

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.

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