

# ExxonMobil™ LD 2021.MN

## Low Density Polyethylene

### Product Description

ExxonMobil™ LD 2021.MN is a homopolymer film resin with good clarity. The resin is suitable for processing on blown film equipment.

### General

Availability <sup>1</sup>	▪ Asia Pacific	▪ Latin America	▪ North America
Additive	▪ Antiblock: 1500 ppm	▪ Slip: 750 ppm	▪ Thermal Stabilizer: Yes
Applications	▪ Blend Partner ▪ Food Packaging	▪ Form Fill And Seal Packaging ▪ Produce Bags	▪ Textile Packaging
Form(s)	▪ Pellets		
Revision Date	▪ 06/17/2020		

### Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.921 g/cm <sup>3</sup>	0.921 g/cm <sup>3</sup>	ASTM D1505
Melt Index (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Peak Melting Temperature	228 °F	109 °C	ExxonMobil Method

### Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	194 °F	90.0 °C	ExxonMobil Method

### Film Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1500 psi	10 MPa	ASTM D882
Tensile Strength at Yield TD	1600 psi	11 MPa	ASTM D882
Tensile Strength at Break MD	3600 psi	25 MPa	ASTM D882
Tensile Strength at Break TD	2700 psi	19 MPa	ASTM D882
Elongation at Break MD	130 %	130 %	ASTM D882
Elongation at Break TD	490 %	490 %	ASTM D882
Secant Modulus MD - 1% Secant	30000 psi	210 MPa	ASTM D882
Secant Modulus TD - 1% Secant	37000 psi	260 MPa	ASTM D882
Dart Drop Impact	120 g	120 g	ASTM D1709A
Elmendorf Tear Strength MD	440 g	440 g	ASTM D1922
Elmendorf Tear Strength TD	110 g	110 g	ASTM D1922
Puncture Force	6 lbf	28 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	6.1 %	6.1 %	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 2021.MN resin on a 2.5 inch (63.5mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 340-360°F (171-182°C), a 30 mil (0.76 mm) die gap at a rate of 8 lbs/hr/in die circumference (1.43 kg/hr/cm).

### 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.

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