



Formolene® MP1810E1

Metallocene Linear Low-Density Polyethylene (mLLDPE) Resin for Film Extrusion Applications

Formolene® MP1810E1 is a metallocene 1-hexene copolymer resin formulated with antiblock and slip that is engineered for blown film application. Films made from this resin have outstanding tensile, impact strength and puncture. These superior strength properties and excellent drawability enable MP1810E1 for downgauging in bag applications. MP1810E1 also contains PFAS free PPA for enhanced processing.

Suggested Applications:

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|--------------------|------------------------------|------------------------|
| Agricultural Film | Bag in Box | Barrier Food Packaging |
| Blown Film | Blown Stretch Film | Bread Bags |
| Food Packaging | Form Fill and Seal Packaging | Freezer Film |
| General Packaging | Heavy Duty Bags | Industrial Packaging |
| Lamination Film | Multilayer Packaging Film | Overwrap Film |
| Premium Trash Bags | Stand Up Pouches | Trash Bags |
| Trash Can Liners | | |

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	1400/1300*	MPa	9.6/8.9*
Tensile Strength at Break	D882	psi	8000/7000*	MPa	55/48*
Tensile Elongation	D882	%	520/700*	%	520/700*
Secant Modulus (1% sec)	D882	kpsi	24/26	MPa	165/180*
Dart Impact	D1709A	g	550	g	550
Tear Strength	D1922	g	210/400*	g	210/400*
Puncture Force	Internal Method	lbf	7.8	N	35
Gloss (45°)	D2457		43		43
Haze	D1003	%	16	%	16

* MD/TD measured on blown film (1 mil / 25.4 micron and 2.5:1 blow up ratio). Actual film properties may vary depending on operating conditions and additive packages.

Available in the following additive packages

Additive	MP1810N	MP1810B	MP1810D	MP1810E1	MP1810E2
Antiblock (ppm)	None	None	4500	2500	5000
Slip (ppm)	None	None	None	800	1000
Processing Aid**	None	Yes	Yes	Yes	Yes

** PFAS free PPA

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

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