Material properties

		NL Nylon 6	NL Nylon 66	PT Polyester	PE Polyethylene	PP Polypropylene	FC ETFE
Tensile strength	(N/mm^2)	480 - 950	500 - 950	600 - 850	410 - 760	360 - 600	180 - 480
Strength degradation at wet condition		8 - 16%	5 - 10%	0%	0%	0%	0%
Elongation at break	Dry	16 - 45%	15 - 38%	7 - 32%	8 - 35%	25 - 60%	25 - 50%
	Wet	20 - 52%	20 - 45%	7 - 32%	8 - 35%	25 - 60%	25 - 50%
Recovery elasticity (Stretched 3%)		98 - 100%	98 - 100%	95 - 100%	85 - 97%	90 - 100%	80 - 100%
Specific gravity		1,14	1,14	1,38	0.94 - 0.96	0,91	1.70 - 1.76
Moisture absorption	20°C 65%RH	3.5 - 5.0%	3.5 - 5.0%	0.4 - 0.5%	0	0	0
	20°C 20%RH	1.0 - 1.8%	1.0 - 1.8%	0.1 - 0.3%	0	0	0
	20°C 95%RH	8.0 - 9.0%	8.0 - 9.0%	0.6 - 0.7%	0 - 0.1%	0 - 0.1%	0
Heat resistance		Softening : 180°C Melting : 215 - 220°C	Softening : 230 - 235°C Melting : 250 - 260°C	Softening : 238 - 240°C Melting : 255 - 260°C	Softening : 100 - 115°C Melting : 125 - 135°C	Softening : 140 - 160°C Melting : 165 - 173°C	Melting : 260°C
Weathering resistance		Slightly weakened and it turns into yellow		Slightly weakened	Slightly weakened	Slightly weakened	Resistant
Acid resistance		Dissolved by concentrated sulfuric acid, concentrated hydrochloric acid, and concentrated nitric acid.		Slightly weakened by hydrochloric acid and sulfuric acid.	Slightly weakened by hydrochloric acid and sulfuric acid.	Slightly weakened by hydrochloric acid and sulfuric acid.	Resistant
Alkaline resistance		Slightly weakened by concentrated sodium hydroxide and concentrated ammonium.		Slightly weakened by 10% sodium hydroxide and concentrated ammonium.	Slightly weakened by concentrated sodium hydroxide.	Slightly weakened by concentrated sodium hydroxide and concentrated ammonium.	Resistant
Chemical resistance		Resistant		Resistant	Resistant	Resistant	Slightly decayed by heated fluorine gas
Solvent resistance (alcohol, ether, benzene, acetone, gasoline, parklen)		Resistant		Resistant	Dissolved in heated ethane tetrachloride	Dissolved in heated ethane tetrachloride	Resistant
Hydrolysis		Resistant		Limited	Resistant	Resistant	Resistant