

Technical Data Sheet

Petrothene NA952000

Low Density Polyethylene



Product Description

Petrothene NA952000 is a low density polyethylene for use in blow molding, injection molding, packaging, as well as liner and bag applications. This resin exhibits excellent toughness, good softness and good dimensional stability. NA952000 is selected by customers for use in injection molding caps, closures, blow molding squeeze bottles and other specialty applications. NA952000 has an excellent balance of processability, toughness, and drawdown.

Regulatory Status

For regulatory compliance information, see *Petrothene* NA952000 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Application	Agriculture Film; Bags & Pouches; Bottles and Vials; Bottles For Consumer Goods; Bottles for Industrial Use; Can Liners; Clear Containers; Film Wrap; Foamed Sheet; Food Packaging Film; Lamination Film; Liner Film; Opaque Containers; Sealants; Secondary Packaging; Surface Protection Film
Market	Flexible Packaging; Rigid Packaging
Processing Method	Blown Film; Cast Film; Extrusion Blow Molding; Injection Molding

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)	0.919	g/cm ³	0.919	g/cm ³	ASTM D1505
Product Density, (23 °C)	0.919	g/cm ³	0.919	g/cm ³	ASTM D1505
Mechanical					
Tensile Strength	1800	psi	12.4	MPa	ASTM D638
Tensile Elongation at Break	650	%	650	%	ASTM D638
Film					
Dart Drop Impact Strength, F50	110	g	110	g	ASTM D1709
Tensile Strength at Break					
MD	3200	psi	22.1	MPa	ASTM D882
TD	2300	psi	15.9	MPa	ASTM D882
Tensile Elongation at Break					
MD	200	%	200	%	ASTM D882
TD	500	%	500	%	ASTM D882
1% Secant Modulus					
MD	26500	psi	183	MPa	ASTM D882
TD	32000	psi	221	MPa	ASTM D882

Elmendorf Tear Strength			
MD	350 g	350 g	ASTM D1922
TD	70 g	70 g	ASTM D1922
Thermal			
Vicat Softening Temperature	185 °F	85 °C	ASTM D1525
Additive			
Slip	None	None	LYB Method
Antiblock	None	None	LYB Method

Product	Product Density(g/cm ³)	Slip(ppm)	Antiblock (ppm)
NA952000	0.919	None	None
NA952094	0.921	500	4000

Notes

Mechanical data derived from Type IV specimen, 75 mil plaque @ 20" per minute.

Data obtained from 1.25 mil (32 micron) film produced on a blown film line with a 8" (203 mm) die, 350°F (177°C) melt temperature, 2:1 BUR, 0.025" die gap at 150 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.

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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