

**LLM1416**

**Melt Index 1.4**

**Density 0.916**

### Material Properties - Metallocene

Properties	Test Method	Unit	Typical Value
Melt Index, 190°C/2.16kg	D 1238	g/10 min	1.4
Density	D 1505	g/cm <sup>3</sup>	0.916
<b>Nominal Blown Film Properties at 1mil<sup>1</sup></b>			
Haze	D 1003	%	4
Gloss, 60°	D 2457		130
COF	D 1894		>1
Dart	D 1709	g/mil	>800
Elmendorf Tear Strength, MD (TD)	D 1922	g/mil	240 (420)
Tensile Strength @ Yield, MD	D 882	psi (MPa)	1,700 (12)
Tensile Strength @ Yield, TD	D 882	psi (MPa)	1,450 (10)
Tensile Strength @ Break, MD	D 882	psi (MPa)	10,100 (70)
Tensile Strength @ Break, TD	D 882	psi (MPa)	7,600 (52)
Tensile Strength Elongation @ Break, MD (TD)	D 882	%	520 (600)
1% Secant Modulus, MD	D 882	psi (MPa)	22,000 (152)
1% Secant Modulus, TD	D 882	psi (MPa)	22,700 (157)
Film Puncture Energy	D 3763	in-lbf (J)	66.4 (7.5)
Film Puncture Force	D 3763	lbf (N)	18.6 (83)
Seal Initiation Temperature	F88 <sup>2</sup>	°F (°C)	212° (100°)

<sup>1</sup> Produced on LLDPE line 2.5:1BUR 80 mil Die Gap 8 in Die 250 lbs/hr 400°F melt temperature.

<sup>2</sup> Temperature at which 0.3 lb/in heat seal strength is achieved. 0.5 s dwell, 30 psi pressure, 11.8 in/min separation rate.

Product	LLM1416	LLM1416SA
Slip	None	1,000 ppm
Antiblock	None	5,000 ppm
Processing Aid	Yes	Yes

- LLM1416 is best suited for applications requiring excellent clarity, gloss, toughness and heat seal. Typical blown film applications include; seal layer in coextrusions, heavy duty packaging and clarity packaging.
- Osterlene LLM1416 meets the requirements of the Food and Drug Administration, 21 CFR Section 177.1520. This regulation allows the use of this olefin polymer in "...articles or components of articles intended for use in contact with food." Specific limitations may apply. Contact your Osterman sales representative for more information.