NYLON SOLUTIONS

Capran® PIR-2500 Biaxially Oriented Nylon 6 Film

Description

Capran® PIR-2500 film from AdvanSix contains 100% post-industrial recycled (PIR) raw materials[1] while providing the same top performance and processability as Capran® 2500, its standard, non-recycled counterpart.

Capran® PIR-2500 is a 1.0 mil (25 micron) biaxially oriented nylon 6 film that offers a superior balance of properties, including high gas barrier, excellent toughness and puncture resistance, optical clarity, and exceptional flex crack resistance. It is well-suited for packaging applications requiring optimum protection and performance.

Properties @ 73°F (22.7°C), 50% RH		Typical Value		Test Method
		English	Metric	
Average Thickness	Target	1.000 mil	25.4 micron	AdvanSix Method
	Tolerance	+/- 5%	+/- 5%	
Basis Weight		18.000 lbs/ream	29.30 g/sq.m	AdvanSix Method
Yield		24,000 sq.in/lb	34.13 sq.m/kg	AdvanSix Method
Tensile Strength @ Break	MD	32,000 - 45,000 psi	220 - 310 MPa	ASTM D-882
	TD	32,000 - 45,000 psi	220 - 310 MPa	
Elongation @ Break	MD	80 - 110%		ASTM D-882
	TD	80 - 110%		
Modulus, Secant	MD	250,000 - 350,000 psi	1,724 - 2,413 MPa	ASTM D-882
	TD	250,000 - 350,000 psi	1,724 - 2,413 MPa	
Dimensional Stability	MD	< 3.0%		Hot air at 320ºF (160ºC), 5 mins
	TD	< 2.5%		
Haze		< 5.0%		ASTM D-1003
Surface Tension	Treated Side	> 56 dynes/cm		ASTM D-2578
	Untreated Side	48 - 54 dynes/cm		
Coefficient of Friction, Kinetic	Film to Film	0.5 - 0.9		ASTM D-1894
	Film to Metal	0.2 - 0.3		
Oxygen Transmission Rate @ 77ºF/0% RH, 25ºC/0% RH		1.3 - 2.3 cc/100 in^2/day	20 - 36 cc/m^2/day	ASTM D-3985
Water Vapor Transmission Rate @ 100ºF/100% RH, 37.7ºC/100% RH		11 - 13 gm/100 in^2/day	171 - 202 gm/m^2/day	ASTM F-1249

[1] *Using an industry-accepted mass balance method, AdvanSix allocates recycled material into 100% PIR Capran® films. PIR grades are certified by an independent third-party organization (SCS Global Services) for recycled content, with annual audits.*

The values presented in this data sheet are typical values and are not to be interpreted as product specifications.

Contact AdvanSix
To learn more about the benefits of Capran® films, visit **AdvanSix.com/NylonSolutions** or call:
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