Product Datasheet

ExxonMobil Signature Polymers

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 [1]	▪ 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/cm³	0.921	g/cm³	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.

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

Manufacturer website: https://www.exxonmobilchemical.com/en/products/polyethylene

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For additional technical, sales and order assistance: Contact Us

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