Product Datasheet

ExxonMobil Signature Polymers

Exceed™ m 4518.PA Cast

Metallocene Polyethylene

Product Description

Exceed™ m 4518.PA resin is an ethylene 1-hexene copolymer. Films made from Exceed™ m 4518.PA resin have outstanding tensile properties and impact and puncture toughness. These superior properties, along with excellent drawability, make this a versatile resin for both monolayer and multilayer packaging and cast stretch film. TnPP is not intentionally added to Exceed™ m 4518.PA.

General

Availability [1]	▪ Asia Pacific ▪ Europe	▪ Latin America ▪ North America	
Additive	▪ Exceed™ m 4518.PA: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes		
Applications	▪ Bag in Box ▪ Barrier Food Packaging ▪ Blown Film ▪ Cast Film	▪ Cast Stretch Film ▪ Diaper Backsheet ▪ Form Fill And Seal Packaging ▪ Hygiene film	▪ Packaging Films ▪ Personal Care
Revision Date	▪ 05/22/2018		

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)	4.5	g/10 min	4.5	g/10 min	ASTM D1238
Peak Melting Temperature	237	°F	114	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1200	psi	8.3	MPa	ASTM D882
Tensile Strength at Yield TD	1100	psi	7.3	MPa	ASTM D882
Tensile Strength at Break MD	9700	psi	70	MPa	ASTM D882
Tensile Strength at Break TD	7000	psi	48	MPa	ASTM D882
Elongation at Break MD	500	%	500	%	ASTM D882
Elongation at Break TD	730	%	730	%	ASTM D882
Secant Modulus MD - 1% Secant	15000	psi	100	MPa	ASTM D882
Secant Modulus TD - 1% Secant	18000	psi	120	MPa	ASTM D882
Dart Drop Impact	140	g	140	g	ASTM D1709A
Elmendorf Tear Strength MD	150	g	150	g	ASTM D1922
Elmendorf Tear Strength TD	460	g	460	g	ASTM D1922
Puncture Force	11	lbf	48	N	ExxonMobil Method
Puncture Energy	39	in·lb	4.5	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	87		87		ASTM D2457
Haze	2.2	%	2.2	%	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 (0.8 mil / 20 micron) obtained on a Black Clawson 3.5 inch cast line at a 5.5 inch melt curtain length, 520-580°F melt temperature, 80°F chill roll temperature and 750 fpm line speed.

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

Product Datasheet

ExxonMobil

Exceed™ m 4518.PA Cast
Metallocene Polyethylene

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

©2026 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

exxonmobilchemical.com

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