

Technical Data Sheet

Petrothene Select GS906061



Linear Low Density Polyethylene

Product Description

The *Petrothene* Select series of resins are high performance hexene, linear low density polyethylenes selected by customers for use in blown film applications that require superior strength and toughness. *Petrothene* Select GS906 has a melt index of 0.6 g/10 min which can contribute to films having very high dart impact as well as excellent melt strength during blown film fabrication.

Regulatory Status

For regulatory compliance information, see *Petrothene* Select GS906061 [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Application	Agriculture Film; Bags & Pouches; Can Liners; Film Wrap; Food Packaging Film; Heavy Duty Packaging; Lamination Film; Liner Film; Retail Carryout Bags; Shipping Sacks; Shrink Film
Market	Flexible Packaging
Processing Method	Blown Film
Attribute	Good Melt Strength; High Impact Resistance; Superior Tear Resistance

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.6	g/10 min	0.6	g/10 min	ASTM D1238
Base Resin Density, (23 °C)	0.9165	g/cm ³	0.9165	g/cm ³	ASTM D1505
Product Density, (23 °C)	0.9215	g/cm ³	0.9215	g/cm ³	ASTM D1505
Film					
Dart Drop Impact Strength, F50	650	g	650	g	ASTM D1709
Tensile Strength at Break					
MD	9500	psi	65.5	MPa	ASTM D882
TD	7000	psi	48.3	MPa	ASTM D882
Tensile Elongation at Break					
MD	500	%	500	%	ASTM D882
TD	700	%	700	%	ASTM D882
1% Secant Modulus					
MD	27000	psi	186	MPa	ASTM D882
TD	29000	psi	200	MPa	ASTM D882
Elmendorf Tear Strength					
MD	450	g	450	g	ASTM D1922
TD	650	g	650	g	ASTM D1922
Additive					
Slip	None		None		LYB Method
Antiblock	6500	ppm	6500	ppm	LYB Method
Polymer Processing Aid	Present		Present		LYB Method

Product	Slip(ppm)
Select GS906061	None
Select GS906062	1350

Notes

Film sample used for testing was 1.0 mil gauge, 2.5:1 BUR.

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

Processing Techniques

Recommended processing conditions for this product are a melt temperature of 420 - 480 °F and a 1.5 to 3.0:1 blow-up ratio.

Using proper techniques, these products can readily be drawn below 0.90 mils at optimum production rates.

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