

ExxonMobil™ LDPE LD 521.LN

Low Density Polyethylene Resin

Product Description

ExxonMobil™ LD 521.LN is an low density polyethylene homopolymer resin that is suitable for use in molding, extrusion, compounding, protective packaging, and foam applications.

General

Additive	▪ Antiblock: No	▪ Slip: No	▪ Thermal Stabilizer: No
Applications	▪ Blend Partner	▪ Foams	▪ Protective Packaging
Form(s)	▪ Pellets		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.919 g/cm ³	0.919 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	2.1 g/10 min	2.1 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	187 °F	86 °C	ASTM D1525

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1400 psi	9.8 MPa	ASTM D882
Tensile Strength at Yield TD	1500 psi	10 MPa	ASTM D882
Tensile Strength at Break MD	4000 psi	28 MPa	ASTM D882
Tensile Strength at Break TD	3000 psi	21 MPa	ASTM D882
Elongation at Break MD	190 %	190 %	ASTM D882
Elongation at Break TD	590 %	590 %	ASTM D882
Secant Modulus MD - 1% Secant	25000 psi	180 MPa	ASTM D882
Secant Modulus TD - 1% Secant	34000 psi	230 MPa	ASTM D882
Dart Drop Impact	110 g	110 g	ASTM D1709A
Elmendorf Tear Strength MD	450 g	450 g	ASTM D1922
Elmendorf Tear Strength TD	90 g	90 g	ASTM D1922
Puncture Force	12 lbf	52 N	ExxonMobil Method
Puncture Energy	16 in-lb	1.8 J	ExxonMobil Method

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	50	50	ASTM D2457
Haze	10 %	10 %	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 521.LN resin on a 2.6 inch (65mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 340-369°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.