Product Datasheet

ExxonMobil Signature Polymers

Exceed™ Stiff+ m 2025 Series

Metallocene Polyethylene

Product Description

Exceed™ Stiff+ m 2025 is a performance linear low density polyethylene 1-hexene copolymer designed to deliver a combination of high stiffness, high toughness, and exceptionally easy extrusion for a range of blown and cast applications. Similar to other Exceed™ S polyethylene products, the resin is well-suited for stiff-tough functional layers. The higher melt index, lower melt pressure and lower melt temperature of Exceed™ Stiff+ m 2025 relative to the other Exceed™ Stiff grades helps it run well on equipment that is sensitive to high melt pressure or temperature limitations. TnPP is not intentionally added to Exceed™ Stiff+ m 2025 resin.

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ Latin America	▪ North America
Additive	▪ Exceed™ Stiff+ m 2025.MR: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes ▪ Exceed™ Stiff+ m 2025.ML: Antiblock: No; Slip: No; Processing Aid: Yes; Thermal Stabilizer: Yes		
Applications	▪ Blown Film ▪ Cast Film	▪ Food & Liquid Packaging ▪ Laminated Full-PE Packaging	▪ Lamination Film ▪ Non-Laminated Coex Film
Revision Date	▪ 12/06/2022		

Resin Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Density / Specific Gravity	0.925	g/cm³	0.925	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	255	°F	124	°C	ExxonMobil Method

Film Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Tensile Strength at Yield MD	1700	psi	11	MPa	ASTM D882
Tensile Strength at Yield TD	1800	psi	13	MPa	ASTM D882
Tensile Strength at Break MD	9200	psi	60	MPa	ASTM D882
Tensile Strength at Break TD	7300	psi	50	MPa	ASTM D882
Elongation at Break MD	560	%	560	%	ASTM D882
Elongation at Break TD	690	%	690	%	ASTM D882
Secant Modulus MD - 1% Secant	38000	psi	260	MPa	ASTM D882
Secant Modulus TD - 1% Secant	48000	psi	330	MPa	ASTM D882
Dart Drop Impact	460	g	460	g	ASTM D1709A
Elmendorf Tear Strength MD	210	g	210	g	ASTM D1922
Elmendorf Tear Strength TD	480	g	480	g	ASTM D1922
Puncture Force	9	lbf	40	N	ExxonMobil Method
Puncture Energy	24	in·lb	2.7	J	ExxonMobil Method

Optical Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Gloss (45°)	32		32		ASTM D2457
Haze	21	%	21	%	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.

Tris(nonylphenol)phosphite (TNPP) CAS# 26523-78-4 is not intentionally used by ExxonMobil in this product. Although this product is not routinely tested for its presence, based on product composition knowledge this substance is not expected to be present. However, the fact that this substance is not intentionally used by ExxonMobil in this product does not exclude that trace levels of this substance 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 from Exceed™ Stiff+ m 2025.ML on a 3.5 inch (90 mm) blown film line with a 2.5:1 blow-up ratio, a target melt temperature of 400°F (204°C), a 60 mil (1.5 mm) die gap at a rate of 15 lbs/hr/in die circumference.

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

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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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