

## LyondellBasell Petrothene® LP510300 High Density Polyethylene, Film Extrusion Grade

Category : Polymer , Film , Thermoplastic , Polyethylene (PE) , HDPE , High Density Polyethylene (HDPE), Film Grade

### Material Notes:

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. 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. This product is from the former Equistar product line.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_LyondellBasell-Petrothene-LP510300-High-Density-Polyethylene-Film-Extrusion-Grade.php](http://www.lookpolymers.com/polymer_LyondellBasell-Petrothene-LP510300-High-Density-Polyethylene-Film-Extrusion-Grade.php)

Physical Properties	Metric	English	Comments
Density	0.949 g/cc	0.0343 lb/in <sup>3</sup>	ASTM D1505
Water Vapor Transmission	3.30 g/m <sup>2</sup> /day	0.213 g/100 in <sup>2</sup> /day	ASTM F372
Oxygen Transmission Rate	2400 cc/m <sup>2</sup> /day	155 cc/100 in <sup>2</sup> /day	ASTM D3985
Thickness	50.8 microns	2.00 mil	
Melt Flow	0.33 g/10 min	0.33 g/10 min	ASTM D1238

Mechanical Properties	Metric	English	Comments
Film Tensile Strength at Yield, MD	24.8 MPa	3600 psi	ASTM D882
Film Tensile Strength at Yield, TD	28.3 MPa	4100 psi	ASTM D882
Film Elongation at Break, MD	500 %	500 %	ASTM D882
Film Elongation at Break, TD	670 %	670 %	ASTM D882
Elmendorf Tear Strength MD	31 g	31 g	ASTM D1922
Elmendorf Tear Strength TD	1200 g	1200 g	ASTM D1922
Dart Drop	1.38 g/micron	35.0 g/mil	ASTM D1709
Film Tensile Strength at Break, MD	43.4 MPa	6300 psi	ASTM D882
Film Tensile Strength at Break, TD	31.0 MPa	4500 psi	ASTM D882
1% Secant Modulus, MD	758 MPa	110000 psi	ASTM E111

Mechanical Properties	Metric	English	Comments
1% Secant Modulus (TD)	924 MPa	133000 psi	ASTM E111

Thermal Properties	Metric	English	Comments
Vicat Softening Point	126 Å°C	259 Å°F	ASTM D1525

Processing Properties	Metric	English	Comments
Melt Temperature	199 - 210 Å°C	390 - 410 Å°F	
Die Opening	0.1524 cm	0.06000 in	
Blow-up Ratio (BUR)	2.5	2.5	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China