

ExxonMobil™ LDPE LD 165BW1

Low Density Polyethylene Resin

Product Description

The LD 165 series are LDPE grades, offering high strength combined with medium optical properties.

General

Availability ¹	▪ Africa & Middle East	▪ Asia Pacific	▪ Europe
Additive	▪ LDPE LD 165BW1: Antiblock: No; Slip: No; Thermal Stabilizer: Yes		
Applications	▪ Agricultural Film ▪ Blend Partner ▪ Construction Film	▪ Foams ▪ Heavy Duty Bags ▪ High Performance Collation Shrink	▪ Pallet Shrink Film ▪ Profile Extrusion
Revision Date	▪ 07/01/2013		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.922 g/cm ³	0.922 g/cm ³	ASTM D1505
Melt Index ² (190°C/2.16 kg)	0.33 g/10 min	0.33 g/10 min	ASTM D1238
Peak Melting Temperature	229 °F	109 °C	ExxonMobil Method

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1800 psi	13 MPa	ASTM D882
Tensile Strength at Yield TD	1700 psi	12 MPa	ASTM D882
Tensile Strength at Break MD	2900 psi	20 MPa	ASTM D882
Tensile Strength at Break TD	2500 psi	18 MPa	ASTM D882
Elongation at Break MD	280 %	280 %	ASTM D882
Elongation at Break TD	540 %	540 %	ASTM D882
Secant Modulus MD - 1% Secant	33000 psi	230 MPa	ASTM D882
Secant Modulus TD - 1% Secant	41000 psi	280 MPa	ASTM D882
Dart Drop Impact	490 g	490 g	ASTM D1709A
Elmendorf Tear Strength MD	260 g	260 g	ASTM D1922
Elmendorf Tear Strength TD	460 g	460 g	ASTM D1922

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	45	45	ASTM D2457
Haze	15 %	15 %	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

The test specimen were prepared on LD 165BW1, 150µm (5.9 mil) thick film, using a 200 mm (7.9 in) die, die gap of 1.0 mm (39.4 mil), Blow-Up Ratio of 1.5 and temperature profile of 145 - 190°C (293 - 374°F).

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.

² Value reported is an estimate based on ExxonMobil's correlation from melt flow rate data measured at other standard conditions, based on ASTM D 1238.

ExxonMobil™ LDPE LD 165BW1
Low Density Polyethylene Resin

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

©2023 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