ExxonMobil™ LDPE LGA 105

Low Density Polyethylene Resin

Product Description

LGA 105 is a homopolymer, garment film resin with good toughness. It is capable of being drawn-down to thin gauges.

General

Availability [1]	▪ North America		
Additive	▪ Antiblock: No ▪ Slip: No	▪ Processing Aid: No ▪ Thermal Stabilizer: No	
Applications	▪ Blown Film ▪ Cast Film	▪ Compounding ▪ Garment Film	▪ Hygiene film ▪ Laundry Film
Form(s)	▪ Pellets		
Revision Date	▪ 06/17/2020		

Resin Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Density	0.920	g/cm³	0.920	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	6.5	g/10 min	6.5	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	187	°F	86.0	°C	ExxonMobil Method

Film Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Tensile Strength at Yield MD	1400	psi	9.6	MPa	ASTM D882
Tensile Strength at Yield TD	1400	psi	9.9	MPa	ASTM D882
Tensile Strength at Break MD	3400	psi	24	MPa	ASTM D882
Tensile Strength at Break TD	2700	psi	19	MPa	ASTM D882
Elongation at Break MD	420	%	420	%	ASTM D882
Elongation at Break TD	670	%	670	%	ASTM D882
Secant Modulus MD - 1% Secant	25000	psi	170	MPa	ASTM D882
Secant Modulus TD - 1% Secant	30000	psi	210	MPa	ASTM D882
Dart Drop Impact	80	g	80	g	ASTM D1709A
Elmendorf Tear Strength MD	530	g	530	g	ASTM D1922
Elmendorf Tear Strength TD	210	g	210	g	ASTM D1922
Puncture Force	9	lbf	42	N	ExxonMobil Method
Puncture Energy	13	in·lb	1.4	J	ExxonMobil Method

Optical Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Gloss (45°)	75		75		ASTM D2457
Haze	5.7	%	5.7	%	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 LGA 105 resin on a 2.5 inch (63.5 mm) 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).

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.

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

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