

	Cotton (Spun Yarn)	Nylon (Multi-filament)	Polyester (Multi-filament)	Polypropylene (Multi-filament)	Polypropylene (Monofilament)
Breaking Tenacity (Grams per Denier)	3 to 5 gpd	5.9 to 9.5 gpd	6.0 to 9.5 gpd	2.5 to 8.0 gpd	3.5 to 7.0 gpd
Stretch Elongation at Break Point (%)	3% to 7%	15% to 28%	12% to 14%	20% to 100%	14% to 30%
Elastic Recovery (%)	74% at 2% 45% at 5%	99% at 2% 89% at 3%	99% at 2% 88% at 5%	98% at 5% 95% at 10%	98% at 5%
Specific Gravity	1.54	1.14	1.38	0.91 (Floats)	0.91 (Floats)
Moisture Absorbency	Good resistance	Excellent resistance	Excellent resistance	Good resistance	Good resistance
Abrasion Resistance	Good resistance	Excellent resistance	Excellent resistance	Good resistance	Good resistance
Effect of Heat	Decomposes 302°	Yellows at 300° Melts at 482°	Melts at 482°	59% tensile at 200° Melts at 320°	50% tensile at 200° Melts at 330°
Effects of Age	Negligible	None	None	Negligible	Negligible
Effects of Sunlight	Loses strength	Loses strength after prolonged exposure	Loses strength after prolonged exposure	Good resistance to indirect sunlight	Good resistance if uv-stabilized
Effects of Acids	Disintegrates in concentrated solutions	Good resistance Dissolves in sulfuric acids	Good resistance Dissolves in sulfuric acids	Good resistance except with oxidizing agents	Good resistance except with oxidizing agents
Effects of Alkalis	Swelling, but no damage	Inert	Moderate	Good resistance	Good resistance
Effects of Organic Solutions	Resistant to common solvents	Resistant. Soluble in phenolic and formic acid	Resistant. Soluble in phenolic acid	Insoluble in most except chlorinated hydrocarbons	Insoluble in most except chlorinated hydrocarbons
Resistance to Moths	Not attacked	Not attacked	Not attacked	Not attacked	Not attacked
Resistance to Mildew	Poor unless bleached	Not attacked	Not attacked	Not attacked	Not attacked
Identification	Melts before burning. Burns rapidly	Melts before burning. Forms hard bead. Celery odor	Floats. Forms hard bead. Pungent odor	Melts before burning. Burning asphalt odor	Floats. Melts before burning. Burning asphalt odor