

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/cm ³	0.925	g/cm ³	ASTM D1505
Product Density, (23 °C)	0.930	g/cm ³	0.930	g/cm ³	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

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Request #: 908784

Polymer Processing Aid	Present	Present	LYB Method
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Product	Product Density(g/cm ³)	Slip(ppm)	Antiblock (ppm)	Polymer Processing Aid(ppm)
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.

Company Information

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

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Users should review the applicable Safety Data Sheet before handling the product.

This product(s) may not be used in the manufacture of any of the following, without prior written approval by Seller for each specific product and application:

- (i) U.S. FDA Class I or II Medical Devices; Health Canada Class I, II or III Medical Devices; European Union Class I or II Medical Devices;
- (ii) film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned medical devices;
- (iii) packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration;
- (iv) tobacco related products and applications, electronic cigarettes and similar devices.
- (v) safety components in automotive applications, for example: air bags, air bag unit housings and covers, seat belt mechanisms, brake systems, pedals and pedal supports, steering systems.

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- (i) U.S. FDA Class III Medical Devices; Health Canada Class IV Medical Devices; European Class III Medical Devices;
- (ii) applications involving permanent implantation into the body;
- (iii) life-sustaining medical applications.

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