

Product Description

Petrothene SM-NA345 is a series of homopolymer resins that combine premium clarity with strength and stiffness. In addition, SM-NA345 exhibits good impact strength on both flat and creased film. SM-NA345 is selected by customers for textile packaging, light produce, bread bags and other thin packaging films enhanced by clarity and sparkle.

Regulatory Status

For regulatory compliance information, see *Petrothene* SM-NA345 Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	Clarity Film
Market	Flexible Packaging
Processing Method	Blown Film; Cast Film

Typical Properties	Nominal English Value Units	Nominal SI Value Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	1.8 g/10 min	1.8 g/10 min	ASTM D1238
Base Resin Density, (23 °C)	0.921 g/cm ³	0.921 g/cm ³	ASTM D1505
Film			
Dart Drop Impact Strength, F50	90 g	90 g	ASTM D1709
Tensile Strength at Break			
MD	4000 psi	27.6 MPa	ASTM D882
TD	3400 psi	23.4 MPa	ASTM D882
Tensile Strength at Yield			
MD	1500 psi	10.3 MPa	ASTM D882
TD	1600 psi	11.0 MPa	ASTM D882
Tensile Elongation at Break			
MD	300 %	300 %	ASTM D882
TD	500 %	500 %	ASTM D882
1% Secant Modulus			
MD	26000 psi	179 MPa	ASTM D882
TD	30000 psi	207 MPa	ASTM D882
Elmendorf Tear Strength			
MD	360 g	360 g	ASTM D1922
TD	200 g	200 g	ASTM D1922
Thermal			
Vicat Softening Temperature	212 °F	100 °C	ASTM D1525
Optical			
Haze	5.0 %	5.0 %	ASTM D1003

As measured on SM-NA345 (medium slip, medium antiblock).

Gloss, (45°)	70	70	ASTM D2457
As measured on SM-NA345 (medium slip, medium antiblock).			
Additive			
Slip	None	None	LYB Method
Antiblock	None	None	LYB Method

Notes

Film data obtained from sample produced on a 3 1/2" (89mm) blown film line, commercially available 8" (203 mm) die, 375°F (191°C) melt extrusion temperature, 2:1 BUR, 1.25 mil (32 micron) gauge, 0.025" die gap at 130 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.

Disclaimer

Users should make their own independent determination that the product is suitable for the intended use and can be used safely and legally.

SELLER MAKES NO WARRANTY; EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTY) OTHER THAN AS SEPARATELY AGREED TO BY THE PARTIES IN A CONTRACT.

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.

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.

All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification.

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