



SURPASS® FPs117 Series

NOVA Chemicals - Linear Low Density Polyethylene

Tuesday, November 5, 2019

General Information

Product Description

FPs117-C (PPA): Lamination film, coextruded sealant layer, and high toughness film

FPs117-D (1000 ppm Slip, 2500 ppm AB, PPA): Lamination film, coextruded sealant layer, and high toughness film

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Antiblock: 2500 ppm [FPs117-D] • Processing Aid • Antioxidant • Slip: 1000 ppm [FPs117-D]
Features	• Antioxidant • Good Processability • Low Density • Food Contact Acceptable • Good Tear Strength • Low Gel • Good Heat Seal • Good Toughness • Octene Comonomer
Uses	• Film • Laminates
Agency Ratings	• FDA 21 CFR 177.1520(c) 3.2a
Forms	• Pellets
Processing Method	• Coextrusion • Film Extrusion

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.919		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	1.0	g/10 min	ASTM D1238

Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	1	mil	
Secant Modulus - 1% Secant, MD (0.98 mil, Blown Film)	18300	psi	ASTM D882
Secant Modulus - 1% Secant, TD (0.98 mil, Blown Film)	19100	psi	ASTM D882
Tensile Strength - MD (Yield, 0.98 mil, Blown Film)	1310	psi	ASTM D882
Tensile Strength - TD (Yield, 0.98 mil, Blown Film)	1310	psi	ASTM D882
Tensile Strength - MD (Break, 0.98 mil, Blown Film)	6670	psi	ASTM D882
Tensile Strength - TD (Break, 0.98 mil, Blown Film)	6090	psi	ASTM D882
Tensile Elongation - MD (Break, 0.98 mil, Blown Film)	540	%	ASTM D882
Tensile Elongation - TD (Break, 0.98 mil, Blown Film)	760	%	ASTM D882
Dart Drop Impact (0.98 mil, Blown Film)	400	g	ASTM D1709A
Elmendorf Tear Strength - MD (0.98 mil, Blown Film)	300	g	ASTM D1922
Elmendorf Tear Strength - TD (0.98 mil, Blown Film)	450	g	ASTM D1922
Seal Initiation Temperature (0.98 mil, Blown Film)	212	°F	

Optical	Nominal Value	Unit	Test Method
Gloss			ASTM D2457
45°, 0.984 mil, Blown Film ²	37		
45°, 0.984 mil, Blown Film ³	72		
Haze			ASTM D1003
0.984 mil, Blown Film ²	16.0	%	
0.984 mil, Blown Film ³	7.00	%	

Additional Information	Nominal Value	Unit	Test Method
Low Friction Puncture - Blown Film (1.0 mil)	17.8	in-lb/mil	Internal Method

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Notes

¹ Typical properties: these are not to be construed as specifications.

² 100% LLDPE

³ LDPE Blended