Formolene® E927

High Density (HMW) Polyethylene

Formosa Plastics Corporation, U.S.A.

Technical Data

Product Description

Formolene E927 is a high molecular weight grade of HDPE designed for high drawdown to produce thin films with good processing and physical properties. E927 is well balanced in overall physical properties and provides good stiffness for thin gauge film applications.

Formolene E927 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
- Trash Can Liner and Heavy Duty Bags
- Multi-Wall Bag Liners
- Merchandise Bags

General

Material Status	• Commercial: Active		
Literature [1]	• Technical Datasheet (English)		
Search for UL Yellow Card	• Formosa Plastics Corporation, U.S.A. • Formolene®		
Availability	• North America		
Features	• Food Contact Acceptable • Good Drawdown	• Good Processability • Good Stiffness	• High Molecular Weight
Uses	• Bags • Film	• Heavy-duty Bags • Laundry Bags	• Liners
Agency Ratings	• EC 1907/2006 (REACH)	• FDA 21 CFR 177.1520	
Forms	• Pellets		

Physical	Nominal Value	Unit	Test Method
Density	0.949	g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR)			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	15	µm	
Secant Modulus			ASTM D882
1% Secant, MD: 15 µm, Blown Film	814	MPa	
1% Secant, TD: 15 µm, Blown Film	1010	MPa	
Tensile Strength			ASTM D882
MD: Break, 15 µm, Blown Film	57.2	MPa	
TD: Break, 15 µm, Blown Film	49.6	MPa	
Tensile Elongation			ASTM D882
MD: Break, 15 µm, Blown Film	280	%	
TD: Break, 15 µm, Blown Film	410	%	
Dart Drop Impact (15 µm, Blown Film)	380	g	ASTM D1709
Elmendorf Tear Strength			ASTM D1922
MD: 15 µm, Blown Film	11	g	
TD: 15 µm, Blown Film	60	g	

Thermal	Nominal Value	Unit	Test Method
Melting Temperature	131	°C	DSC

Notes

[1] These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

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