

Technical Data Sheet

Petrothene NA305212

Low Density Polyethylene



Product Description

Petrothene NA305212 is a fractional melt index LDPE resin that exhibits good balance of optics, modulus, puncture, tear and shrink characteristics. Typical applications include collation shrink film, shrink bundling, pallet shrink film, frozen food packaging, overwraps and heavy duty films where clarity and stiffness are important.

Regulatory Status

For regulatory compliance information, see *Petrothene* NA305212 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Application	Bags & Pouches; Clarity Film; Film Wrap; Food Packaging Film; Heavy Duty Packaging; Shrink Film; Specialty Film; Stretch Hood; Surface Protection Film; Textile Packaging Film
Market	Flexible Packaging
Processing Method	Blown Film

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.80	g/10 min	0.80	g/10 min	ASTM D1238
Density, (23 °C)	0.924	g/cm ³	0.924	g/cm ³	ASTM D1505
Film					
Dart Drop Impact Strength, F50	130	g	130	g	ASTM D1709
Tensile Strength at Break					
MD	3200	psi	22.1	MPa	ASTM D882
TD	3000	psi	20.7	MPa	ASTM D882
Tensile Strength at Yield					
MD	1700	psi	11.7	MPa	ASTM D882
TD	1700	psi	11.7	MPa	ASTM D882
Tensile Elongation at Break					
MD	330	%	330	%	ASTM D882
TD	540	%	540	%	ASTM D882
1% Secant Modulus					
MD	30000	psi	207	MPa	ASTM D882
TD	32000	psi	221	MPa	ASTM D882
Elmendorf Tear Strength					
MD	270	g	270	g	ASTM D1922
TD	290	g	290	g	ASTM D1922
Optical					
Haze	5.5	%	5.5	%	ASTM D1003
Gloss, (45°)	75		75		ASTM D2457

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Additive			
Slip	None	None	LYB Method
Antiblock	2000 ppm	2000 ppm	LYB Method

Notes

Data obtained from 2.0 mil (51 micron) film produced on a blown film line with a 4" (102 mm) die, 370 °F (188 °C) melt temperature, 2.5:1 BUR, 0.025" die gap at 60 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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