Technical Data Sheet

Petrothene LP510300

High Density Polyethylene

Product Description

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

Regulatory Status

For regulatory compliance information, see *Petrothene* LP510300 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	Bags & Pouches; Food Packaging Film; Lamination Film; Secondary Packaging; Shrink Film
Market	Flexible Packaging
Processing Method	Blown Film
Attribute	General Purpose; High Tensile Strength

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.33	g/10 min	0.33	g/10 min	ASTM D1238
Density, (23 °C)	0.949	g/cm³	0.949	g/cm³	ASTM D1505
Film					
Dart Drop Impact Strength, F50	70	g	70	g	ASTM D1709
Tensile Strength at Break					
MD	6300	psi	43.4	MPa	ASTM D882
TD	4500	psi	31.0	MPa	ASTM D882
Tensile Strength at Yield					
MD	3600	psi	24.8	MPa	ASTM D882
TD	4100	psi	28.3	MPa	ASTM D882
Tensile Elongation at Break					
MD	500	%	500	%	ASTM D882
TD	670	%	670	%	ASTM D882
Secant Modulus					
MD	110000	psi	758	MPa	ASTM D882
TD	134000	psi	924	MPa	ASTM D882
Elmendorf Tear Strength					
MD	31	g	31	g	ASTM D1922
TD	1200	g	1200	g	ASTM D1922
Thermal					
Vicat Softening Temperature	259	°F	126	°C	ASTM D1525

Manufacturer website: https://www.lyondellbasell.com/en/

Notes

Data obtained from 2.0 mil film produced on a blown film line with a 60 mil die gap, 2.5:1 BUR, and 390-410 °F (199-210 °C) melt extrusion temperature.

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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