



Formolene® E927ND

Formosa Plastics Corporation, U.S.A. - High Density (HMW) Polyethylene

Tuesday, November 5, 2019

General Information

Product Description

Formolene® E927ND is a high molecular weight grade of HDPE designed for high drawdown to produce thin films with good processing and physical properties. Formolene® E927ND is well balanced in overall physical properties and provides good stiffness for thin gauge film applications.

Formolene® E927ND meets all requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520, covering safe use of polyolefin articles intended for direct food contact.

Suggested Applications:

- T-Shirt Bags
- Multi-Wall Bag Liners
- Trash Can Liners and Heavy Duty Bags
- Merchandise Bags

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Food Contact Acceptable • Good Drawdown • Good Gauge Control • Good Processability • Good Stiffness • High Density • High Molecular Weight
Uses	• Bags • Film • Heavy-duty Bags • Liners
Agency Ratings	• EC 1907/2006 (REACH) • FDA 21 CFR 177.1520
Forms	• Pellets
Processing Method	• Film Extrusion

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density	0.949	g/cm ³	ASTM D1505
Melt Mass-Flow Rate			ASTM D1238
190°C/2.16 kg	0.070	g/10 min	
190°C/21.6 kg	12	g/10 min	
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	1	mil	
Secant Modulus - 1% Secant, MD (0.50 mil, Blown Film)	77000	psi	ASTM D882
Secant Modulus - 1% Secant, TD (0.50 mil, Blown Film)	134000	psi	ASTM D882
Tensile Strength - MD (Break, 0.50 mil, Blown Film)	8100	psi	ASTM D882
Tensile Strength - TD (Break, 0.50 mil, Blown Film)	7000	psi	ASTM D882
Tensile Elongation - MD (Break, 0.50 mil, Blown Film)	340	%	ASTM D882
Tensile Elongation - TD (Break, 0.50 mil, Blown Film)	530	%	ASTM D882
Dart Drop Impact (0.50 mil, Blown Film)	330	g	ASTM D1709
Elmendorf Tear Strength - MD (0.50 mil, Blown Film)	16	g	ASTM D1922
Elmendorf Tear Strength - TD (0.50 mil, Blown Film)	130	g	ASTM D1922
Thermal	Nominal Value	Unit	Test Method
Melting Temperature	268	°F	DSC

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Additional Information	Nominal Value	Unit
Blow-up Ratio	4	

Notes

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