



Formosa Industries

Formolene® LLDPE

Formolene® LB1810E2

Linear Low Density Polyethylene (LLDPE) Resin for Film Extrusion Applications

Formolene® LB1810E2 is a butene based linear low density polyethylene copolymer designed for blown film applications.

Formolene® LB1810E2 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:

Agricultural Films Industrial Liners Industrial Packaging Garment Bags

Additives:

Antiblock – 5000 ppm Slip – 1500 ppm Processing Aid – No

Nominal Values

PROPERTY	ASTM TEST METHOD	ENGLISH		SI	
		Unit	Value	Unit	Value
Base Density	Internal Method	g/cm ³	0.918	g/cm ³	0.918
Melt Index (190 °C, 2.16 kg)	D1238	g/10 min	1.0	g/10 min	1.0
Tensile Strength at Yield	D882	psi	1550/1600*	MPa	10.7/11.0*
Tensile Strength at Break	D882	psi	5300/3900*	MPa	36.5/26.9*
Tensile Elongation at Break	D882	%	580/690*	%	580/690*
Dart Impact	D1709A	g	90	g	90
Elmendorf Tear Strength	D1922	g	170/320*	g	170/320*

* MD/TD

Available in the following additive packages:

Additive	LB1810B	LB1810A	LB1810E2
Density (g/cm ³)	0.918	0.920	0.922
ASTM D792			
Antiblock (ppm)	None	4000	5000
Slip (ppm)	None	None	1500
Processing aid	None	None	None
Special	High Antioxidant	Additives talc based	Additives talc based

Note: Film properties are based on 1.0 mil (25 µm) thickness blown film produced with a 2.5:1 blow-up ratio at 12 lb/hr/in. die. Actual film properties may vary depending on operating conditions and additive packages. Film properties are not intended to be used as specifications.

Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

Published 11/1/2019

Any inquiries regarding this data sheet should be addressed to: 9 Peach Tree Hill Road • Livingston, NJ 07039 • Phone: (800) 363-1823 • Fax: (973) 716-7483

The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions concerning uses or applications are only the opinion of FORMOSA INDUSTRIES CORPORATION and users should perform their own tests to determine the suitability of these products for their own particular purposes. However, because of numerous factors affecting the results, FORMOSA INDUSTRIES CORPORATION MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, other than that the material conforms to the applicable current Standard Specifications Statement herein, therefore, should not be construed as representations or warranties. Statements concerning the use of the products of formulations described herein are not to be construed as recommending the infringement of any patent and no liability for infringement arising out of any such use is assumed.

Formolene® is a registered trademark of Formosa Plastics Corporation, U.S.A. Formosa Industries Corporation is an authorized user of this trademark.