

## NYLON SOLUTIONS

# Capran® 1000 Biaxially Oriented Nylon 6 Film

## Description

**Capran® 1000** is a 0.39 mil (10 micron) biaxially oriented nylon 6 film. It features a superior balance of properties, including high gas barrier, excellent toughness and puncture resistance, and exceptional flex crack resistance and optics. Capran® 1000 nylon 6 film 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	0.390 mil	10 micron	AdvanSix Method
	Tolerance	+/- 5%	+/- 5%	
Basis Weight		7.129 lbs/ream	11.60 g/sq.m	AdvanSix Method
Yield		60,600 sq.in/lb	86.2 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 320°F (160°C), 5 mins
	TD	< 2.5%		
Haze		< 2.0%		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 @ 77°F/0% RH, 25°C/0% RH		3.8 - 4.8 cc/100 in²/day	60 - 75 cc/m²/day	ASTM D-3985
Water Vapor Transmission Rate @ 100°F/100% RH, 37.7°C/100% RH		25 - 28 gm/100 in²/day	383 - 434 gm/m²/day	ASTM F-1249

The properties 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](http://AdvanSix.com/NylonSolutions) or call: **1-844-890-8949** (toll free, U.S./Can.) **+1-973-526-1800** (international)

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