

ExxonMobil™ LD 2021.MN

(Legacy name: ExxonMobil™ LDPE LD 136.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 - Form Fill And Seal Packaging - Food 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 ³	0.921 g/cm ³	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.

ExxonMobil™ LD 2021.MN
Low Density Polyethylene

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

©2025 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

exxonmobilchemical.com