Technical Data Sheet

Petrothene NA345013

Low Density Polyethylene

Product Description

Petrothene NA345 is a series of homopolymer resins that combine premium clarity with strength and stiffness. In addition, NA345 exhibits good impact strength on both flat and creased film. 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* NA345013 Product Stewardship Bulletin (PSB) and 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 Value	English Units	Nominal Value	SI 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/cm³	0.921	g/cm³	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 NA345196 (medium slip, medium antiblock).

Manufacturer website: https://www.lyondellbasell.com/en/

Gloss, (45°)	70	70	ASTM D2457
As measured on NA345196 (medium slip, medium antiblock).			
Additive			
Slip	None	None	LYB Method
Antiblock	None	None	LYB Method

Product	Slip(ppm)	Antiblock (ppm)
NA345013	None	None
NA345184	None	1500
NA345196	750	1500

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.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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