

Capran® 1000 Biaxially Oriented Nylon 6 Film

Description

Capran® 1000 is a 0.40 mil (10 micron) biaxially oriented nylon 6 film produced by Simultaneous Tenter Frame Orientation technology. It features a superior balance of properties, including high gas barrier, excellent flex crack resistance and outstanding 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	0.400 mil	10 micron	AdvanSix Method
	Tolerance	+/- 5%	+/- 5%	
Basis Weight		7.224 lbs/ream	11.76 g/sq.m	AdvanSix Method
Yield		59,800 sq.in/lb	85.04 sq.m/kg	AdvanSix Method
Tensile Strength @ Break	MD	34,000 - 42,000 psi	234 - 290 MPa	ASTM D-882
	TD	34,000 - 42,000 psi	234 - 290 MPa	
Elongation @ Break	MD	70 - 90%		ASTM D-882
	TD	70 - 90%		
Moulus, 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	
Tear Strength, Graves	MD	1,000 - 1,500 gf/mil		ASTM D-1004
	TD	1,000 - 1,500 gf/mil		
Dimensional Stability	MD	< 3.6%		Hot air at 320°F (160°C), 5 mins
	TD	< 2.5%		
Haze		< 3.0%		ASTM D-1003
Surface Tension	Treated Side	> 56 dynes/cm		ASTM D-2578
	Untreated Side	50 - 54 dynes/cm		
Coefficient of Friction, Kinetic	Film to Film	0.6 - 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 in ² /day	59 - 74 cc/m ² /day	ASTM D-3985
Water Vapor Transmission Rate @ 100°F/100% RH, 37.7°C/100% RH		25 - 30 gm/100 in ² /day	388 - 465 gm/m ² /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 or call: **1-844-890-8949** (toll free, U.S./Can.) **+1-973-526-1800** (international)

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