



ISO 9001:2015  
File #10002028

# Cellusuede Products, Inc.

## PHYSICAL AND CHEMICAL PROPERTIES

### NYLON 6,6

Breaking Tenacity	Dry	2.9 – 7.2
	Wet	2.5 – 6.1
Tensile Strength (psi)		40,000 – 106,000
Breaking Elongation (%)	Dry	16 - 75
	Wet	18 - 78
Elastic Recovery (%)		82 at 3%
Average Stiffness (gpd)		10 - 45
Average Toughness (g/cm)		0.58 – 1.37
Specific Gravity		1.13 – 1.14
Water Absorbency (%)	21°C/70°F, 65% RH	4.0 – 4.5
	21°C/70°F, 95% RH	6.1 – 8.0
Effect of Heat	Sticks at 230°C/445°F. Melts at 249-260°C/480–500°F. Yellows slightly at 149°C/300° when held for 5 hours.	
Effects of Acids and Alkalis	Unaffected by most mineral acids, except hot mineral acids. Dissolves with partial decomposition in concentrated solutions of hydrochloric, sulfuric and nitric acids. Soluble in formic acid. Substantially inert in alkalis.	
Effects of Bleaches and Solvents	Can be bleached in most bleaching solutions. Generally insoluble in most organic solvents. Soluble in some phenolic compounds.	
Resistance to Mildew, Aging,	Excellent resistance to mildew, aging and abrasion. Prolonged exposure to sunlight causes some degradation.	

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