

Exceed™ 4518 Series

Metallocene Polyethylene Resin

Product Description

Exceed 4518 resins are metallocene ethylene-hexene copolymers. Films made from Exceed 4518 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.

General

Additive	- Exceed 4518CB: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes - Exceed 4518PA: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes		
Applications	- Cast Film - Cast Stretch Film	- Diaper Backsheet - Hygiene film	- Packaging Films - Personal Care

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.918 g/cm ³	0.918 g/cm ³	ExxonMobil Method
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.

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.