Technical Data Sheet

Petrothene NA963083

Low Density Polyethylene

Product Description

Petrothene NA963083 is selected by customers for use in a wide variety of industrial film applications where high impact strength, excellent drawdown, and moderate shrinkage are needed. NA963083 exhibits good bubble stability, ease of processing, good tensile strength and good shrinkage.

Application	Agriculture Film; Bags & Pouches; Bottles and Vials; Bottles For Consumer Goods; Bottles for Industrial Use; Can Liners; Caps & Closures; Film Wrap; Food Packaging Film; Lamination Film; Liner Film; Opaque Containers; Secondary Packaging; Shrink Film; Surface Protection Film
Market	Flexible Packaging; Rigid Packaging
Processing Method	Blown Film; Extrusion Blow Molding

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.70	g/10 min	0.70	g/10 min	ASTM D1238
Base Resin Density, (23 °C)	0.919	g/cm³	0.919	g/cm³	ASTM D1505
Product Density, (23 °C)	0.921	g/cm³	0.921	g/cm³	ASTM D1505
Mechanical					
Tensile Strength at Break	1650	psi	11.4	MPa	ASTM D638
Tensile Strength at Yield	1550	psi	10.7	MPa	ASTM D638
Tensile Elongation at Break	700	%	700	%	ASTM D638
Tensile Elongation at Yield	100	%	100	%	ASTM D638
Film					
Dart Drop Impact Strength, F50	130	g	130	g	ASTM D1709
Tensile Strength at Break					
MD	3400	psi	23.4	MPa	ASTM D882
TD	2400	psi	16.5	MPa	ASTM D882
Tensile Elongation at Break					
MD	160	%	160	%	ASTM D882
TD	480	%	480	%	ASTM D882
1% Secant Modulus					
MD	26000	psi	179	MPa	ASTM D882
TD	32000	psi	221	MPa	ASTM D882
Elmendorf Tear Strength					
MD	300	g	300	g	ASTM D1922
TD	180	g	180	g	ASTM D1922
Hardness					

Shore Hardness, (Shore D)	46		46		ASTM D2240
Thermal					
Vicat Softening Temperature	194	°F	90	°C	ASTM D1525
Low Temperature Brittleness, F_{50}	-103	°F	-75	°C	ASTM D746
Additive					
Slip	None		None		LYB Method
Antiblock	4000	ppm	4000	ppm	LYB Method