

# EXCEED™ mLLDPE

## EXCEED 1018 Series

Blown Film Resins

### Description

Exceed 1018 Series grades are ethylene based polymers produced with metallocene single site catalysts using ExxonMobil's proprietary Exxpol technology.

Films made of Exceed 1018 Series grades have outstanding tensile, impact, puncture resistance, and low temperature properties. Exceed 1018 EB and Exceed 1018 FA contain slipagent and antiblock, which makes them suitable for formulations which require good openability and a low friction coefficient. They are ready-to-use versatile polymers for demanding mono layer and multi layer blown film applications.

### Applications

- film for frozen foods
- high speed Form Fill Seal packaging
- overwrap films, e.g., for tissue
- thin gauge industrial and consumer films
- bag in box film
- trash bags
- liners

Additive Package	PPA	Antiblock	Slip	Thermal Stabilizer
Exceed 1018EB	Yes	2500 ppm	750 ppm	Yes
Exceed 1018FA	Yes	4500 ppm	450 ppm	Yes

Resin Properties	Test Based On	Typical Value / Unit
Melt Index	ASTM D1238	1.0 g/10 min
Density	ASTM D4703 / D1505	0.918 g/cm <sup>3</sup>
Peak Melting Temperature	ASTM D3418	118 °C 244 °F

### Film Properties

Tensile Strength	MD	ASTM D882	50 MPa	7500 psi
	TD		35 MPa	5100 psi
Elongation @ Break	MD	ASTM D882	440 %	
	TD		510 %	
1% Secant Modulus	MD	ASTM D882	180 MPa	26000 psi
	TD		180 MPa	26000 psi
Haze		ASTM D1003	4 %	
Gloss, 60° angle		ASTM D2457	13 %	
Dart Drop Impact, A/Face		ASTM D1709	30 g/μm	762 g/mil
Elmendorf Tear Strength	MD	ASTM D1922	9 g/μm	228 g/mil
	TD		15 g/μm	381 g/mil
Puncture Resistance		ExxonMobil Method	3 N/μm	16 lb/mil

Film properties have been measured on a 25 μm (0.98 mil) thick film made of Exceed 1018EB (BUR = 2.5 and a melt temperature of 210 °C, 410 °F). Optical film properties have been measured on 25 μm (0.98 mil) thick film made of Exceed 1018EB with addition of 10 % LDPE at the same conditions.

Exceed 1018EB and Exceed 1018FA can - in principle - be used in food contact applications in various EU Member States and in the USA (FDA). Migration or use limitations may apply. Please contact your ExxonMobil Chemical representative for more detailed information and/or actual compliance certification documents for the specific grade of interest.

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