

ExxonMobil LLDPE

LL 1001 series

Blown Film Resins

Description

LL 1001 series are LLDPE grades, offering excellent drawdown and puncture resistance combined with high gloss and clarity.

They are also frequently used as a blend partner with LDPE resins to improve film properties and processability.

Several additive packages are available according to the required surface properties.

Applications

- shrink film
- produce bags (blended with 10 - 20 % LDPE)
- agricultural film
- stretch film
- refuse sacks

Additive Package	Antiblock	Slip	Thermal Stabilizer
LL 1001XV	No	No	Yes
LL 1001KI	2500 ppm	1000 ppm	Yes
LL 1001KW	3500 ppm	1500 ppm	Yes

Resin Properties	Test Based On	Typical Value / Unit	
Melt Index	ASTM D1238	1 g/10 min	
Density	ASTM D4703 / D1505	0.918 g/cm ³	
Peak Melting Temperature	ASTM D3418	120 °C	248 °F
Crystallization Point	ASTM D3418	104 °C	219 °F

Film Properties

Tensile Strength	MD	ASTM D882	57 MPa	8500 psi
	TD		38 MPa	5500 psi
Elongation @ Break	MD	ASTM D882	590 %	
	TD		860 %	
1 % Secant Modulus	MD	ASTM D882	220 MPa	32000 psi
	TD		250 MPa	36500 psi
Haze		ASTM D1003	9 %	
Gloss, 60° angle		ASTM D2457	11 %	
Dart Drop Impact, A/Face		ASTM D1709	4 g/μm	102 g/mil
Elmendorf Tear Strength	MD	ASTM D1922	4 g/μm	102 g/mil
	TD		16 g/μm	406 g/mil

The film properties have been measured on 30 μm (1.18 mil) thick films of LL 1001XV (Blow-up ratio : 2.5)

LL 1001 series 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.

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