Formolene® E924

Tuesday, November 5, 2019

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

General Information

Product Description

Formolene ® E924 is a high molecular weight grade of HDPE designed for high drawdown to produce thin films with good processing and physical properties. Formolene ® E924 is well balanced in overall physical properties and provides good stiffness for thin gauge film applications.

Formolene® E924 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	• Heavy-duty Bags	• Liners
Agency Ratings	• EC 1907/2006 (REACH)	• FDA 21 CFR 177.1520	
Forms	• Pellets		
Processing Method	• Film Extrusion		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	0.949	g/cm³	ASTM D1505
Melt Mass-Flow Rate			ASTM D1238
190°C/2.16 kg [2]	0.040	g/10 min	
190°C/21.6 kg [3]	8.5	g/10 min	
Films	**Nominal Value**	**Unit**	**Test Method**
Film Thickness - Tested	1	mil	
Secant Modulus - 1% Secant, MD (0.50 mil)	1.07E+7	psi	ASTM D882
Secant Modulus - 1% Secant, TD (0.50 mil)	128000	psi	ASTM D882
Tensile Strength - MD (Break, 0.50 mil)	9800	psi	ASTM D882
Tensile Strength - TD (Break, 0.50 mil)	7000	psi	ASTM D882
Tensile Elongation - MD (Break, 0.50 mil)	290	%	ASTM D882
Tensile Elongation - TD (Break, 0.50 mil)	480	%	ASTM D882
Dart Drop Impact (0.50 mil)	590	g	ASTM D1709
Elmendorf Tear Strength - MD (0.50 mil)	17	g	ASTM D1922
Elmendorf Tear Strength - TD (0.50 mil)	210	g	ASTM D1922
Thermal	**Nominal Value**	**Unit**	**Test Method**
Melting Temperature	268	°F	DSC

Formolene® E924

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

Notes

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

[2] MI

[3] HLMI