Technical Data Sheet

Petrothene GA503027

Linear Low Density Polyethylene

Product Description

The *Petrothene* GA503 series of products are pelletized medium density butene copolymer LLDPE resins with high draw. GA503 resins are typically selected by customers for stiff, thin blown films. The GA503 series contains an additive package to minimize discoloration and die build-up.

Regulatory Status

For regulatory compliance information, see *Petrothene* GA503027 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	Bags & Pouches; Film Wrap; Food Packaging Film; Lamination Film; Zipper Packaging
Market	Flexible Packaging
Processing Method	Blown Film; Cast Film; Sheet and Profile Extrusion

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	3.5	g/10 min	3.5	g/10 min	ASTM D1238
Base Resin Density, (23 °C)	0.925	g/cm³	0.925	g/cm³	ASTM D1505
Product Density, (23 °C)	0.930	g/cm³	0.930	g/cm³	ASTM D1505
Film					
Dart Drop Impact Strength, F50	110	g	110	g	ASTM D1709
Tensile Strength at Break					
MD	4800	psi	33.1	MPa	ASTM D882
TD	3400	psi	23.4	MPa	ASTM D882
Tensile Elongation at Break					
MD	690	%	690	%	ASTM D882
TD	740	%	740	%	ASTM D882
1% Secant Modulus					
MD	44500	psi	307	MPa	ASTM D882
TD	45500	psi	314	MPa	ASTM D882
Elmendorf Tear Strength					
MD	100	g	100	g	ASTM D1922
TD	215	g	215	g	ASTM D1922
Optical					
Haze	30	%	30	%	ASTM D1003
Gloss	25		25		ASTM D2457
Additive					
Slip	1500	ppm	1500	ppm	LYB Method
Antiblock	7000	ppm	7000	ppm	LYB Method
Polymer Processing Aid	Present		Present		LYB Method

Product	Product Density(g/cm³)	Slip(ppm)	Antiblock (ppm)	Polymer Processing Aid(ppm)
GA503026	0.926	800	1300	None
GA503027	0.930	1500	7000	Present
GA503028	0.926	800	1300	None

Notes

Film sample used for testing was 1.5 mil gauge, 2.5:1 BUR.

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.