

Technical Data Sheet

Petrothene NA271009

Low Density Polyethylene



Product Description

Petrothene NA271009 is a medium density polyethylene resin selected by customers for overwrap film and other films requiring good stiffness and optics. NA271009 exhibits good film optics and high stiffness.

Regulatory Status

For regulatory compliance information, see *Petrothene* NA271009 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Application	Bags & Pouches; Food Packaging Film; Lamination Film; Secondary Packaging
Market	Flexible Packaging
Processing Method	Blown Film; Cast Film

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	1.2	g/10 min	1.2	g/10 min	ASTM D1238
Density, (23 °C)	0.930	g/cm ³	0.930	g/cm ³	ASTM D1505
Film					
Dart Drop Impact Strength, F50	70	g	70	g	ASTM D1709
Tensile Strength at Break					
MD	3900	psi	26.9	MPa	ASTM D882
TD	3300	psi	22.8	MPa	ASTM D882
Tensile Elongation at Break					
MD	350	%	350	%	ASTM D882
TD	620	%	620	%	ASTM D882
1% Secant Modulus					
MD	46000	psi	317	MPa	ASTM D882
TD	54000	psi	372	MPa	ASTM D882
Elmendorf Tear Strength					
MD	185	g	185	g	ASTM D1922
TD	255	g	255	g	ASTM D1922
Optical					
Haze	7.5	%	7.5	%	ASTM D1003
Gloss, (45°)	62		62		ASTM D2457
Additive					
Slip	None		None		LYB Method
Antiblock	None		None		LYB Method

Notes

Data obtained from 1.25 mil (32 micron) film produced on a blown film line with a 4" (102mm) die, 385 °F (196 °C) melt temperature, 2.2:1 BUR, 0.025" die gap at 70 lbs/hr.

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.

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- (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.

The product(s) may not be used in:

- (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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