

Petrothene

NA345

Low Density Polyethylene
Film Extrusion Grade

Melt Index: 1.8 Density: 0.921



Applications

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

The base resin NA345 meets the requirements of the Food and Drug Administration, 21 CFR 177.1520. This regulation allows the use of this olefin polymer in "...articles or components of articles intended for use in contact with food..." Specific limitations or conditions of use may apply. Contact your Equistar product safety representative for more information.

Processing Techniques

Specific recommendations for processing NA345 resins can only be made when the processing conditions, equipment and end use are known.

Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Index	1.8	g/10 min	D1238
Base Resin Density	0.921	g/cc	D1505
Vicat Softening Point	100	°C	D1525
Film*			
Haze ¹	5.0	%	D1003
Gloss, 45° ¹	70	units	D2457
Dart Drop impact Strength, F ₅₀	90	g	D1709
Tensile Strength @ Yield, MD (TD)	1,500 (1,600)	psi	D882
Tensile Strength @ Break MD (TD)	4,000 (3,400)	psi	D882
Elongation, MD (TD)	300 (500)	%	D882
1% Secant Modulus, MD (TD)	26,000 (30,000)	psi	D882
Elmendorf Tear Strength, MD (TD)	360 (200)	g	D1922

Product	<u>NA345013</u>	<u>NA345184</u>	<u>NA345196</u>
Slip (ppm)	None	None	750
Antiblock (ppm)	None	1,500	1,500

* Data obtained from film produced on a 3½" (89 mm) 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 lb/hr.

¹ Optical properties given for NA345196 (medium slip, medium antiblock)

These are typical values not to be construed as specification limits.