LL-3001 is a hexene copolymer LLDPE film resin. Films made from LL-3001 have outstanding tensile and toughness properties. The superior strength properties along with excellent drawability make this a very versatile packaging film resin. LL-3001 is available with blown film additive formulations with or without slip and antiblock. A heavily stabilized formulation for cast film processing is also available.

Applications

- Stretch wrap
- Stretch film
- Frozen food packaging
- Ice bags
- Shipping sacks
- Premium trash bags

Resin Properties	Test Based On	Units	Typical Value ²		
Melt Index	ASTM D-1238 (E)	g/10 min.	1.0		
Density	ExxonMobil Method	g/cm ³	0.917		
Melting Point	ExxonMobil Method	°F (°C)	255 (124)		
Film Properties¹					
Gauge	ExxonMobil Method	mil	1.5		
Haze	ASTM D-1003	%	barefoot	13	
			w/ antiblock	32	
Gloss, 45°	ASTM D-2457	-	barefoot	50	
			w/ antiblock	24	
Tensile Strength	@ Yield	MD	ASTM D-882	psi	1400
		TD			1560
	@ Break	MD			7960
		TD			6470
Ultimate Elongation	MD	ASTM D-882	%	640	
	TD			760	
1% Secant Modulus	MD	ASTM D-882	psi	27,400	
	TD			32,600	
Elmendorf Tear Strength	MD	ASTM D-1922	g/mil	340	
	TD			670	
Dart Drop Impact, F ₅₀	ASTM D1709 A	g/mil	175		
Puncture	ExxonMobil Method	in-lb/mil	16		

1. Film obtained on a Gloucester 2½" blown film line with a 2.5:1 blow-up ratio, a melt temperature of 410-420°F and a 60 mil die gap.
2. Values given are typical for clear film without trim recycle and should not be interpreted as specification.

FDA Status

LL-3001 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 temperature. The finished food-contact article, when produced with certain additive formulations of this grade, may restrict its use in heat stearization at temperatures in excess of 212 °F and/or to film form only.

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