ExxonMobil™ LDPE LD 051.LQ

Low Density Polyethylene Resin

Product Description

ExxonMobil™ LD 051.LQ blown film resin is a fractional melt index grade designed for demanding heavy duty film applications. It combines excellent strength properties with outstanding processability.

General

Availability [1]	▪ Asia Pacific	▪ Latin America	▪ North America
Additive	▪ Antiblock: 4000 ppm	▪ Slip: No	▪ Thermal Stabilizer: No
Applications	▪ Agricultural Film ▪ Blend Partner ▪ Collation Shrink	▪ Construction Film ▪ Heavy Duty Bags ▪ Pallet Shrink Film	▪ Zipper Bag
Form(s)	▪ Pellets		
Revision Date	▪ 06/17/2020		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.919	g/cm³	0.919	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	0.25	g/10 min	0.25	g/10 min	ASTM D1238
Peak Melting Temperature	230	°F	110	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	194	°F	90.0	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1600	psi	11	MPa	ASTM D882
Tensile Strength at Yield TD	1500	psi	10	MPa	ASTM D882
Tensile Strength at Break MD	3600	psi	25	MPa	ASTM D882
Tensile Strength at Break TD	3100	psi	21	MPa	ASTM D882
Elongation at Break MD	100	%	100	%	ASTM D882
Elongation at Break TD	540	%	540	%	ASTM D882
Secant Modulus MD - 1% Secant	26000	psi	180	MPa	ASTM D882
Secant Modulus TD - 1% Secant	35000	psi	240	MPa	ASTM D882
Dart Drop Impact	180	g	180	g	ASTM D1709A
Elmendorf Tear Strength MD	340	g	340	g	ASTM D1922
Elmendorf Tear Strength TD	120	g	120	g	ASTM D1922
Puncture Force	12	lbf	52	N	ExxonMobil Method
Puncture Energy	6.2	in·lb	0.70	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	35		35		ASTM D2457
Haze	18	%	18	%	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 (2.0 mil/50.8 micron) made from LD 051.LQ resin on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 360-380°F (182-193°C), a 30 mil (0.76 mm) die gap at a rate of 8 lbs/hr/in die circumference (1.43 kg/hr/cm).

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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.

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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