Technical Data Sheet

Petrothene NA271009

Low Density Polyethylene

Product Description

Petrothene NA271009 is a medium density polyethylene resin selected by customers for overwrap film and other films requiring good stiffness and optics. NA271009 exhibits good film optics and high stiffness.

Application	Bags & Pouches; Food Packaging Film; Lamination Film; Secondary Packaging
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)	1.2	g/10 min	1.2	g/10 min	ASTM D1238
Density, (23 °C)	0.930	g/cm³	0.930	g/cm³	ASTM D1505
Film					
Dart Drop Impact Strength, F50	70	g	70	g	ASTM D1709
Tensile Strength at Break					
MD	3900	psi	26.9	MPa	ASTM D882
TD	3300	psi	22.8	MPa	ASTM D882
Tensile Elongation at Break					
MD	350	%	350	%	ASTM D882
TD	620	%	620	%	ASTM D882
1% Secant Modulus					
MD	46000	psi	317	MPa	ASTM D882
TD	54000	psi	372	MPa	ASTM D882
Elmendorf Tear Strength					
MD	185	g	185	g	ASTM D1922
TD	255	g	255	g	ASTM D1922
Optical					
Haze	7.5	%	7.5	%	ASTM D1003
Gloss, (45°)	62		62		ASTM D2457
Additive					
Slip	None		None		LYB Method
Antiblock	None		None		LYB Method

Notes

Data obtained from 1.25 mil (32 micron) film produced on a blown film line with a 4" (102mm) die, 385 °F (196 °C) melt temperature, 2.2:1 BUR, 0.025" die gap at 70 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.