

ExxonMobil

Linear Low Density Polyethylene

LL-1002 Blown or Cast Film Resin

Description

LL-1002 is a butene LLDPE blown film designed for the blown film or the cast film process. Films made from LL-1002 have very good tensile and toughness properties. LL-1002 is available with several stabilization packages, as well as with different levels of slip and antiblock.

Applications

- Produce bags on a roll
- Stretch film
- Drum and box liners
- Trash can liners
- Institutional can liners

Resin Properties	Test Based On	Units (SI)	Typical Value ³
Melt Index	ASTM D-1238 (E)	g/10 min.	2.0
Density	ExxonMobil Method	g/cm ³	0.918
Melting Point	ExxonMobil Method	°F (°C)	249 (121)

Film Properties ¹				Cast ¹	Blown ²
Gauge		ASTM D-374	mil	0.8	1.2
Haze		ASTM D-1003	%	1	18
Gloss, 45°		ASTM D-2457	-	90	40
Tensile Strength	@ Yield	ASTM D-882	psi (MPa)	1100	1400
	MD			980	1400
	TD			8800	5800
	@ Break			3800	4800
Ultimate Elongation	MD	ASTM D-882	%	440	700
	TD			800	830
1% Secant Modulus	MD	ASTM D-882	psi (MPa)	18,000	28,000
	TD			21,000	33,000
Elmendorf Tear Strength	MD	ASTM D-1922	g	40	150
	TD			380	340
Puncture		ExxonMobil Method	in-lb	20	20
Dart Drop Impact, F ₅₀		ExxonMobil Method	g	60	95

1. Film obtained on a Black Clawson 3½" cast film line @ 750 ft/min take-off speed and melt temperature of 525-575°F.
2. 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.
3. Values given are typical for clear film without trim recycle and should not be interpreted as specification.

FDA Status

LL-1002 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.

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