

## Formolene® LB1810M

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

Formolene® LB1810M is a butene based linear low density polyethylene copolymer designed for blown film applications.

Formolene® LB1810M 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 – Yes Slip – Yes Processing Aid – No

**Nominal Values** 

PROPERTY	ASTM TEST	ENGLISH		SI	
PROPERTY	METHOD	Unit	Value	Unit	Value
Base Density	Internal Method	g/cm <sup>3</sup>	0.918	g/cm <sup>3</sup>	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*

<sup>\*</sup> MD/TD

Available in the following additive packages:

11 variable in the 1010 wing additive packages.									
Additive	LB1810B	LB1810H	LB1810A	LB1810E2	LB1810M	LB1810E3	LB1810D		
Density (g/cm <sup>3</sup> ) ASTM D792	0.918	0.918	0.921	0.922	0.924	0.919	0.919		
Antiblock (ppm)	None	None	4000	5000	7500	1700	1700		
Slip (ppm)	None	None	None	1500	1500	1350	1350		
Processing aid	None	None	None	None	None	No	Yes		
Special	-	High Antioxidant	Additives talc based	Additives talc based	Additives talc based	Additives synthetic based	Additives synthetic based		

Note: Film properties are based on 1.0 mil ( $25 \text{ }\mu\text{m}$ ) 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  $0.0008 \text{ g/cm}^3$ . Base density is the estimated density of the polymer if it did not contain any antiblock.

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