

Petrothene Select

GS906

Linear Low Density Polyethylene
Film Extrusion Grade

Melt Index: 0.6 Density: 0.9165



Applications

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. Typical applications include trash can liners, heavy duty bags, shipping sacks and industrial packaging.

Regulatory Status

GS906 meets the specifications 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 product safety representative for more information.

Processing Techniques

Recommended processing conditions for GS906 are a melt temperature of 400°- 450°F and a 1.5 to 3.0 blow-up ratio. Specific recommendations for resin type and extrusion conditions can only be made when the end use, required properties and extrusion equipment are known.

Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Index	0.6	g/10 min	D1238
Base Resin Density	0.9165	g/cc	D1505
Film*			
Dart Drop Impact Strength, F ₅₀	650	g	D1709A
Tensile Strength @ Break MD (TD)	9,500 (7,000)	psi	D882
Elongation @ Break, MD (TD)	500 (700)	%	D882
1% Secant Modulus, MD (TD)	27,000 (29,000)	psi	D882
Elmendorf Tear, MD (TD)	450 (650)	g	D1922

*Data obtained under the following extrusion conditions: 1.0 mil film, 2.5:1 blow-up ratio, 430°F melt temperature

Product	GS906061	GS906062
Pellet Density (g/cc)	0.9215	0.9215
Slip (ppm)	0	1350
Antiblock (ppm)	6500	6500
Processing Aid	Present	Present

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

