ExxonMobil Signature Polymers

ExxonMobil™ EVA 1005 Series

(Legacy name: ExxonMobil™ LDPE LD 312 Series)

Ethylene Vinyl Acetate Copolymer

Product Description

ExxonMobil™ EVA 1005 Series resins are 4.6 wt% vinyl acetate copolymer resins for films with good toughness. The comonomer content and low melt index of these resins help produce films which exhibit superior impact strength, good heat sealability and good low temperature properties.

General

Availability [1]	▪ Latin America	▪ North America	
Additive	▪ EVA 1005.23: Antiblock: 5000 ppm; Slip: 1100 ppm; Thermal Stabilizer: Yes ▪ EVA 1005.82: Antiblock: 4000 ppm; Slip: 800 ppm; Thermal Stabilizer: Yes ▪ EVA 1005.SJ: Antiblock: 4000 ppm; Slip: 800 ppm; Thermal Stabilizer: Yes		
Applications	▪ Co-Extrusion Films ▪ Foams ▪ Form Fill And Seal Packaging	▪ Freezer Film ▪ Lamination Film ▪ Poultry Bag	▪ Produce Bags ▪ Rice Bags
Form(s)	▪ Pellets		
Revision Date	▪ 06/17/2020		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.925	g/cm³	0.925	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	1.0	g/10 min	1.0	g/10 min	ASTM D1238
Vinyl Acetate Content	4.6	wt%	4.6	wt%	ExxonMobil Method
Peak Melting Temperature	221	°F	105	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	190	°F	88.0	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1100	psi	7.8	MPa	ASTM D882
Tensile Strength at Yield TD	1100	psi	7.8	MPa	ASTM D882
Tensile Strength at Break MD	3800	psi	26	MPa	ASTM D882
Tensile Strength at Break TD	3300	psi	22	MPa	ASTM D882
Elongation at Break MD	140	%	140	%	ASTM D882
Elongation at Break TD	540	%	540	%	ASTM D882
Secant Modulus MD - 1% Secant	20000	psi	140	MPa	ASTM D882
Secant Modulus TD - 1% Secant	23000	psi	160	MPa	ASTM D882
Dart Drop Impact	200	g	200	g	ASTM D1709A
Elmendorf Tear Strength MD	190	g	190	g	ASTM D1922
Elmendorf Tear Strength TD	90	g	90	g	ASTM D1922
Puncture Force	7	lbf	32	N	ExxonMobil Method
Puncture Energy	5.4	in·lb	0.61	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	68		68		ASTM D2457
Haze	7.1	%	7.1	%	ASTM D1003

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).

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Processing Statement

Film (1.5 mil/38.1 micron) made on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 350-370°F (177-188°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.

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

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