Product Datasheet

ExxonMobil Signature Polymers

Exxtra™ Seal m 1012.RA

Metallocene Polyethylene

Product Description

Exxtra™ Seal m 1012.RA is an ethylene 1-hexene copolymer resin. Films that incorporate Exxtra™ Seal m 1012.RA can enable cold temperature toughness, impact strength and puncture performance. These superior strength properties, along with excellent heat sealing and hot tack performance, make this a very versatile packaging film resin. Fluoropolymers, or fluorine containing compounds, and TNPP are not intentionally added to Exxtra™ Seal m 1012.RA.

General

Availability [1]	▪ Africa & Middle East ▪ Europe	▪ Latin America ▪ North America	
Additive	▪ Antiblock: No ▪ Slip: No	▪ Thermal Stabilizer: Yes ▪ Alternative Processing Aid: Yes	
Applications	▪ Bag in Box ▪ Barrier Food Packaging ▪ Blown Film ▪ Food Packaging	▪ Form Fill And Seal Packaging ▪ Freezer Film ▪ Heavy Duty Bags ▪ Ice Bags	▪ Lamination Film ▪ Multilayer Packaging Film ▪ Stand Up Pouches
Form(s)	▪ Pellets		
Revision Date	▪ 04/19/2024		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density / Specific Gravity	0.912	g/cm³	0.912	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	1.0	g/10 min	1.0	g/10 min	ASTM D1238
Peak Melting Temperature	238	°F	114	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1000	psi	7.0	MPa	ASTM D882
Tensile Strength at Yield TD	1000	psi	6.9	MPa	ASTM D882
Tensile Strength at Break MD	8700	psi	60	MPa	ASTM D882
Tensile Strength at Break TD	8300	psi	60	MPa	ASTM D882
Elongation at Break MD	460	%	460	%	ASTM D882
Elongation at Break TD	580	%	580	%	ASTM D882
Secant Modulus MD - 1% Secant	16000	psi	110	MPa	ASTM D882
Secant Modulus TD - 1% Secant	18000	psi	120	MPa	ASTM D882
Dart Drop Impact	1100	g	1100	g	ASTM D1709
Elmendorf Tear Strength MD	200	g	200	g	ASTM D1922
Elmendorf Tear Strength TD	300	g	300	g	ASTM D1922
Puncture Force	13	lbf	58	N	ExxonMobil Method
Puncture Energy	55	in·lb	6.2	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	57		57		ASTM D2457
Haze	9.5	%	9.5	%	ASTM D1003

Legal Statement

Fluoropolymers, or fluorine-containing compounds, and tris(nonylphenol) phosphite (TNPP) CAS# 26523-78-4 are not intentionally used by ExxonMobil in this product. Although this product is not routinely tested for their presence, based on product composition knowledge these substances are not expected to be present. However, the fact that these substances are not intentionally used by ExxonMobil in this product does not exclude that trace levels of these substances may be present as a result of the specific characteristics of the raw materials and/or of the manufacturing process.

This product, including the product name, shall not be used or tested in any medical application without the prior written acknowledgement of ExxonMobil Chemical as to the intended use. For detailed Product Stewardship information, please contact Customer Service.

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

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

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Processing Statement

Film (1 mil / 25.4 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 390 - 440°F (199 - 210°C), a 60 mil (1.52 mm) die gap at a rate of 10 lbs/hr/ in die circumference (1.79 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: Contact Us

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