



Formolene® LB1820E3

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

Formolene® LB1820E3 is a general purpose butene based LLDPE film grade made using gas-phase technology. The resin exhibits excellent toughness and puncture resistance.

Formolene® LB1820E3 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:

Food Packaging Industrial Liners Trash Can Liners

Additives:

Antiblock – Yes Slip – Yes 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	2.0	g/10 min	2.0
Tensile Strength at Break	D882	psi	5000/3600*	MPa	34.5/24.8*
Tensile Elongation at Break	D882	%	450/850*	%	450/850*
Dart Impact	D1709A	g	70	g	70
Elmendorf Tear Strength	D1922	g	50/400*	g	50/400*

* MD/TD

Available in the following additive packages:

Additive	LB1820B	LB1820H	LB1820E2	LB1820E3
Density (g/cm ³) ASTM D792	0.918	0.919	0.922	0.919
Antiblock (ppm)	None	None	5000	1700
Slip (ppm)	None	None	1500	1350
Processing aid	None	None	None	None
Special	-	High Antioxidant	Additives talc based	Additives synthetic based

Note: Film properties are based on slot-cast film extruded at 520 °F (270 °C) at 1.0 mil (25 µm) thickness. 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 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

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