Formolene® FR165BW

Formosa Plastics Corporation, U.S.A. - Low Density Polyethylene

Tuesday, November 5, 2019

General Information

Product Description

Formolene ® FR165BW is a low density polyethylene with film exhibiting medium optical properties.

Formolene ® FR165BW is formulated without slip and antiblock for use in high performance film applications offering excellent extrusion processing and outstanding melt strength characteristics suitable for thick film gauges and large layflat widths.

General			
Material Status	• Commercial: Active		
Availability	• North America		
Features	• Good Optical Properties	• Low Density	
Uses	• Agricultural Applications • Blending • Construction Applications	• Film • Foam • Heavy-duty Bags	• Profiles • Shrink Wrap
Agency Ratings	• EC 1907/2006 (REACH)		
Processing Method	• Extrusion	• Film Extrusion	• Profile Extrusion

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	0.922	g/cm³	ASTM D1505
Melt Mass-Flow Rate (190°C/2.16 kg)	0.33	g/10 min	ASTM D1238
Films	**Nominal Value**	**Unit**	**Test Method**
Film Thickness - Tested	6	mil	
Secant Modulus - 1% Secant, MD (5.9 mil, Blown Film)	33000	psi	ASTM D882
Secant Modulus - 1% Secant, TD (5.9 mil, Blown Film)	41000	psi	ASTM D882
Tensile Strength - MD (Yield, 5.9 mil, Blown Film)	1800	psi	ASTM D882
Tensile Strength - TD (Yield, 5.9 mil, Blown Film)	1700	psi	ASTM D882
Tensile Strength - MD (Break, 5.9 mil, Blown Film)	2900	psi	ASTM D882
Tensile Strength - TD (Break, 5.9 mil, Blown Film)	2500	psi	ASTM D882
Tensile Elongation - MD (Break, 5.9 mil, Blown Film)	280	%	ASTM D882
Tensile Elongation - TD (Break, 5.9 mil, Blown Film)	540	%	ASTM D882
Dart Drop Impact (5.9 mil, Blown Film)	490	g	ASTM D1709
Elmendorf Tear Strength - MD (5.9 mil, Blown Film)	260	g	ASTM D1922
Elmendorf Tear Strength - TD (5.9 mil, Blown Film)	460	g	ASTM D1922
Optical	**Nominal Value**	**Unit**	**Test Method**
Gloss (45°, 150 mil, Blown Film)	45		ASTM D2457
Haze (5.91 mil, Blown Film)	15.0	%	ASTM D1003

Processing Information

Extrusion	Nominal Value	Unit
Melt Temperature	293 to 374	°F

Notes

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