Product Datasheet

ExxonMobil Signature Polymers

Exceed™ Tough m 1023.RJ

Metallocene Polyethylene

Product Description

Exceed™ Tough m 1023.RJ resin is an ethylene 1-hexene copolymer resin. Films that incorporate Exceed™ Tough m 1023.RJ can enable outstanding tensile, impact strength and puncture performance. These superior strength properties, along with excellent drawability, highlght a very versatile packaging film resin. Fluoropolymers, or fluorine-containing compounds, and TNPP are not intentionally added to Exceed™ Tough m 1023.RJ.

General

Availability [1]	▪ North America		
Additive	▪ Antiblock: 4500 ppm ▪ Slip: No	▪ Thermal Stabilizer: Yes ▪ Alternative Processing Aid: Yes	
Applications	▪ Bag in Box ▪ Barrier Food Packaging ▪ Blown Film	▪ Form Fill And Seal Packaging ▪ Heavy Duty Bags ▪ Multilayer Packaging Film	▪ Packaging Films ▪ Premium Trash Bags ▪ Stand Up Pouches
Revision Date	▪ 04/19/2024		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density / Specific Gravity	0.923	g/cm³	0.923	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	1.0	g/10 min	1.0	g/10 min	ExxonMobil Method
Peak Melting Temperature	250	°F	121	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1500	psi	10	MPa	ASTM D882
Tensile Strength at Yield TD	1600	psi	11	MPa	ASTM D882
Tensile Strength at Break MD	7400	psi	50	MPa	ASTM D882
Tensile Strength at Break TD	6300	psi	43	MPa	ASTM D882
Elongation at Break MD	510	%	510	%	ASTM D882
Elongation at Break TD	620	%	620	%	ASTM D882
Secant Modulus MD - 1% Secant	32000	psi	220	MPa	ASTM D882
Secant Modulus TD - 1% Secant	33000	psi	230	MPa	ASTM D882
Dart Drop Impact	320	g	320	g	ASTM D1709A
Elmendorf Tear Strength MD	250	g	250	g	ASTM D1922
Elmendorf Tear Strength TD	460	g	460	g	ASTM D1922
Puncture Force	10	lbf	46	N	ExxonMobil Method
Puncture Energy	25	in·lb	2.8	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	30		30		ASTM D2457
Haze	24	%	24	%	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 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).

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 390-410°F (199-210°C), a 60 mil (1.52 mm) die gap at a rate of 10 lbs/hr/in die circumference.

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