

ASTM D1003

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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		Asia Pacific	 Europe 	
Additive	Antiblock: NoSlip: No		Thermal Stabilizer: Yes		
Applications	Agricultural FilmBlend PartnerConstruction Film	FoamsHeavy Duty BagsHigh Performance Collation Shrink		Pallet Shrink FilmProfile Extrusion	
Revision Date	• 07/01/2013				
Resin Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Density	0.922	g/cm³	0.922	g/cm³	ExxonMobil Method
Melt Index ²	0.33	g/10 min	0.33	g/10 min	ExxonMobil Method
Peak Melting Temperature	228	°F	109	°C	ExxonMobil Method
Film Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Tensile Strength at Yield MD	1700	psi	12	MPa	ASTM D882
Tensile Strength at Yield TD	1600	psi	11	MPa	ASTM D882
Tensile Strength at Break MD	3500	psi	24	MPa	ASTM D882
Tensile Strength at Break TD	3200	psi	22	MPa	ASTM D882
Elongation at Break MD	500	%	500	%	ASTM D882
Elongation at Break TD	650	%	650	%	ASTM D882
Secant Modulus MD - 1% Secant	30000	psi	210	MPa	ASTM D882
Secant Modulus TD - 1% Secant	35000	psi	240	MPa	ASTM D882
Dart Drop Impact	320	9	320	g	ASTM D1709A
Elmendorf Tear Strength MD	400	g	400	g	ASTM D1922
Elmendorf Tear Strength TD	750	9	750	g	ASTM D1922
Optical Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Gloss (45°)	54		54		ASTM D2457

Legal Statement

Haze

This product is not intended for use in medical applications and should not be used in any such applications.

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

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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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