



Formolene® L42009F

Formosa Plastics Corporation, U.S.A. - Linear Low Density Polyethylene

Tuesday, November 5, 2019

General Information

Product Description

Formolene® L42009F is a general-purpose film grade linear low density made using gas-phase technology. The resin exhibits excellent toughness and strength when drawn down to thin gauges.

Formolene® L42009F 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		
Additive	• Antiblock: 7000 ppm	• Slip: 1350 ppm	
Features	• Butene Comonomer • Food Contact Acceptable • General Purpose	• Good Drawdown • Good Strength • Good Toughness	• High Antiblocking • High Slip
Uses	• Blending • Film • General Purpose	• Industrial Applications • Laundry Bags • Liners	• Non-specific Food Applications • Packaging
Agency Ratings	• EC 1907/2006 (REACH)	• FDA 21 CFR 177.1520	
Forms	• Film		
Processing Method	• Blown Film	• Coextrusion	• Film Extrusion

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.919	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (190°C/2.16 kg)	0.95	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	1	mil	
Tensile Strength - MD (Break, 0.98 mil, Blown Film)	5100	psi	ASTM D882
Tensile Strength - TD (Break, 0.98 mil, Blown Film)	3230	psi	ASTM D882
Tensile Elongation - MD (Break, 0.98 mil, Blown Film)	700	%	ASTM D882
Tensile Elongation - TD (Break, 0.98 mil, Blown Film)	820	%	ASTM D882
Elmendorf Tear Strength ²			
MD : 1.0 mil	160	g/mil	ASTM D1922
TD : 1.0 mil	400	g/mil	
Optical	Nominal Value	Unit	Test Method
Gloss (45°, 0.984 mil, Blown Film)	36		ASTM D523
Haze (0.984 mil, Blown Film)	27.0	%	ASTM D1003
Additional Information	Nominal Value	Unit	Test Method
Dart Impact ² (1.0 mil)	300	lb/in	ASTM D1709

Notes

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

² Blown Film