

Technical Data Sheet

Petrothene GA502024

Linear Low Density Polyethylene



Product Description

The *Petrothene* GA502 series of resins are pelletized linear low density polyethylenes for applications requiring excellent drawdown and toughness. These pelletized products offer excellent additive homogeneity, require no transfer equipment modification and facilitate clean and safe storage and handling. They can be used in either blown or cast film extrusion. GA502024 is formulated with higher antioxidant levels for use in cast film.

Regulatory Status

For regulatory compliance information, see *Petrothene* GA502024 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Application	Bags & Pouches; Can Liners; Colour Concentrates; Film Wrap; Food Packaging Film; Lamination Film; Liner Film; Stretch Wrap Film
Market	Compounding; Flexible Packaging; Rigid Packaging
Processing Method	Cast Film; Compounding; 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)	2.0	g/10 min	2.0	g/10 min	ASTM D1238
Base Resin Density, (23 °C)	0.918	g/cm ³	0.918	g/cm ³	ASTM D1505
Product Density, (23 °C)	0.918	g/cm ³	0.918	g/cm ³	ASTM D1505
Film					
Dart Drop Impact Strength, F50	120	g	120	g	ASTM D1709
Tensile Strength at Break					
MD	4900	psi	33.8	MPa	ASTM D882
TD	3600	psi	24.8	MPa	ASTM D882
Tensile Elongation at Break					
MD	750	%	750	%	ASTM D882
TD	800	%	800	%	ASTM D882
1% Secant Modulus					
MD	32000	psi	221	MPa	ASTM D882
TD	36000	psi	248	MPa	ASTM D882
Elmendorf Tear Strength					
MD	170	g	170	g	ASTM D1922
TD	400	g	400	g	ASTM D1922
Additive					
Slip	None		None		LYB Method
Antiblock	None		None		LYB Method

Product	Product Density(g/cm ³)	Slip(ppm)	Antiblock (ppm)
GA502022	0.923	1350	7000
GA502023	0.922	900	5500
GA502024	0.918	None	None
GA502119	0.918	None	None

Notes

Film sample used for testing was 1.5 mil gauge, 2.1:1 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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- (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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