

ExxonMobil™ LDPE LD 165.BW1

Low Density Polyethylene Resin

Product Description

ExxonMobil™ LD 165.BW1 resin is a fractional melt index LDPE with medium optical properties.

General

Additive	▪ 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
Form(s)	▪ Pellets		

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 (190°C/2.16 kg)	0.33 g/10 min	0.33 g/10 min	ASTM D1238
Peak Melting Temperature	232 °F	111 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	199 °F	93 °C	ASTM D1525

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	1800 psi	12 MPa	ASTM D882
Tensile Strength at Break MD	4500 psi	31 MPa	ASTM D882
Tensile Strength at Break TD	4000 psi	27 MPa	ASTM D882
Elongation at Break MD	150 %	150 %	ASTM D882
Elongation at Break TD	630 %	630 %	ASTM D882
Secant Modulus MD - 1% Secant	32000 psi	220 MPa	ASTM D882
Secant Modulus TD - 1% Secant	43000 psi	290 MPa	ASTM D882
Dart Drop Impact	180 g	180 g	ASTM D1709A
Elmendorf Tear Strength MD	190 g	190 g	ASTM D1922
Elmendorf Tear Strength TD	150 g	150 g	ASTM D1922
Puncture Force	17 lbf	76 N	ExxonMobil Method
Puncture Energy	19 in·lb	2.2 J	ExxonMobil Method

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss	39	39	ASTM D2457
Haze	15 %	15 %	ASTM D1003

