

Product Datasheet



Exceed™ 4518PA Cast

Performance Polymer

Product Description

Exceed 4518PA resin is an ethylene 1-hexene copolymer. Films made from Exceed 4518PA 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 4518PA.

General

Availability ¹	- Asia Pacific - Europe - Latin America - North America
Additive	Exceed 4518PA: 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/cm ³	0.918 g/cm ³	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.

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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.

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