

Technical Data Sheet

Petrothene NA960183

Low Density Polyethylene



Product Description

Petrothene NA960 is a series of resins selected by customers for use in a wide variety of industrial film applications where high impact strength and excellent drawdown are needed. NA960 exhibits good uniformity, ease of processing and good tensile strength.

Application	Agriculture Film; Bags & Pouches; Can Liners; Film Wrap; Food Packaging Film; Lamination Film; Liner Film; Secondary Packaging; Surface Protection 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)	1.0	g/10 min	1.0	g/10 min	ASTM D1238
Base Resin Density, (23 °C)	0.920	g/cm ³	0.920	g/cm ³	ASTM D1505
Mechanical					
Tensile Strength at Break	2100	psi	14.5	MPa	ASTM D638
Tensile Elongation at Break, (23 °C)	990	%	990	%	ASTM D638
Film					
Dart Drop Impact Strength, F50	85	g	85	g	ASTM D1709
Tensile Strength at Break					
MD	5300	psi	36.5	MPa	ASTM D882
TD	3100	psi	21.4	MPa	ASTM D882
Tensile Strength at Yield					
MD	1600	psi	11.0	MPa	ASTM D882
TD	1600	psi	11.0	MPa	ASTM D882
Tensile Elongation at Break					
MD	120	%	120	%	ASTM D882
TD	620	%	620	%	ASTM D882
Tensile Elongation at Yield					
MD	7	%	7	%	ASTM D882
TD	9	%	9	%	ASTM D882
1% Secant Modulus					
MD	32000	psi	221	MPa	ASTM D882
TD	43000	psi	297	MPa	ASTM D882
Elmendorf Tear Strength					
MD	500	g	500	g	ASTM D1922
TD	100	g	100	g	ASTM D1922



Thermal			
Vicat Softening Temperature	198 °F	92 °C	ASTM D1525
Additive			
Slip	None	None	LYB Method
Antiblock	4000 ppm	4000 ppm	LYB Method

Product	Slip(ppm)	Antiblock (ppm)
NA960000	None	None
NA960070	500	1500
NA960183	None	4000

Notes

Mechanical data derived from Type IV specimen, 75 mil plaque @ 20" per minute.

Data obtained from 1.1 mil film produced on a 2" blown film line, commercially available 4" die, 350°F (177°C) melt extrusion temperature, 2:1 BUR with a 0.025" die gap at 60 lbs/hr.

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

