



Formolene® LH1810D

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

Formolene® LH1810D is a hexene based linear low density film grade designed for blown film and cast extrusion applications. It has excellent toughness, high tensile and elongation properties.

Formolene® LH1810D 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:

Slot Cast Extrusion requiring excellent drawn down capabilities

Additives:

Antiblock – 6250 ppm

Slip – 1,000 ppm

Processing Aid – Yes

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	1750/1700*	MPa	12.1/11.7*
Tensile Strength at Break	D882	psi	5500/5500*	MPa	37.9/37.9*
Tensile Elongation at Break	D882	%	500/500*	%	500/500*
Dart Impact	D1709A	g	200	g	200
Elmendorf Tear Strength	D1922	g	380/600*	g	380/600*

* MD/TD

Available in the following additive packages:

Additive	LH1810B	LH1810H	LH1810A	LH1810D
Final Density (g/cm ³) ASTM D792	0.918	0.919	0.923	0.923
Antiblock (ppm)	None	None	6000	6250
Slip (ppm)	None	None	None	1000
Processing aid	None	None	None	Yes
Special	Barefoot	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.

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