Formolene® E-924

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

Monday, June 16, 2008

General Information

Product Description

Formolene E924 is a high molecular weight grade of HDPE designed for high dart impact strength and good processing characteristics. 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.

General

Material Status	• Commercial: Active	
Availability	• North America	
Features	• Food Contact Acceptable • Good Processability	• Good Stiffness • High Impact Resistance
Uses	• Bi-axially Oriented Film • Heavy-duty Bags	• Laundry Bags • Liners
Agency Ratings	• FDA 21 CFR 177.1520 [1]	
Forms	• Pellets	
Processing Method	• Film Extrusion	

ASTM and ISO Properties [2]

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.949 g/cm³	0.949 g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR)			ASTM D1238
190°C/2.16 kg	0.040 g/10 min	0.040 g/10 min	
190°C/21.6 kg	8.5 g/10 min	8.5 g/10 min	
Films	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength at Break MD [3]	9000 psi	62.1 MPa	ASTM D882
Tensile Strength at Break TD [3]	7300 psi	50.3 MPa	ASTM D882
Elongation at Break MD [3]	330 %	330 %	ASTM D882
Elongation at Break TD [3]	430 %	430 %	ASTM D882
Dart Drop Impact [3]	400 g	400 g	ASTM D1709
Elmendorf Tear Strength MD [3]	15 g	15 g	ASTM D1922
Elmendorf Tear Strength TD [3]	110 g	110 g	ASTM D1922
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Melting Temperature	268 °F	131 °C	DSC

Notes

[1] When used unmodified for the manufacture of food contact articles, Formolene® E-924 will comply with Food Additive Regulations FDA 21 CFR 177.1520 under the U.S. Food, Drug and Cosmetic Act. Such uses are subject to good manufacturing practices and any other limitations which are part of the statute or regulations. These should be consulted for complete details.

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

[3] 0.500 mil (12.7 µm)