

ExxonMobil LLDPE

LL 1001 Series

Blown Film Resins

Description

LL 1001 are butene LLDPE blown film resins having good drawdown.

Films made from LL 1001 resins exhibit good tensile and toughness properties.

Applications

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

Additive Package	PPA	Antiblock	Slip	Thermal Stabilizer
LL1001X26	Yes	No	No	Yes
LL 1001X59	No	No	No	Yes
LL1001X72	No	5000 ppm	850 ppm	Yes
LL1001X74	No	5000 ppm	1700 ppm	Yes
LL1001X76	No	7000 ppm	No	Yes

Resin Properties	Test Based On	Typical Value / Unit
Melt Index	ASTM D 1238	1.0 g/10 min
Density	ExxonMobil Method	0.918 g/cm ³
Peak Melting Temperature	ExxonMobil Method	121 °C 249 °F

Film Properties (@ thickness 25.4 μ (1 mil))

Tensile Strength at Yield	MD	ASTM D 882	9.4 MPa	1360 psi
	TD		9.5 MPa	1380 psi
Tensile Strength at Break	MD	ASTM D 882	53.1 MPa	7700 psi
	TD		35.3 MPa	5120 psi
Elongation at Break	MD	ASTM D 882	580 %	
	TD		850 %	
1% Secant Modulus	MD	ASTM D 882	193.4 MPa	28000 psi
	TD		222.6 MPa	32300 psi
Haze		ASTM D 1003	15.3 %	
Gloss MD, 45°		ASTM D 2457	45	
Dart Drop Impact Strength, F50		ASTM D 1709A	104 g	
Elmendorf Tear Strength	MD	ASTM D 1922	80 g	
	TD		400 g	
Puncture Force Energy		ExxonMobil Method	42.7 N	9.6 Lb
			3.1 J	27.7 in-lb

1. Film was made from LL 1001X26 on a 2.5 inch blown film having a 6 inch die with a 60 mil die gap at a 2.5:1 blow-up ratio and melt temperature of 390-395°F (198-202°C).

LL 1001 resins can - in principle - be used in food contact applications in various EU Member States and in the USA (FDA). Migration or use limitations may apply. Please contact your ExxonMobil Chemical representative for more detailed information and/or actual compliance certification documents for the specific grade of interest.

Revised January 2006