Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ LD 6821.LC

Low Density Polyethylene

Product Description

ExxonMobil™ LD 6821.LC is a formulated homopolymer, garmet film resin with good toughness. It is capable of being drawn-down to thin gauges.

General

Availability [1]	▪ Latin America	▪ North America	
Additive	▪ Antiblock: 3000 ppm ▪ Slip: 1200 ppm	▪ Processing Aid: No ▪ Thermal Stabilizer: No	
Applications	▪ Blown Film ▪ Cast Film	▪ Compounding ▪ Garment Film	▪ Laundry Film
Revision Date	▪ 06/17/2020		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.921	g/cm³	0.921	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	6.8	g/10 min	6.8	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	189	°F	87.0	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1400	psi	9.7	MPa	ASTM D882
Tensile Strength at Yield TD	1500	psi	10	MPa	ASTM D882
Tensile Strength at Break MD	2600	psi	18	MPa	ASTM D882
Tensile Strength at Break TD	2100	psi	15	MPa	ASTM D882
Elongation at Break MD	230	%	230	%	ASTM D882
Elongation at Break TD	530	%	530	%	ASTM D882
Secant Modulus MD - 1% Secant	25000	psi	170	MPa	ASTM D882
Secant Modulus TD - 1% Secant	30000	psi	200	MPa	ASTM D882
Dart Drop Impact	60	g	60	g	ASTM D1709A
Elmendorf Tear Strength MD	500	g	500	g	ASTM D1922
Elmendorf Tear Strength TD	210	g	210	g	ASTM D1922
Puncture Force	5	lbf	20	N	ExxonMobil Method
Puncture Energy	1.8	in·lb	0.20	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss	71		71		ASTM D2457
Haze	7.4	%	7.4	%	ASTM D1003

Additional Information

Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

Legal Statement

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).

Processing Statement

Film (1.5 mil/38.1 micron) made from LD 6821.LC resin on a 2.5 inch (63.5mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 340-360°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).

Manufacturer website: https://www.exxonmobilchemical.com/en/products/polyethylene

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Notes

Typical properties: these are not to be construed as specifications.

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For additional technical, sales and order assistance: Contact Us

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Manufacturer website: https://www.exxonmobilchemical.com/en/products/polyethylene