NOVAPOL® LF-0219-A

NOVA Chemicals - Low Density Polyethylene

Tuesday, November 5, 2019

General Information

General			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Resin		
Features	• Food Contact Acceptable • Good Heat Seal	• Good Processability • Good Toughness	• Homopolymer
Uses	• Blending • Film	• Industrial Applications • Liners	• Packaging
Agency Ratings	• FDA 21 CFR 177.1520(c) 2.1		
Processing Method	• Film Extrusion		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.920		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	2.3	g/10 min	ASTM D1238
Films	**Nominal Value**	**Unit**	**Test Method**
Film Thickness - Tested	1	mil	
Secant Modulus - 1% Secant, MD (1.5 mil, Blown Film)	24700	psi	ASTM D882
Secant Modulus - 1% Secant, TD (1.5 mil, Blown Film)	27600	psi	ASTM D882
Tensile Strength - MD (Yield, 1.5 mil, Blown Film)	1600	psi	ASTM D882
Tensile Strength - TD (Yield, 1.5 mil, Blown Film)	1310	psi	ASTM D882
Tensile Strength - MD (Break, 1.5 mil, Blown Film)	3190	psi	ASTM D882
Tensile Strength - TD (Break, 1.5 mil, Blown Film)	2610	psi	ASTM D882
Tensile Elongation - MD (Break, 1.5 mil, Blown Film)	250	%	ASTM D882
Tensile Elongation - TD (Break, 1.5 mil, Blown Film)	550	%	ASTM D882
Dart Drop Impact [2] (1.5 mil, Blown Film)	160	g	ASTM D1709A
Elmendorf Tear Strength - MD (1.5 mil, Blown Film)	160	g	ASTM D1922
Elmendorf Tear Strength - TD (1.5 mil, Blown Film)	150	g	ASTM D1922
Optical	**Nominal Value**	**Unit**	**Test Method**
Gloss (45°, 1.50 mil, Blown Film)	37		ASTM D2457
Haze (1.50 mil, Blown Film)	15.0	%	ASTM D1003
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Low Friction Puncture [3] (1.5 mil)	337	ft·lb/in	Internal Method

Film properties are typical of blown film extruded on a 1.5" extruder with 3" die and 35-mil die gap at a blow up ratio of 2.5:1, but are dependent upon operating conditions.

Notes

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

[2] F50

[3] Blown Film