



Exceed™ 1018 Series

Performance Polymer

Product Description

Exceed™ 1018 are ethylene 1-hexene copolymer resins. Films made from Exceed™ 1018 resins have outstanding tensile, impact strength and puncture. These superior strength properties, along with excellent drawability, allow downgauging in bag applications. TnPP is not intentionally added to Exceed™ 1018 resins.

General

Availability ¹	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Additive	<ul style="list-style-type: none"> Exceed™ 1018MK: Antiblock: 5000 ppm; Slip: 1000 ppm; Processing Aid: Yes; Thermal Stabilizer: Yes Exceed™ 1018MF: Antiblock: 4500 ppm; Slip: 450 ppm; Processing Aid: Yes; Thermal Stabilizer: Yes Exceed™ 1018MA: Antiblock: No; Slip: No; Processing Aid: Yes; Thermal Stabilizer: Yes Exceed™ 1018MJ: Antiblock: 4500 ppm; Slip: No; Processing Aid: Yes; Thermal Stabilizer: Yes Exceed™ 1018MB: Antiblock: 2500 ppm; Slip: 800 ppm; Processing Aid: Yes; Thermal Stabilizer: Yes 		
Applications	<ul style="list-style-type: none"> Agricultural Film Bag in Box Barrier Food Packaging Blown Film Blown Stretch Film Bread Bags Food Packaging 	<ul style="list-style-type: none"> Form Fill And Seal Packaging Freezer Film General Packaging Heavy Duty Bags Industrial Packaging Lamination Film Multilayer Packaging Film 	<ul style="list-style-type: none"> Overwrap Film Packaging Films Premium Trash Bags Stand Up Pouches Trash Bags Trash Can Liners
Revision Date	<ul style="list-style-type: none"> 07/12/2022 		

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)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Peak Melting Temperature	244 °F	118 °C	ExxonMobil Method

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1300 psi	8.7 MPa	ASTM D882
Tensile Strength at Yield TD	1300 psi	8.8 MPa	ASTM D882
Tensile Strength at Break MD	9400 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	8400 psi	60 MPa	ASTM D882
Elongation at Break MD	500 %	500 %	ASTM D882
Elongation at Break TD	640 %	640 %	ASTM D882
Secant Modulus MD - 1% Secant	24000 psi	170 MPa	ASTM D882
Secant Modulus TD - 1% Secant	26000 psi	180 MPa	ASTM D882
Dart Drop Impact	550 g	550 g	ASTM D1709A
Elmendorf Tear Strength MD	220 g	220 g	ASTM D1922
Elmendorf Tear Strength TD	370 g	370 g	ASTM D1922
Puncture Force	13 lbf	59 N	ExxonMobil Method
Puncture Energy	49 in-lb	5.5 J	ExxonMobil Method

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	43	43	ASTM D2457
Haze	16 %	16 %	ASTM D1003