

**Petrothene®**

# LP510300

**High Density Polyethylene  
Film Extrusion Grade**
**Melt Index 0.33 Density 0.949**
**Applications**

PETROTHENE LP510300 is a copolymer resin designed for blown film applications. This resin offers high stiffness, excellent appearance and bubble stability and good drawdown. LP510300 is recommended for merchandise bags, and multi-wall sack liners and barrier sheeting. It is also useful as a blend component for improved stiffness and machineability.

**Regulatory  
Status**

LP510300 meets the requirements of the Food and Drug Administration regulation 21 CFR 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 or conditions of use may apply. Contact your Equistar sales representative for more information.

**Processing  
Techniques**

Specific recommendations for processing LP510300 can only be made when the processing conditions, equipment and end use are known. For further suggestions, please contact your Equistar sales representative.

**Typical  
Properties**

Property	Nominal Value	Units	ASTM Test Method
Melt Index	0.33	g/10 min	D 1238
Density	0.949	g/cc	D 1505
Vicat Softening Point	126	°C	D 1525
<b>Film**</b>			
Dart Drop Impact Strength, F50	70	g	D 1709
Elmendorf Tear Strength, MD (TD)	31 (1,200)	g	D 1922
Tensile Strength @ Yield, MD (TD)	3,600 (4,100)	psi	D 882
Tensile Strength @ Break, MD (TD)	6,300 (4,500)	psi	D 882
Elongation @ Break, MD (TD)	500 (670)	%	D 882
1% Secant Modulus, MD (TD)	110,000 (134,000)	psi	E 111
Transmission Rates:			
Water Vapor	3.3	g/m <sup>2</sup> /24 hrs	F 372
Oxygen	2,400	cm <sup>3</sup> /m <sup>2</sup> /24 hrs	D 3985

\* These are typical values and are not to be construed as specific product limits.

\*\* Film properties obtained from 2.0 mil Blown Film; 2.5:1 Blow-up-ratio, Melt Temperature 390-410°F (199-210°C), 60 mil die gap.

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