

## ExxonMobil™ LDPE LD 117 Series

## Low Density Polyethylene Resin

### **Product Description**

ExxonMobil™ LD 117 are homopolymer film resins with good clarity and excellent stiffness. Film made from LD 117 resins can be used in overwrap applications and in push-through type packaging equipment. With a narrow die gap, film produced from LD 117 resins can be drawn down to 1.0 mil gauge.

General					
Availability <sup>1</sup>	<ul> <li>Latin America</li> </ul>		<ul> <li>North America</li> </ul>		
Additive	LD 117.NM: Antiblock: No; Slip: No; Thermal Stabilizer: Yes				
	<ul> <li>LD 117.JJ: Antiblock: 1000 ppm; Slip: 250 ppm; Thermal Stabilizer: Yes</li> </ul>				
Applications	<ul> <li>Bread Bags</li> </ul>		<ul> <li>Foams</li> <li>Lamination Film</li> </ul>		
	<ul> <li>Co-Extrusion Films</li> </ul>				
	<ul> <li>Collation Shrink</li> </ul>		Shrink	<ul> <li>Paper</li> </ul>	Overwrap
	<ul> <li>Diaper Backsheet</li> </ul>		<ul><li>Hygiene Packaging</li><li>Label Film</li></ul>		
Revision Date	• 06/17/2020				
Resin Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Density	0.929	g/cm³	0.929	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	1.6	g/10 min	1.6	g/10 min	ASTM D1238
Peak Melting Temperature	241	°F	116	°C	ExxonMobil Method
Thermal	Typical Value	(English)	Typical Value	(SI)	Test Based On
Vicat Softening Temperature	219	°F	104	°C	ExxonMobil Method
Film Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Tensile Strength at Yield MD	2000	psi	14	MPa	ASTM D882
Tensile Strength at Yield TD	2300	psi	16	MPa	ASTM D882
Tensile Strength at Break MD	3600	psi	25	MPa	ASTM D882
Tensile Strength at Break TD	2600	psi	18	MPa	ASTM D882
Elongation at Break MD	170	%	170	%	ASTM D882
Elongation at Break TD	510	%	510	%	ASTM D882
Secant Modulus MD - 1% Secant	46000	psi	320	MPa	ASTM D882
Secant Modulus TD - 1% Secant	54000	psi	380	MPa	ASTM D882
Dart Drop Impact	80	g	80	g	ASTM D1709A
Elmendorf Tear Strength MD	190	g	190		ASTM D1922
Elmendorf Tear Strength TD	240	g	240	g	ASTM D1922
Puncture Force	7	lbf	31	N	ExxonMobil Method
Puncture Energy	3.0	in·lb	0.34	J	ExxonMobil Method
Optical Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Gloss (45°)	68		68		ASTM D2457
Haze	7.1	%	7.1	%	ASTM D1003

#### Legal Statement

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

This product is not intended for use in medical applications and should not be used in any such applications.

### **Processing Statement**

Film (1.5 mil/38.1 micron) made from LD 117.85 resin on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 350-370°F (177-188°C), a 30 mil (0.76 mm) die gap at a rate of 8 lbs/hr/in die circumference (1.43 kg/hr/cm).

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#### Notes

Typical properties: these are not to be construed as specifications.

<sup>1</sup> Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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