Technical Data Sheet

Petrothene NA321013

Low Density Polyethylene

Product Description

Petrothene NA321 is a series of homopolymer resins that combine premium clarity with strength and stiffness. In addition, NA321 exhibits good impact strength on both flat and creased film. NA321 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* NA321013 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)	2.0	g/10 min	2.0	g/10 min	ASTM D1238
Base Resin Density, (23 °C)	0.923	g/cm³	0.923	g/cm³	ASTM D1505
Film					
Dart Drop Impact Strength, F50	77	g	77	g	ASTM D1709
Tensile Strength at Break					
MD	3190	psi	22.0	MPa	ASTM D882
TD	2390	psi	16.5	MPa	ASTM D882
Tensile Strength at Yield					
MD	1625	psi	11.2	MPa	ASTM D882
TD	1710	psi	11.8	MPa	ASTM D882
Tensile Elongation at Break					
MD	325	%	325	%	ASTM D882
TD	605	%	605	%	ASTM D882
1% Secant Modulus					
MD	32600	psi	225	MPa	ASTM D882
TD	40000	psi	276	MPa	ASTM D882
Elmendorf Tear Strength					
MD	542	g	542	g	ASTM D1922
TD	456	g	456	g	ASTM D1922
Optical					
Haze	4.5	%	4.5	%	ASTM D1003
Gloss	75		75		ASTM D2457
Additive					
Slip	None		None		LYB Method

Antiblock	None	None	LYB Method

Product	Haze(%)	Gloss( )	Slip(ppm)	Antiblock (ppm)
NA321013	4.5	75	None	None
NA321210	5.0	70	750	1000

Notes

Data obtained from 2.0 mil film produced on a 2" extruder with a 4" die, 410°F melt temperature, 3:1 BUR,0.060" die gap at 50 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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