

# Exceed™ 1018 Series

## Metallocene Polyethylene Resin

### Product Description

Exceed 1018 resins are metallocene ethylene-hexene copolymers. Films made from Exceed 1018 resin have outstanding tensile, impact strength and puncture. These superior strength properties, along with excellent drawability, allow downgauging in bag application.

### General

Availability <sup>1</sup>	• Latin America	• North America	• South America
Additive	<ul style="list-style-type: none"> <li>• Exceed 1018LA: Antiblock: 4500 ppm; Processing Aid: Yes; Slip: 450 ppm; Thermal Stabilizer: Yes</li> <li>• Exceed 1018KA: Antiblock: 5000 ppm; Processing Aid: Yes; Slip: 1000 ppm; Thermal Stabilizer: Yes</li> <li>• Exceed 1018JA: Antiblock: 4500 ppm; Processing Aid: Yes; Slip: No; Thermal Stabilizer: Yes</li> <li>• Exceed 1018MK: Antiblock: 5000 ppm; Processing Aid: Yes; Slip: 1000 ppm; Thermal Stabilizer: Yes</li> </ul>		
Applications	<ul style="list-style-type: none"> <li>• Agricultural Film</li> <li>• Bag in Box</li> <li>• Barrier Food Packaging</li> <li>• Blown Film</li> <li>• Bread Bags</li> <li>• Food packaging</li> <li>• Form Fill And Seal Packaging</li> </ul>	<ul style="list-style-type: none"> <li>• Freezer Film</li> <li>• General Packaging</li> <li>• Heavy Duty Bags</li> <li>• Industrial Packaging</li> <li>• Lamination Film</li> <li>• Multilayer Packaging Film</li> <li>• Overwrap Film</li> </ul>	<ul style="list-style-type: none"> <li>• Packaging Films</li> <li>• Premium Trash Bags</li> <li>• Stand Up Pouches</li> <li>• Trash Bags</li> <li>• Trash Can Liners</li> </ul>
Revision Date	• May 2011		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.918 g/cm <sup>3</sup>	0.918 g/cm <sup>3</sup>	ExxonMobil Method
Melt Index (190°C/2.16 kg)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Peak Melting Temperature	246 °F	119 °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	1200 psi	8.4 MPa	ASTM D882
Tensile Strength at Break MD	6600 psi	45 MPa	ASTM D882
Tensile Strength at Break TD	4600 psi	32 MPa	ASTM D882
Elongation at Break MD	470 %	470 %	ASTM D882
Elongation at Break TD	550 %	550 %	ASTM D882
Secant Modulus MD - 1% Secant	25000 psi	170 MPa	ASTM D882
Secant Modulus TD - 1% Secant	26000 psi	180 MPa	ASTM D882
Dart Drop Impact	580 g	580 g	ASTM D1709A
Elmendorf Tear Strength MD	270 g	270 g	ASTM D1922
Elmendorf Tear Strength TD	440 g	440 g	ASTM D1922
Puncture Force	8 lbf	36 N	ExxonMobil Method
Puncture Energy	15 in-lb	1.7 J	ExxonMobil Method

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	42	42	ASTM D2457

Typical properties: these are not to be construed as specifications.

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## ExxonMobil Chemical Exceed™ 1018 Series Metallocene Polyethylene Resin

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Haze	17 %	17 %	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.

### Processing Statement

Film (1 mil / 25.4 micron) made from Exceed 1018 EA on a 2.5 inch blown film line equipped with a 2.5:1 blow-up ratio, 60 mil die gap, 411°F (211°C) melt temperature, 24 inch frostline and 10 lb/die inch/hr.

Note: Typical film properties reported are preliminary and may be updated to reflect the 2011 mPE additive changes.

### Notes

<sup>1</sup> 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:

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Typical properties: these are not to be construed as specifications.

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