

Technical Data Sheet

Petrothene NA480178

Ethylene Vinyl Acetate



Product Description

Petrothene NA480178 is a LDPE/EVA copolymer resin selected by customers for specialty films. NA480178 produces film with excellent puncture resistance, impact strength, heat sealability, clarity and low temperature flexibility. Typical applications include frozen food packaging, bundling, heavy-duty, and stretch hooder films.

Regulatory Status

For regulatory compliance information, see *Petrothene* NA480178 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Application	Agriculture Film; Bags & Pouches; Film Wrap; Food Packaging Film; Heavy Duty Packaging; Liner Film; Sealants; Shrink Film; Stretch Hood
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)	0.25	g/10 min	0.25	g/10 min	ASTM D1238
Base Resin Density, (23 °C)	0.923	g/cm ³	0.923	g/cm ³	ASTM D1505
Product Density, (23 °C)	0.930	g/cm ³	0.930	g/cm ³	ASTM D1505
Vinyl Acetate Content	4.5	%	4.5	%	LYB Method
Film					
Dart Drop Impact Strength, F50	320	g	320	g	ASTM D1709
Tensile Strength at Break					
MD	3200	psi	22.1	MPa	ASTM D882
TD	3000	psi	20.7	MPa	ASTM D882
Tensile Elongation at Break					
MD	370	%	370	%	ASTM D882
TD	550	%	550	%	ASTM D882
1% Secant Modulus					
MD	19000	psi	131	MPa	ASTM D882
TD	23000	psi	159	MPa	ASTM D882
Elmendorf Tear Strength					
MD	150	g	150	g	ASTM D1922
TD	250	g	250	g	ASTM D1922
Thermal					
Vicat Softening Temperature	190	°F	88	°C	ASTM D1525
Additive					
Slip	None		None		LYB Method
Antiblock	12000	ppm	12000	ppm	LYB Method

Product	Product Density(g/cm³)	Slip(ppm)	Antiblock (ppm)
NA480145	0.926	1000	6000
NA480178	0.930	None	12000

Notes

Data obtained from 2.0 mil (51 micron) film produced on a blown film line with a 8" (203 mm) die, 430°F (221°C) melt temperature, 2:1 BUR, 0.025" die gap at 170 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.

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- (ii) applications involving permanent implantation into the body;
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