ExxonMobil Signature Polymers

Exceed™ m 2018.RA

Metallocene Polyethylene

Product Description

Exceed™ m 2018.RA is an ethylene 1-hexene copolymer resin. Films that incorporate Exceed™ m 2018.RA can enable outstanding tensile, impact strength and puncture performance. These superior strength properties, along with excellent drawability, highlight a very versatile packaging film resin. The higher melt index also makes this polymer resin suitable for blending into LDPE rich films. Fluoropolymers, or fluorine-containing compounds, and TNPP are not intentionally added to Exceed™ m 2018.RA.

General

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

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density / Specific Gravity	0.918	g/cm³	0.918	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	2.0	g/10 min	2.0	g/10 min	ASTM D1238
Peak Melting Temperature	243	°F	117	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	223	°F	106	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1300	psi	9.1	MPa	ASTM D882
Tensile Strength at Yield TD	1300	psi	9.2	MPa	ASTM D882
Tensile Strength at Break MD	8600	psi	60	MPa	ASTM D882
Tensile Strength at Break TD	8000	psi	60	MPa	ASTM D882
Elongation at Break MD	590	%	590	%	ASTM D882
Elongation at Break TD	690	%	690	%	ASTM D882
Secant Modulus MD - 1% Secant	24000	psi	170	MPa	ASTM D882
Secant Modulus TD - 1% Secant	27000	psi	180	MPa	ASTM D882
Dart Drop Impact	580	g	580	g	ASTM D1709A
Elmendorf Tear Strength MD	330	g	330	g	ASTM D1922
Elmendorf Tear Strength TD	460	g	460	g	ASTM D1922
Puncture Force	11	lbf	48	N	ExxonMobil Method
Puncture Energy	37	in·lb	4.1	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	18		18		ASTM D2457
Haze	> 30	%	> 30	%	ASTM D1003

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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.

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.

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 400-420°F (204-216°C), a 60 mil (1.52 mm) die gap at a rate of 9 lbs/hr/in die circumference (1.61 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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