



Wednesday, March 28, 2007

**Exceed™ 1018FA (NA)****ExxonMobil Chemical Company - Polyethylene, Linear Low Density**Unit System: **Actions****Legend** ([Open](#))**General Information****Product Description**

Exceed 1018 resins are hexene copolymer produced using ExxonMobil Chemical's EXXPOL® Technology.

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**

Material Status	● Commercial: Active
Availability	● Asia ● North America ● Pacific Rim
Test Standards Available	● ASTM
Additive	● Aid, Processing      ● Heat Stabilizer ● Antiblock, 0.45 %    ● Slip, 0.045 %
Features	● Antiblocking              ● Heat Stabilized ● Comonomer, Hexene    ● Impact Resistance, Good ● Copolymer                ● Puncture Resistance, Good ● Food Contact Acceptable ● Slip
Uses	● Bags              ● Liners ● Film              ● Packaging
Agency Ratings	● EU Food Contact, Unspecified Rating ● FDA Food Contact, Unspecified Rating
Forms	● Pellets
Processing Method	● Film, Blown

**ASTM and ISO Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density	0.918	g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.0	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	0.984	mil	
Secant Modulus MD (Blown Film) <sup>2</sup>	1% Secant: 25400	psi	ASTM D882
Secant Modulus TD (Blown Film) <sup>2</sup>	1% Secant: 26300	psi	ASTM D882
Tensile Strength @ Yld MD (Blown Film) <sup>2</sup>	1310	psi	ASTM D882
Tensile Strength @ Yld TD (Blown Film) <sup>2</sup>	1230	psi	ASTM D882
Tensile Strength @ Brk MD (Blown Film) <sup>2</sup>	6690	psi	ASTM D882
Tensile Strength @ Brk TD (Blown Film) <sup>2</sup>	4660	psi	ASTM D882
Elongation @ Break MD (Blown Film) <sup>2</sup>	470	%	ASTM D882
Elongation @ Break TD (Blown Film) <sup>2</sup>	550	%	ASTM D882
Dart Drop Impact (Blown Film) <sup>3</sup>	580	gm	ASTM D1709
Elmendorf Tear Str MD (Blown Film) <sup>2</sup>	270	gm	ASTM D1922
Elmendorf Tear Str TD (Blown Film) <sup>2</sup>	440	gm	ASTM D1922
Thermal	Nominal Value	Unit	Test Method

Melting Point	246 °F	
<b>Optical</b>	<b>Nominal Value</b>	<b>Unit</b>
Gloss (45°, 0.984 mil, Blown Film)	42	ASTM D2457
Haze (0.984 mil, Blown Film)	16	% ASTM D1003

**Additional Properties**

Film 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.

The value listed as Density, ASTM D1505, was tested in accordance with EMC test methods.

Puncture Energy, 25µm Blown Film: 1.8 J

**Notes**

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

Ø.984 mil

Method A, 0.984 mil



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