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 Properties[1]						
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.

AMERICAS - PETD Updated 7/01